

BIG DATA – ЧТО ЭТО? И КАК BIG DATA ПРИМЕНЯЕТСЯ В СОВРЕМЕННОМ МАРКЕТИНГЕ

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20 ОКТЯБРЯ 2013

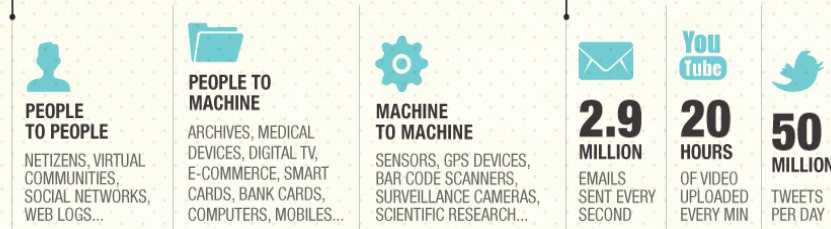
WHAT IS BIG DATA ?

The "three V's", i.e the Volume, Variety and Velocity of the data coming in is what creates the challenge.

VOLUME

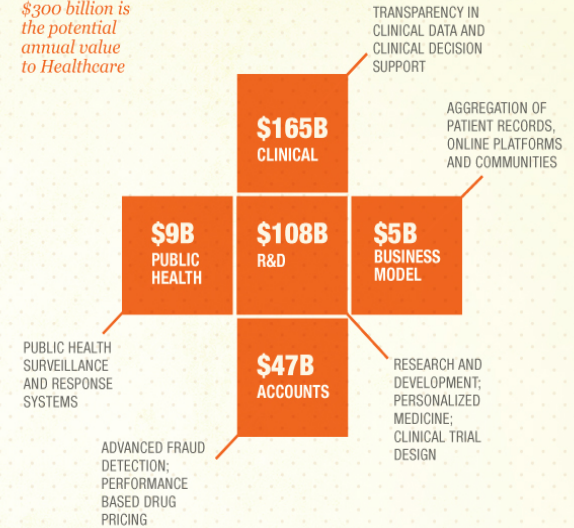


VARIETY



CASE STUDY - Healthcare

\$300 billion is the potential annual value to Healthcare

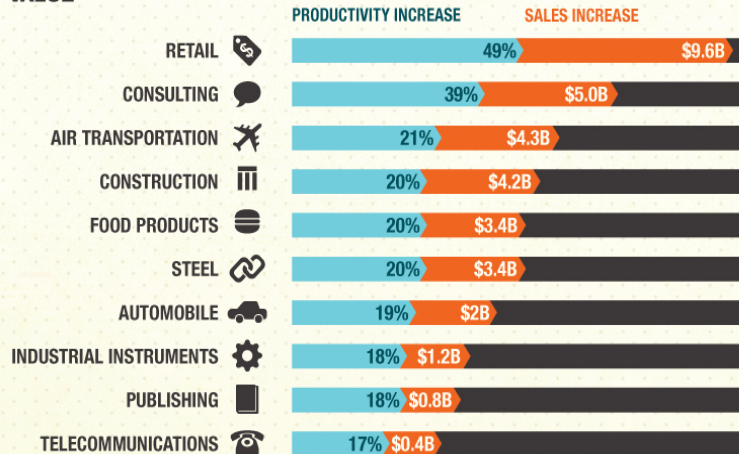


BIG DATA

Big Data is data that is too large, complex and dynamic for any conventional data tools to capture, store, manage and analyze.

The right use of Big Data allows analysts to spot trends and gives niche insights that help create value and innovation much faster than conventional methods.

VALUE



40% PROJECTED GROWTH IN GLOBAL DATA CREATED PER YEAR



5% PROJECTED GROWTH IN GLOBAL IT SPENDING PER YEAR

The estimated size of the digital universe in 2011 was 1.8 zettabytes. It is predicted that between 2009 and 2020, this will grow 44 fold to 35 zettabytes per year. A well defined data management strategy is essential to successfully utilize Big Data.

Sources - ① Reaping the Rewards of Big Data - Wipro Report ② Big Data: The Next Frontier for Innovation, Competition and Productivity - McKinsey Global Institute Report ③ eRoomScore, Radicati Group ④ Measuring the Business Impacts of Effective Data - study by University of Texas, Austin ⑤ US Department of Labour.

DO BUSINESS BETTER

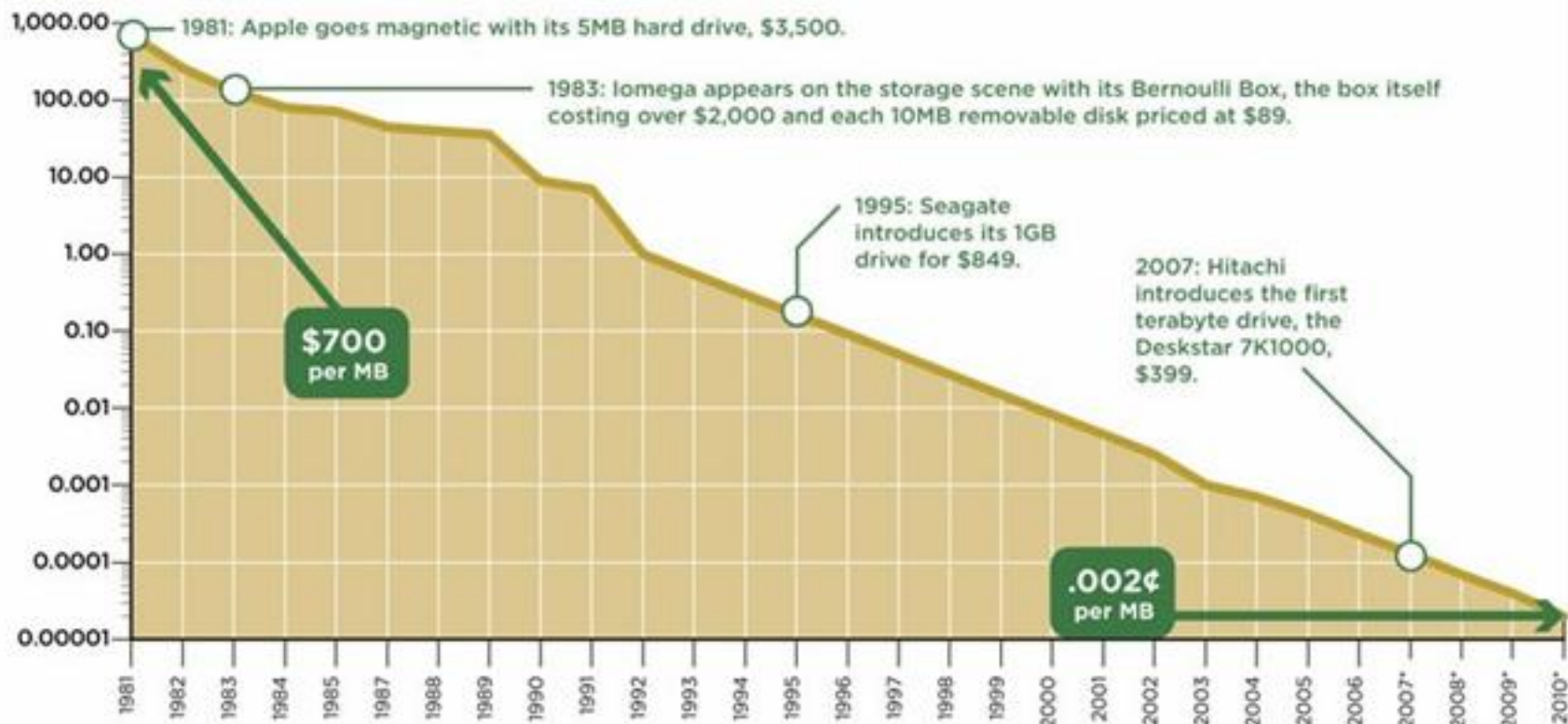
NYSE:WIT | OVER 130,000 EMPLOYEES | 54 COUNTRIES | CONSULTING | SYSTEM INTEGRATION | OUTSOURCING





STORAGE: FROM HIGHWAY ROBBERY TO RUNAWAY BARGAIN

\$ per megabyte

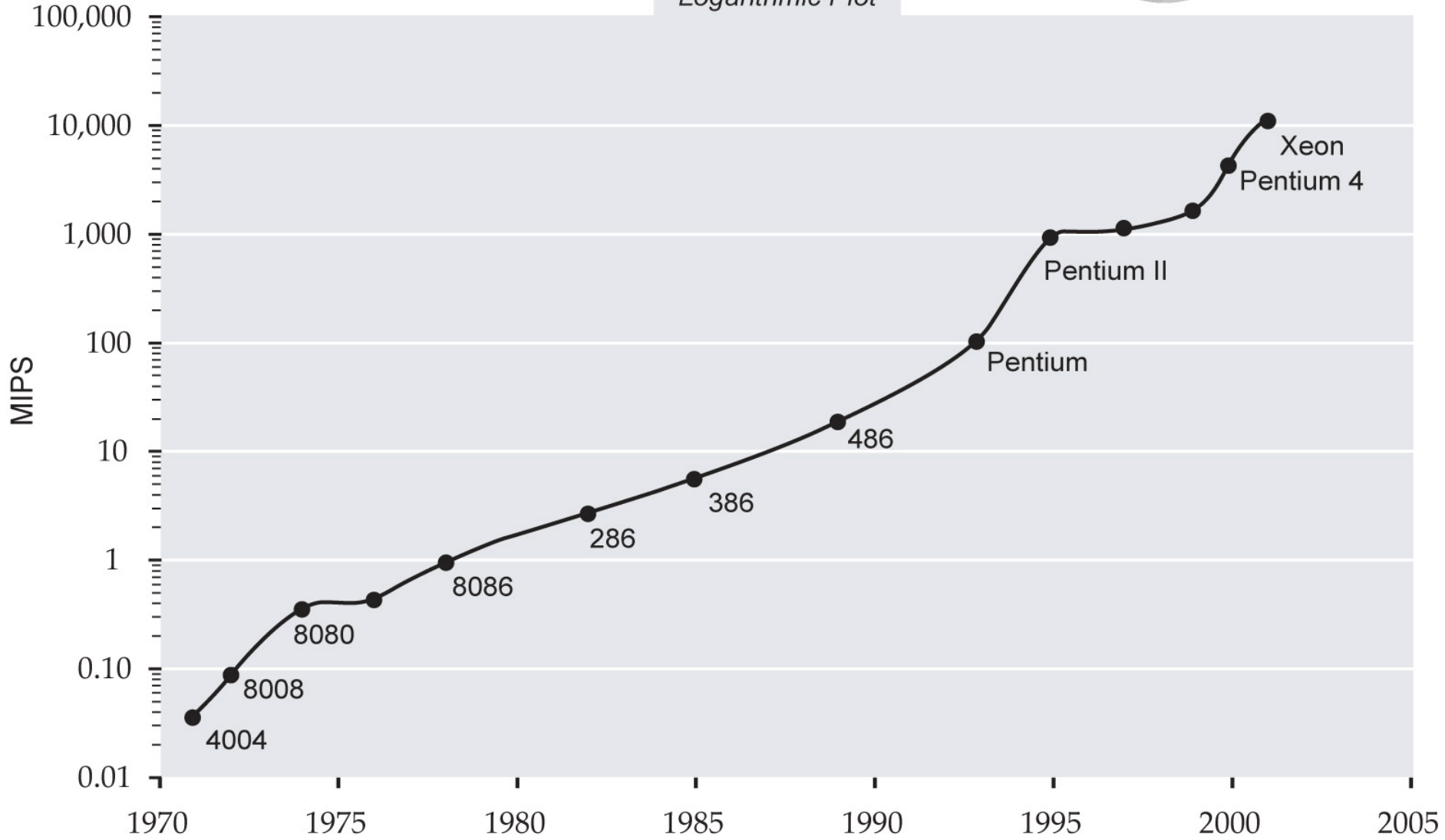
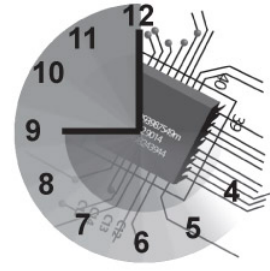


*Projected. No data is available for 1986.

Sources: Ars Technica, Little Tech Shoppe, Steve Gilheany, ExtremeTech

Processor Performance (MIPS)

Logarithmic Plot



Doubling time: 1.8 years

Year

WHAT IS BIG DATA?

VOLUME VELOCITY VARIETY

Large amounts of data.

Needs to be analyzed quickly.

Different types of structured and unstructured data.



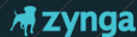
Key questions enterprises are asking about Big Data:

- How to store and protect big data?
- How to backup and restore big data?
- How to organize and catalog the data that you have backed up?
- How to keep costs low while ensuring that all the critical data is available when you need it?

WHAT ARE THE VOLUMES OF DATA THAT WE ARE SEEING TODAY?



30 billion pieces of content were added to Facebook this past month by 600 million plus users.



Zynga processes 1 petabyte of content for players every day; a volume of data that is unmatched in the social game industry.



More than 2 billion videos were watched on YouTube... yesterday.

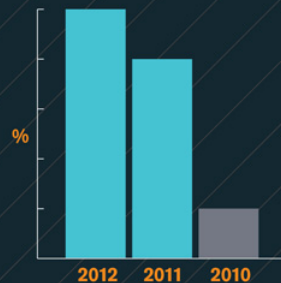


The average teenager sends 4,762 text messages per month.

32 billion searches were performed last month... on Twitter.

Source: Statista

Everyday business and consumer life creates 2.5 quintillion bytes of data per day.



90% of the data in the world today has been created in the last two years alone.

Source: IBM

WHAT DOES THE FUTURE LOOK LIKE?

Worldwide IP traffic will quadruple by 2015.



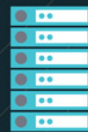
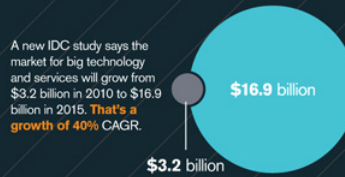
By 2015, nearly 3 billion people



will be online, pushing the data created and shared to nearly 8 zettabytes.

HOW IS THE MARKET FOR BIG DATA SOLUTIONS EVOLVING?

A new IDC study says the market for big technology and services will grow from \$3.2 billion in 2010 to \$16.9 billion in 2015. That's a growth of 40% CAGR.



58% of respondents expect their companies to increase spending on server backup solutions and other big data-related initiatives within the next three years.

Source: Economist Business Unit

2/3rds of surveyed businesses in North America said big data will become a concern for them within the next five years.

Source: Economist Business Unit

www.wipro.com

BIG DATA

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USUAL DATA

“Conventional
business processes”

- Clear goal
- Clear how to use
- Clear format
- Structured format



BIG DATA

“Innovations”

- Unclear purpose
- Unclear how to use it
- Unclear format
- Unstructured format



"No, it's MY data!"

Data Scientist Skills



- Domain knowledge (i.e. Industry specific processes where analytic are applied)
- Commercial acumen/ Strategic
- Customer-centric
- Problem-solving skills
- Communication skills (story-telling)
- Curiosity (willingness to challenge the status quo)
- Technology / data
- Analytical skill-set
- Mathematics / statistics (including experimental design)

Big Data Landscape

Vertical Apps



Ad/Media Apps



Business Intelligence



Analytics and Visualization



Log Data Apps



Data As A Service



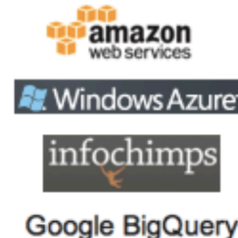
Analytics Infrastructure



Operational Infrastructure



Infrastructure As A Service



Structured Databases



Technologies



Visual Guide to NoSQL Systems

Availability:
Each client can
always read
and write.

A

Data Models

Relational (comparison)
Key-Value
Column-Oriented/Tabular
Document-Oriented

CA

RDBMSs
(MySQL,
Postgres,
etc)

Aster Data
Greenplum
Vertica

AP

Dynamo
Voldemort
Tokyo Cabinet
KAI

Cassandra
SimpleDB
CouchDB
Riak

Pick Two

C

Consistency:
All clients always
have the same view
of the data.

CP

BigTable
Hypertable
Hbase

MongoDB
Terrastore
Scalaris

Berkeley DB
MemcacheDB
Redis

P

Partition Tolerance:
The system works
well despite physical
network partitions.



BIG DATA В ПОВСЕДНЕВНОМ БИЗНЕСЕ

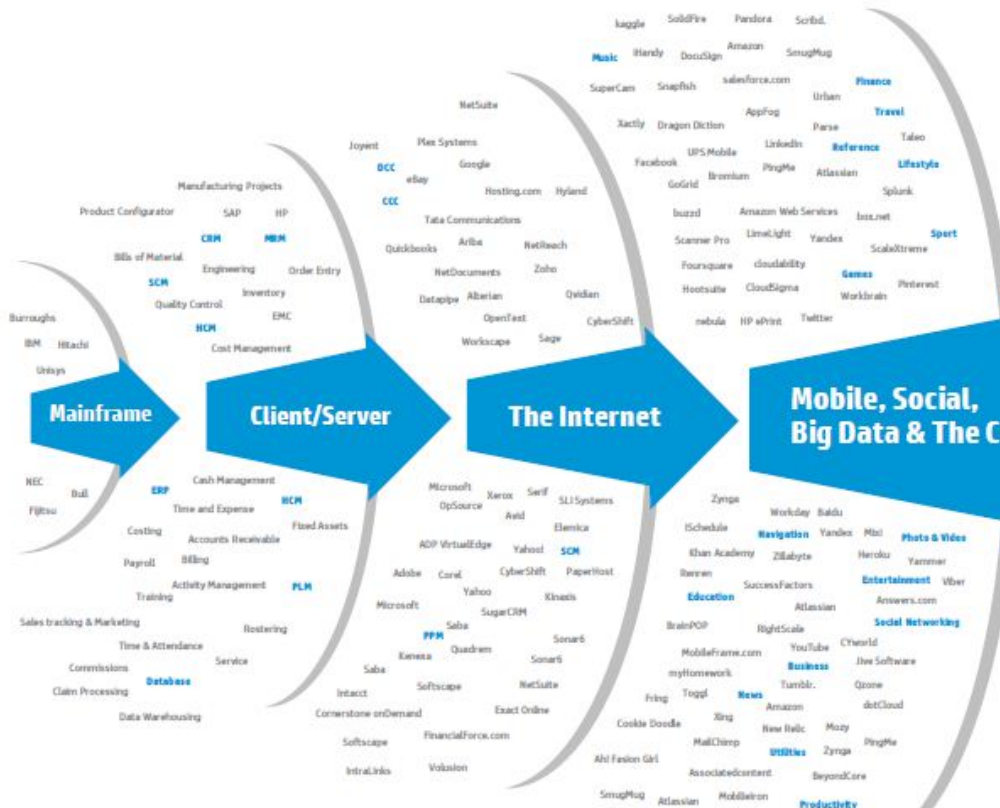
What Happens in an Internet Minute?



And Future Growth is Staggering



A new style of IT emerging



Every 60 seconds



98,000+ tweets



695,000 status updates



11 million instant messages



698,445 Google searches



168 million+ emails sent



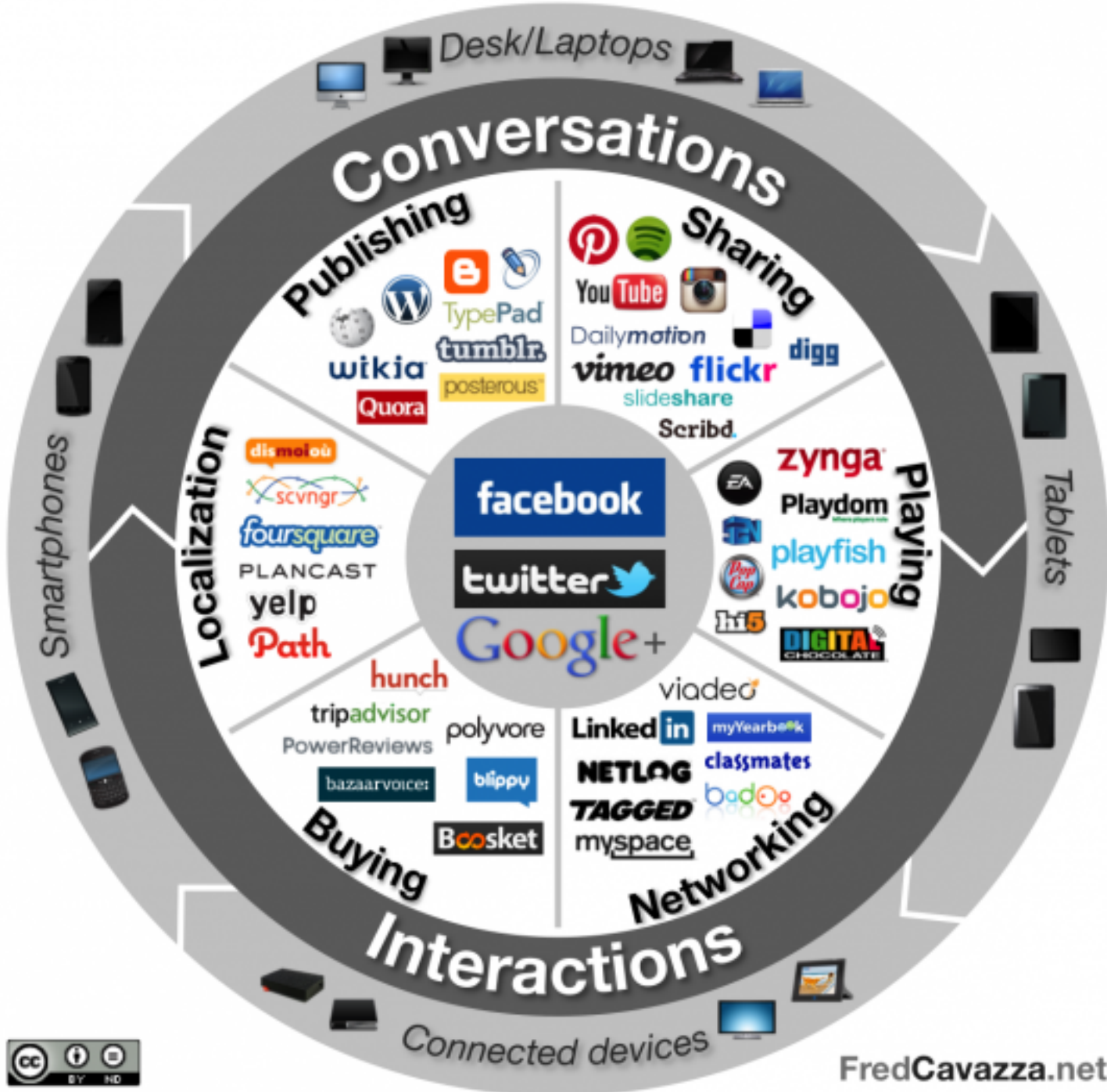
1,820TB of data created



217 new mobile web users

A stylized illustration of a globe with a network of blue lines forming a geodesic dome. The globe is surrounded by a blue ribbon that wraps around its middle. On the top half of the globe, numerous colorful human icons are standing on small blue circular platforms. On the bottom half, the same icons are hanging upside down from the globe's surface. The background consists of light blue rays emanating from behind the globe.

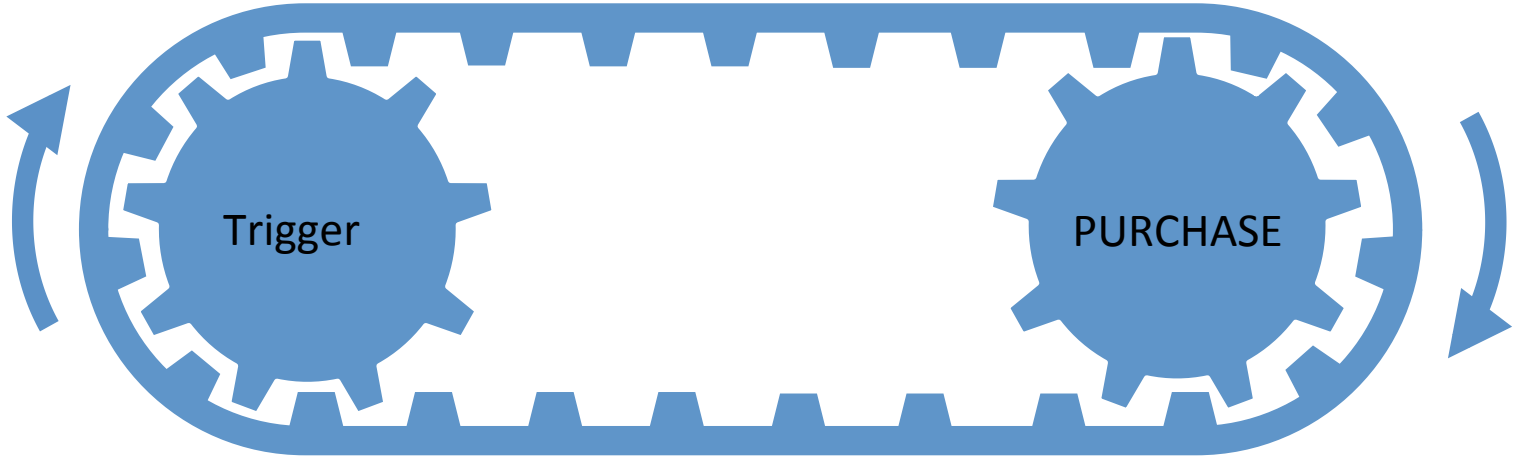
SOCIAL MEDIA



BIG DATA & MARKETING



Passive stage



Active Stage



BUSINES CASE: BIG DATA & MARKETING

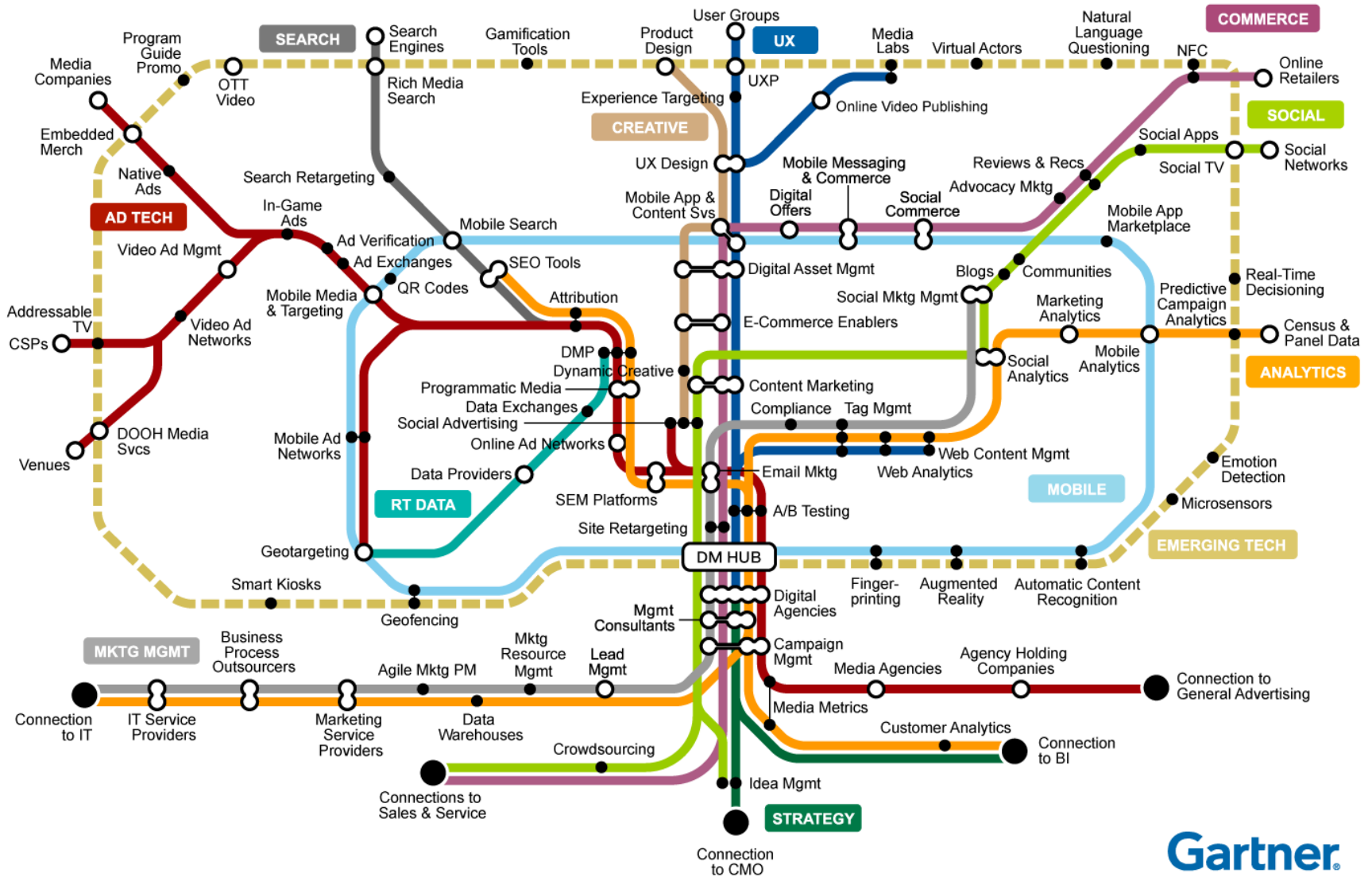
- The majority of online users are now cross-platform
- They are spending more time with digital content across multiple devices
- Engagement with content varies by platform time of day
- Key audiences engage with content differently across PC, Smartphones and Tablets

We can foresee now the Revolution of new technologies, which capable to track consumer behavior across all marketing touchpoints (cros-device, cross-chanel) and provide marketers with insights to optimize campaigns business success.



Gartner Digital Marketing Transit Map

The digital sphere is always evolving. Gartner for Marketing Leaders keeps the CMO and her team connected to the research, so they can keep the competition guessing. For more information: gartner.com/dmtransitmap



Gartner®

● Off-line Connection ○ Vendor Station ● Product Station

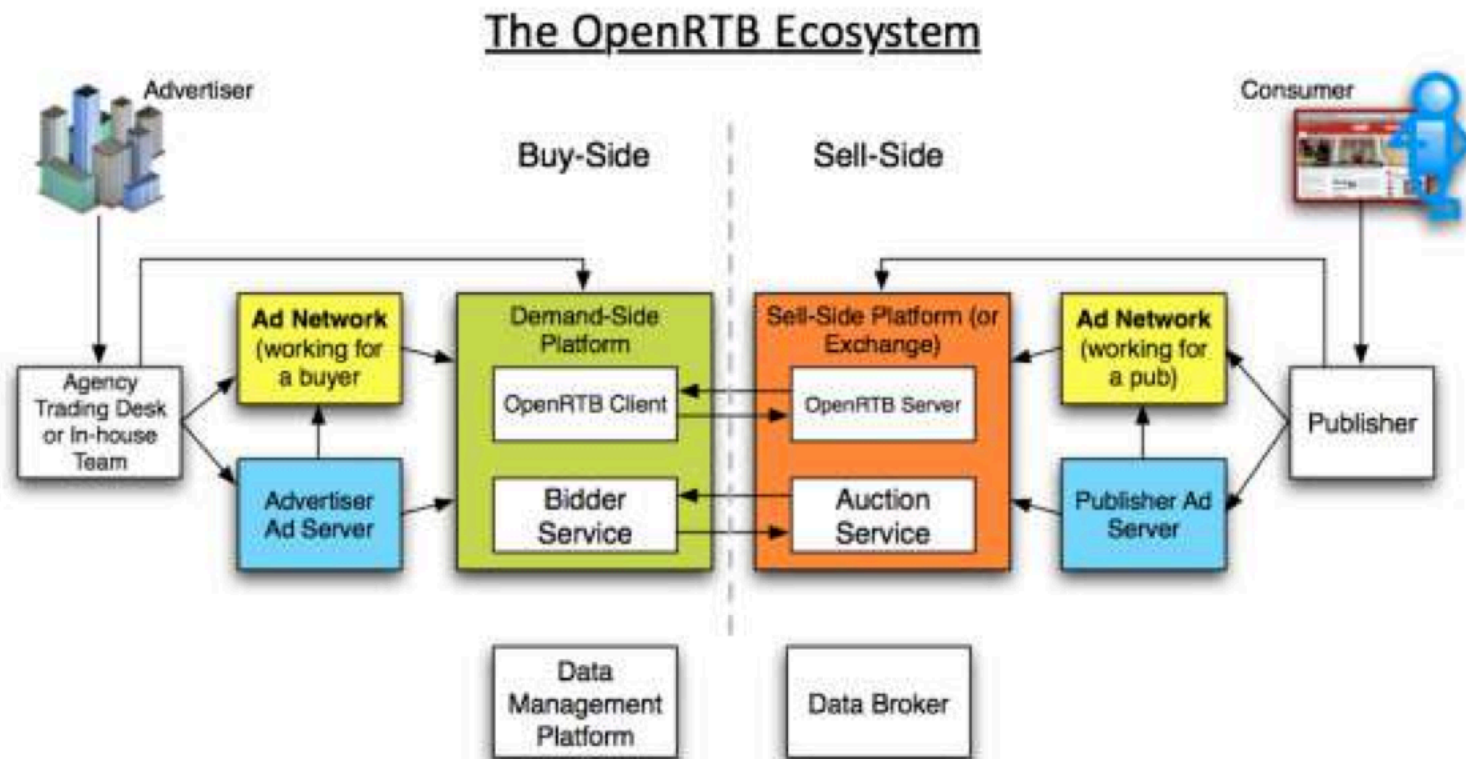
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Marketing Technology Landscape

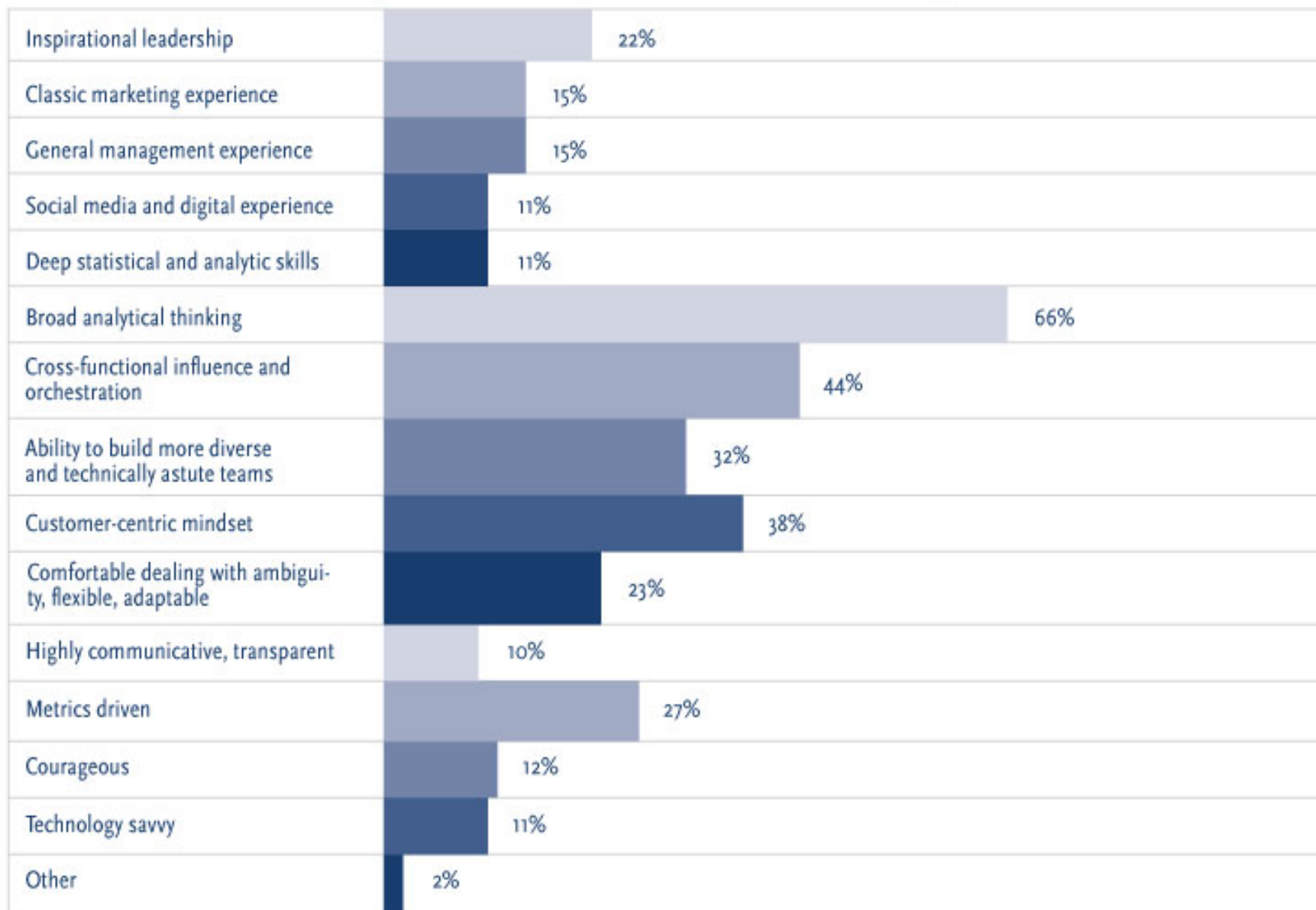
September 2012



Real Time Bidding systems



What are the “must-have” capabilities and experience for the CMO in a big data environment?



Respondents were allowed to choose multiple responses.



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