

# Disruptive Change in Higher Education

EDUCAUSE 2012



# Unique time for change in Higher Education

Historically significant shift in the *missions* of Higher Ed

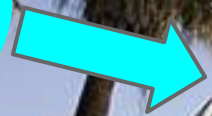
Fundamental change in *base technologies* underway

Changing *funding model* creating massive downward pressure on spending

# THE CHANGE IS REALLY BIG



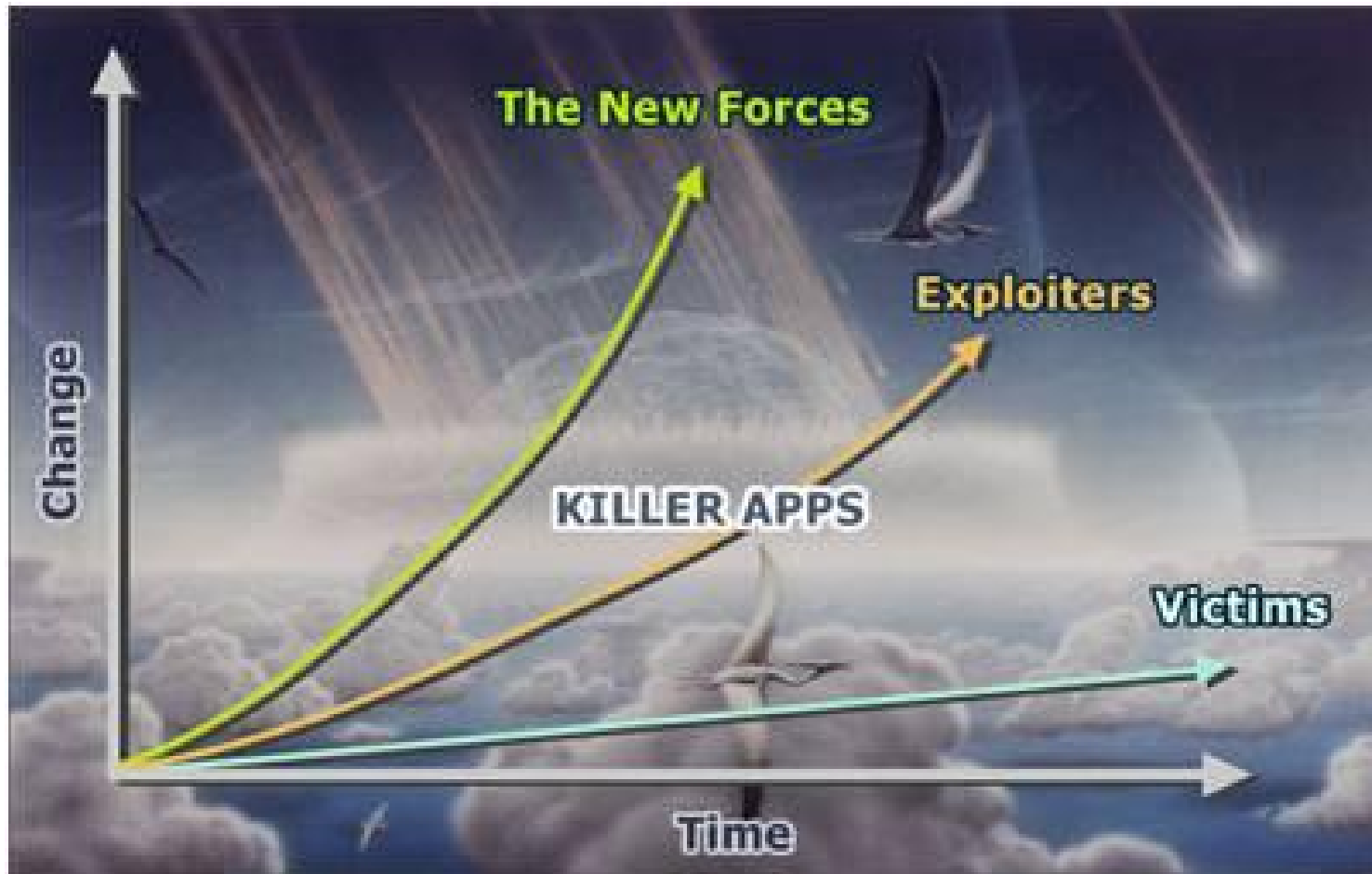
Current Changes



Previous Changes



# IT'S NOT OPTIONAL



From *The Laws of Disruption*, Larry Downes, 2009

# YOU CAN HELP LEAD YOUR ORGANIZATION THROUGH IT



"The mobile internet is going to change more lives, create more wealth, destroy more business, and upend more political systems than any force in history."

--The Fifth Wave, Marcus/Hemingway, 2012



# Changing Teaching / Learning



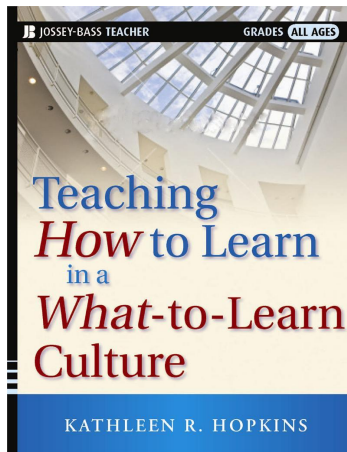
Students learn:



Collaboratively



At their own  
place and time



How To learn



Throughout  
their lives

# Changing Research

The Big Data Threshold

Orders of Magnitude Speed  
Improvements

Move from Hypothesis to Patterns

Shift in the Value of Data Vs. Published Research



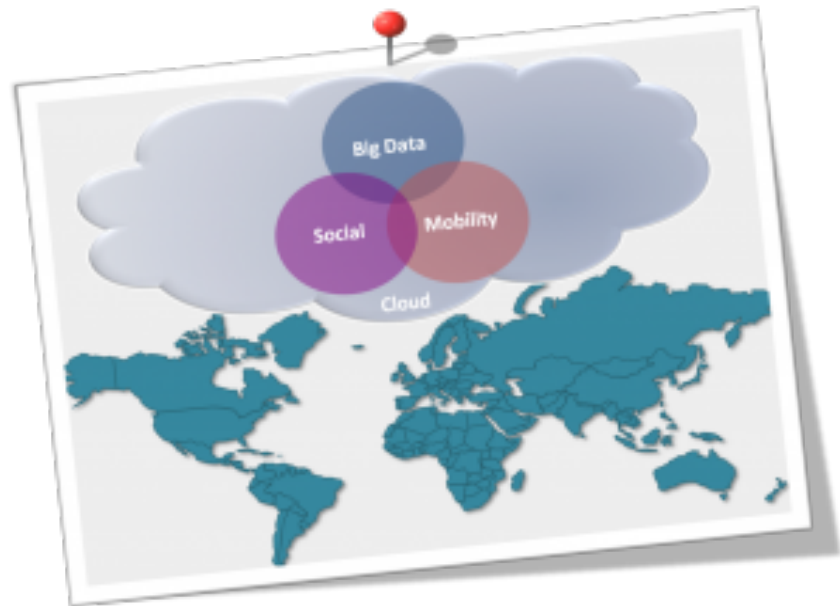
# Higher Education Impacts

- Institutions can no longer push from the top down
- Organizational loss of control
- Organizational loss of predictability
- Students are driving the train

# Technology Disruption

The "Big 5" immediate IT trends:

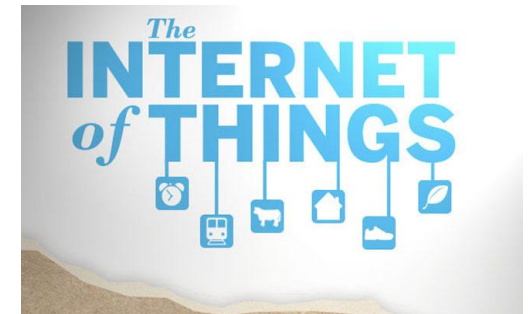
- Mobile Computing
- Social Networking and Collaboration
- Cloud Computing
- Big Data
- Consumerization



# Mobile Computing

Both Gartner and Microsoft predict that tablets will be outselling desktops within a year.

Gartner calls it the "Internet of Everything"



- 50% of Internet connections are things
- 15 billion permanently connected things
- 50+ billion intermittently connected

*"Work is what you do, not where you are"*  
*The "Always On" Society*

# Cloud Computing

Any organization (or individual) can have world-class computing infrastructure, platforms, and services.



Internal IT departments are no longer monopolies - they are now competing with the best in the market.

*“It’s like Lego for grown-ups. Only better.”*

# Big Data isn't about raw storage

“Datasets whose size is beyond the ability of typical database tools to capture, store, manage, and analyze.”

For \$600 one can "buy a disk drive that can store all of the world's music."

[McKinsey Report on Big Data, 2011.](#)



# Big Data is disruptive

By 2015, big data demand will generate 1 million jobs in the Global 1000.

"The single corporate data warehouse is dead"



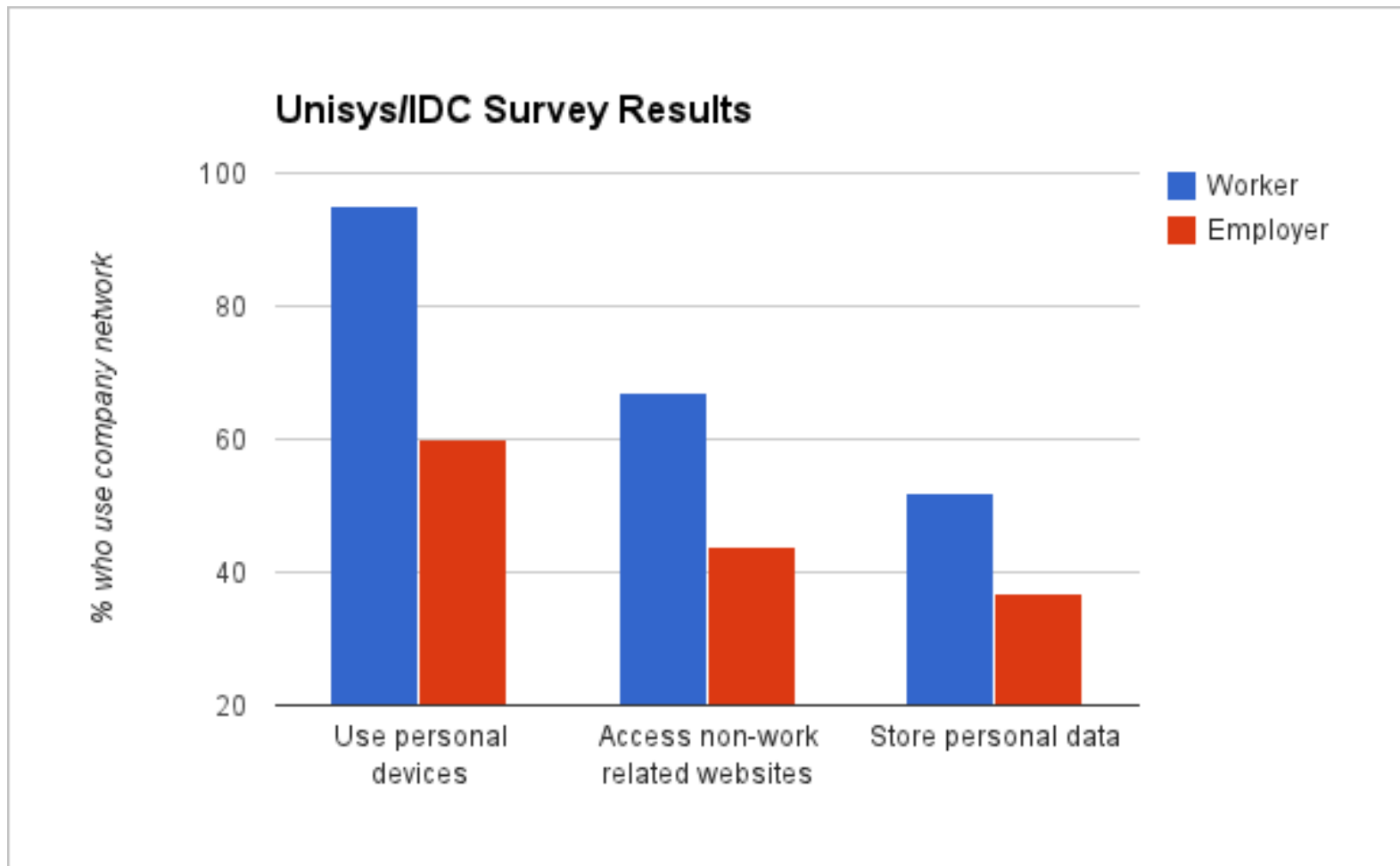
# Consumerization (i.e. BYOD)

New technology is emerging first in the consumer market

Users are no longer beholden to just those services offered by internal IT departments



*The Democratization of Innovation*



70% of employers want to buy standardized technologies for users.



# Technology Impacts

- IT departments can no longer push from the top down
- Organizational loss of control
- Organizational loss of predictability
- Users are driving the train





# Enterprise Architecture Challenge

*Help lead our organizations through these disruptive changes*

