

Become the Employee of the Future

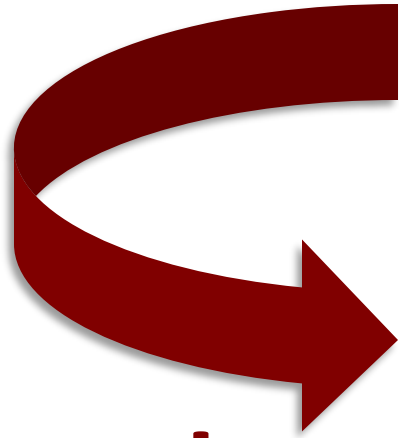


Designed by
Garry Golden
Forward Elements, Inc

Designed for
Brooklyn College

PDF Copy of Presentation:
www.garrygolden.net/BC2013

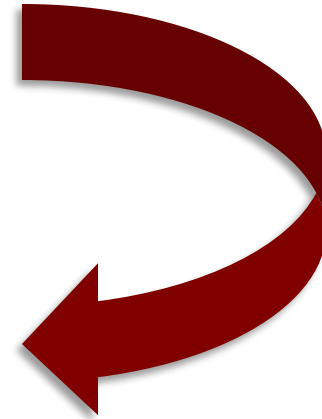
Outside



In



Future



Present



**Direction
of Change**



Mission:
Get a Degree

**Outputs focus on
Courses & Degree**

Mission:
Become a Learner

**Outcomes focused
on Behavior Change
around Skills-building**

Start

End



Foresight 101



Drivers of Change




Learning More

Not Changing?



Who is this Futurist' guy?



A close-up photograph of a person's hand holding a small, white, rectangular slip of paper against a dark background. The paper is slightly tilted and has a white rectangular label in the center. The text on the label is printed in a black, sans-serif font. The hand is visible on the left side of the frame, with the thumb and index finger gripping the paper.

You will inherit a
large sum of money

IF YOU HIT THIS SIGN
YOU WILL HIT THAT BRIDGE





WAIT FOR IT

.....Wait for it.....



MORE DIFFICULT

LESS DIFFICULT

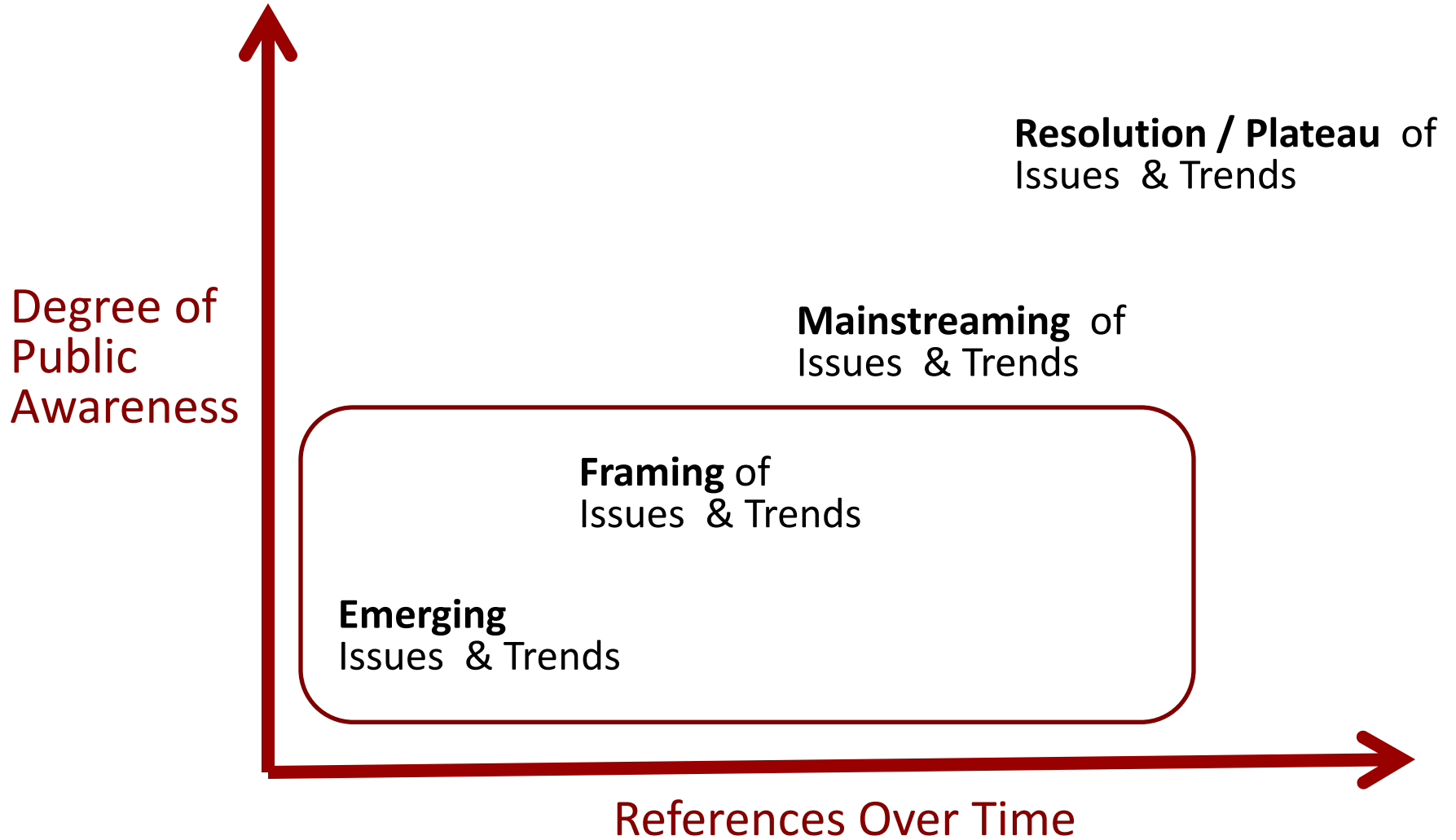


← Leptocaulis
DM7
9/22/10
Handwritten scribbles and other faint markings on the sign.

Every day I make an effort to go
toward what I don't understand.

Yo-Yo Ma

Understanding Trend Diffusion within Society



Understanding Trend Diffusion within Society

2016

**Supreme Court Ruling on
Ownership Rights for Personal Data**

2010

TIME

Person of the Year 2010

Mark Zuckerberg

By LEV GROSSMAN Wednesday, Dec. 15, 2010

2007

TechCrunch

**Facebook Launches Facebook
Platform; They are the Anti-MySpace**

 **MICHAEL
ARRINGTON**



Thursday, May 24th, 2007

1 Comments

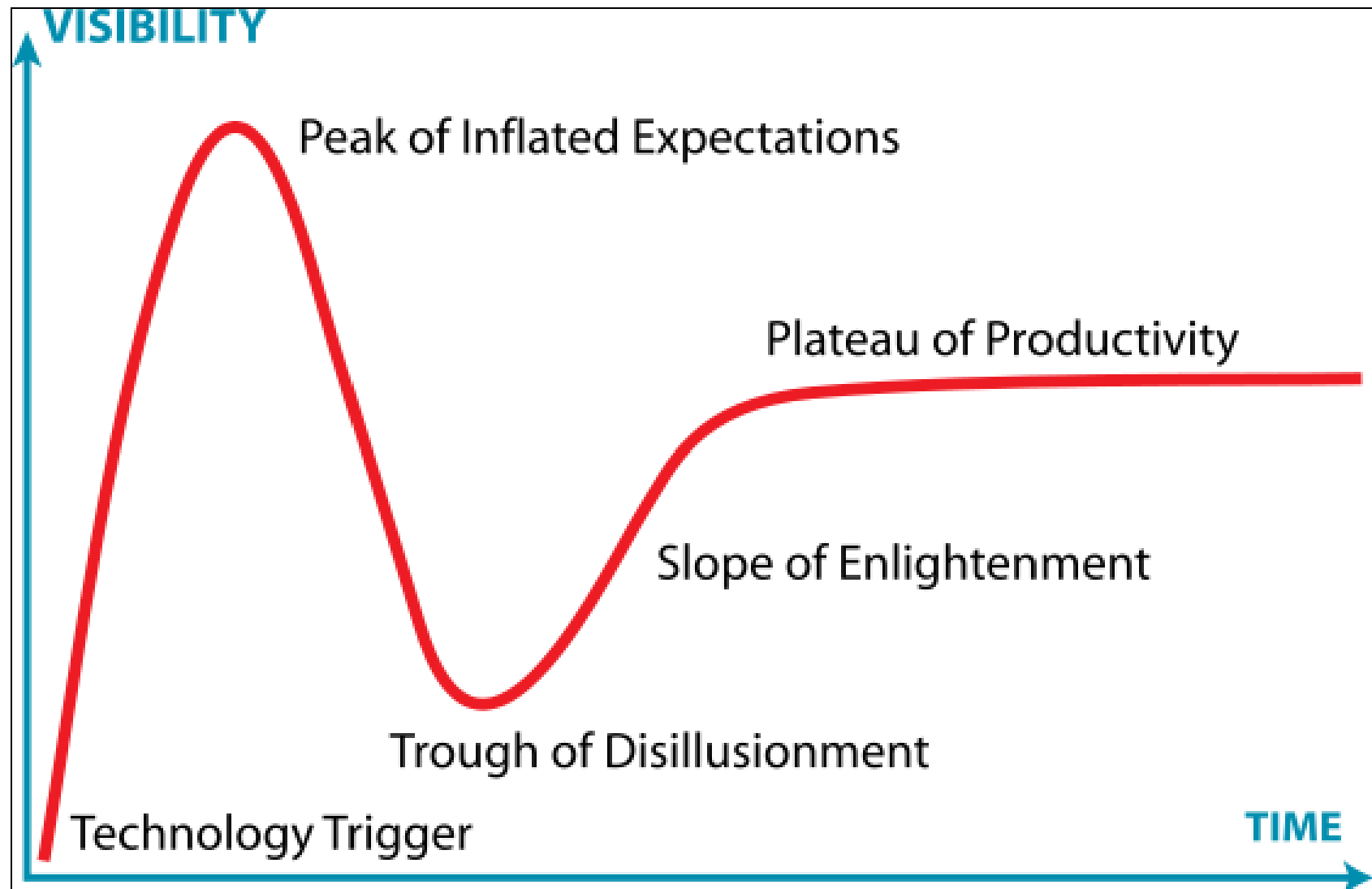
The Harvard Crimson

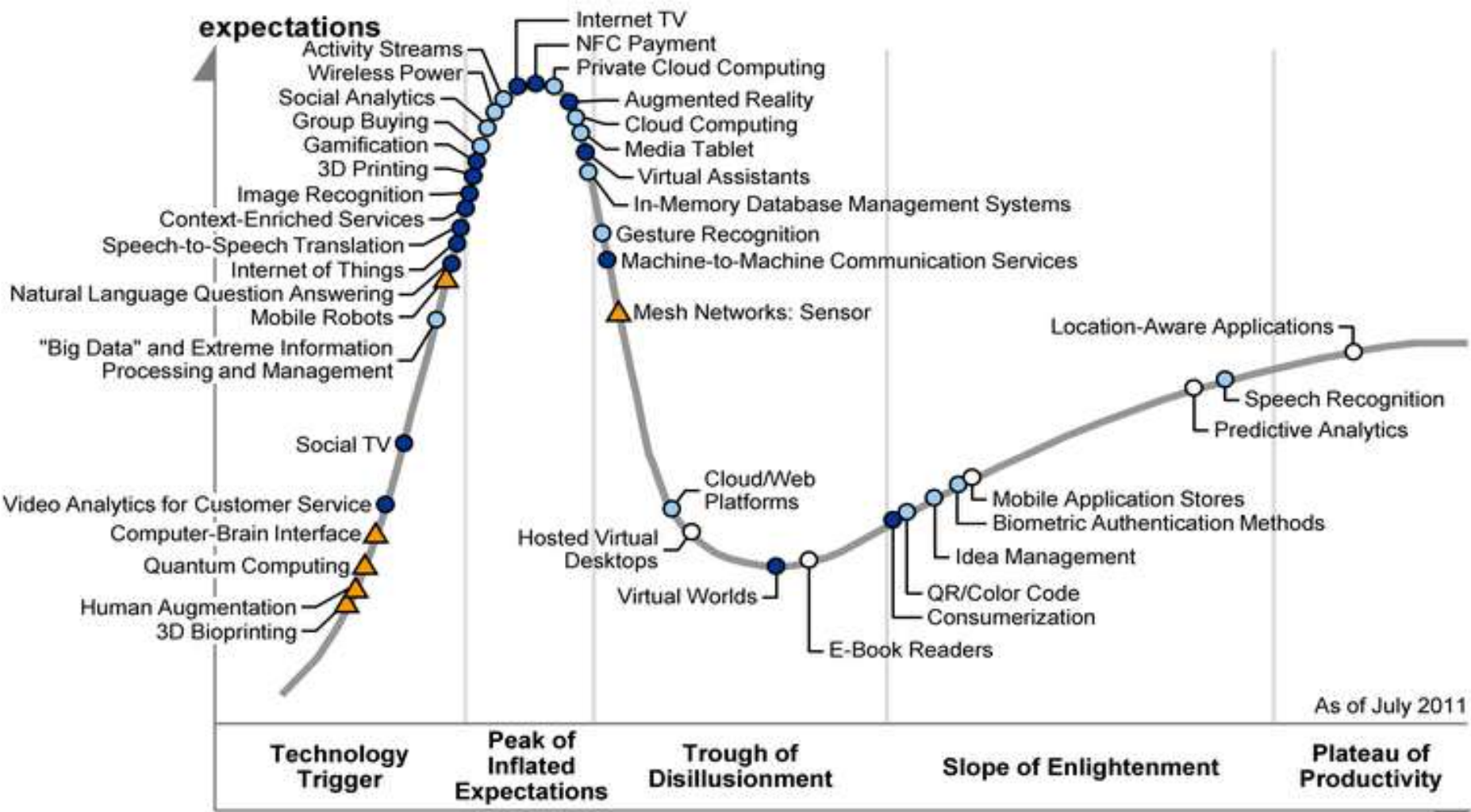
2004

Hundreds Register for New Facebook Website
Facemash creator seeks new reputation with latest online project

By ALAN J. TABAK, CRIMSON STAFF WRITER
Published: Monday, February 09, 2004

Gartner Hype Cycle™





What are the things we do not understand about the Future of Work?



High Uncertainty & High Impact

- Globalization
- Demographic Transitions (Aging / Youth Surge)
- Level of Employer / Employee Loyalty
- Level of Collaboration (Humans / Machines)
- Key Skills vs On-Demand Learning
- Types of Jobs
- Disruptive Technologies
(Information; Cognitive; Neuro-; Bio-)



1950s-1990
West to West Economy
= National Independence

1990s-2000s
East to West
= Low Cost Outsourcing

Beyond 2015
South to South Economy
= Global Interdependence

The Upsides & Downsides of an Aging of Society

Demographics
(Part One)

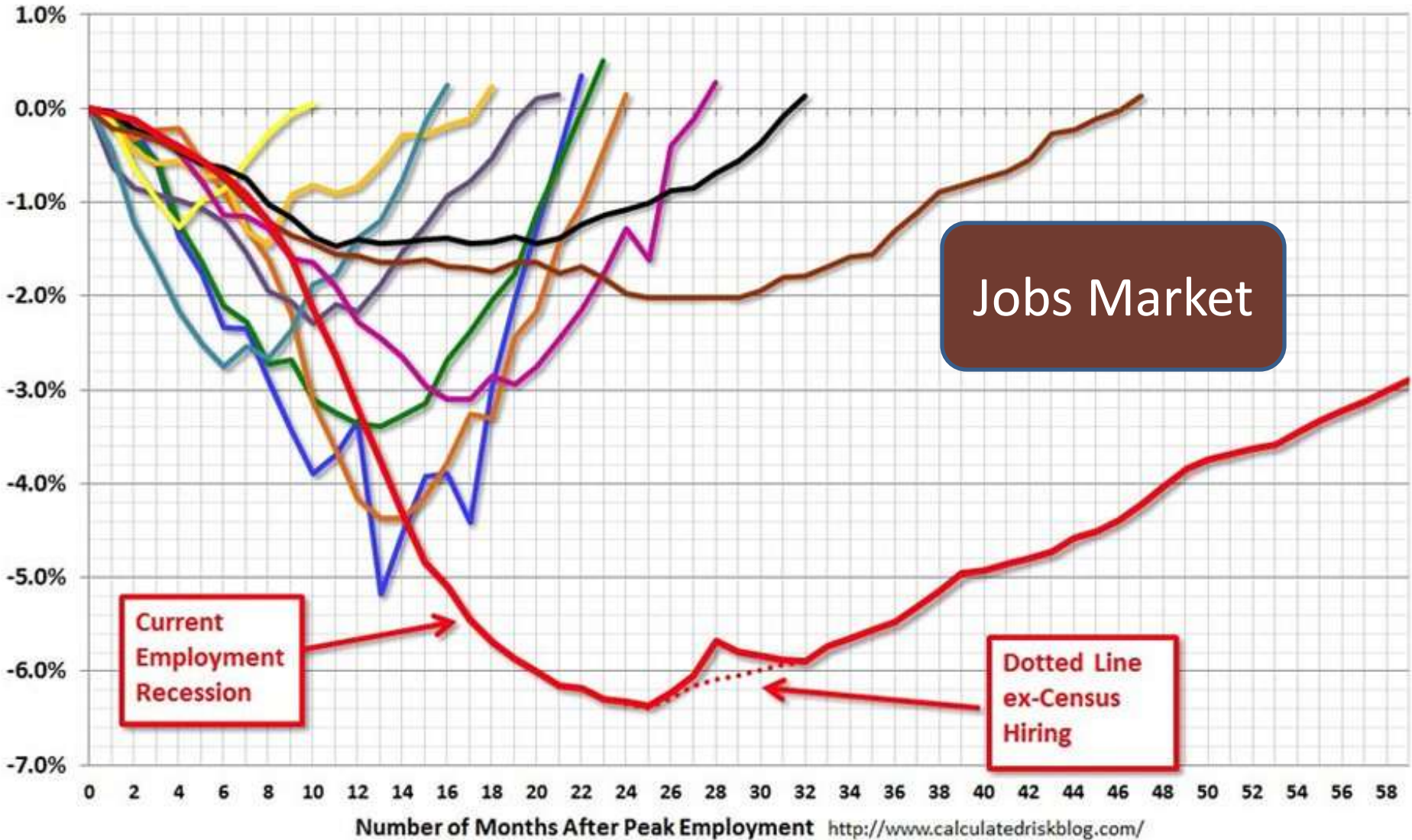




Percent Job Losses In Post WWII Recessions

Percent Job Losses Relative To Peak Employment Month

1948 1953 1957 1960 1969 1974 1980 1981 1990 2001 2007



Jobs Market

Current Employment Recession

Dotted Line ex-Census Hiring

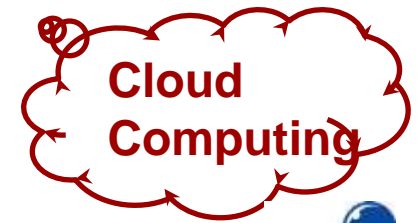
Work & Digital Fluency 1995 – 2010 & Beyond



Lotus Notes 4.0



Learning Systems



Data-Driven Services

Pre-'Web'
Admin Tools

Web 1.0
Info Portal

Web 2.0
Social Web

Web 3.0
*Services
& Behavior
Change*

**Tip #1:
Prepare for Uncertainties
& Dynamics Changes in a
Global Age of Work**





In the News

The visionary entrepreneur has leaked plans on –what Esquire is calling - *Galactic Inner Space*: retreat centers aimed at individuals seeking

How do we bring new mindset and habits to managing stress in workplace?

True



False

The Manufacturing Institute intends to create a National Manufacturing Badge System, recognizing the wide range of skills, competencies, capacities, qualities and achievements students and workers need to be successful in today's

How do we rethink the role of certifications in showing our commitment to lifelong learning?

True



**RIGHT
SKILLS
NOW**
FOR MANUFACTURING



False

[The New BristolRising.com](#)[Bristol Rising: The Video](#)[Downtown Living Progress](#)

[Interested in living downtown? Click here to choose your residential preference!](#)

[New website finally h](#) 

Hey Risers! Welcome, welcome, and welcome! It's our brand spanking new site. Still smells like we just drove it off the lot. Please browse around and check things out. Interact with it, tickle it, have fun. If there's something funky, ...

27 February 2012

[READ MORE](#) ...

[Kudos to the Bristol Rising Team!](#)

[Home Show Success!](#)

True

False

A Verizon employee was recently caught outsourcing his daily work to a software programmer in China whom he paid directly from his own salary.



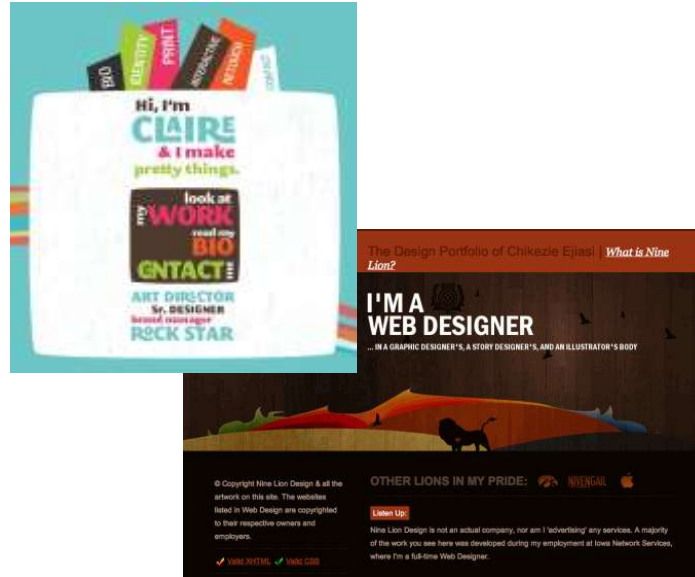
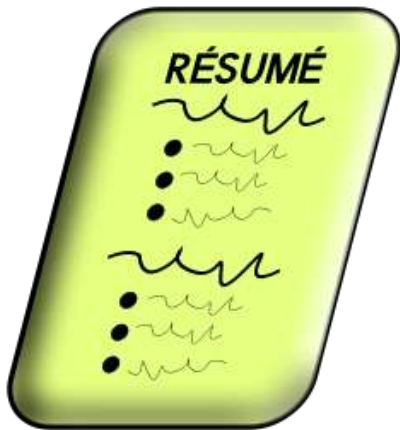
True

False

What are the ways we can sell our 21st Century skill sets and mindsets?



Tip #2: Going Beyond the Resume



Resume

Portfolio

Presence



Tip #3: Show Your Breadth of Skills

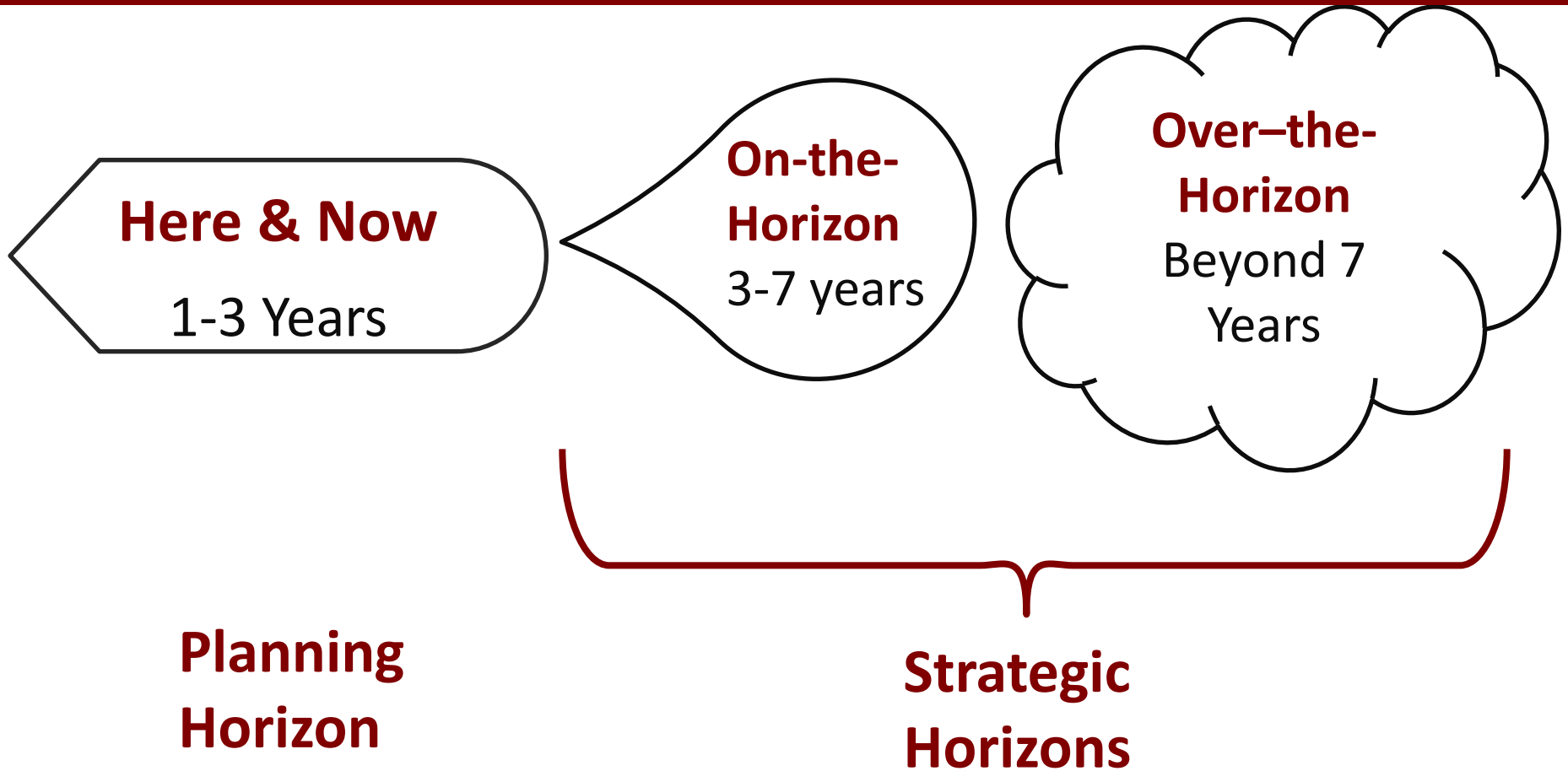
Ability to Apply Broadly Across
Situations & Disciplines

Depth of Subject Expertise

Example of Breadth of T-Shaped

- Communication / Presentation / Storytelling
- Collaboration Experiences
- Ethnography / Sociology
- Data Science & Visualization
- Analytics & Modeling
- Psychology / Behavior Change
- User Experience Design
- Arts Education

Setting Personal Strategy using Multiple Time Horizons



Employee of the Future

I am someone who can...

- Reframe Problems
- Stand at Intersections of Change
- Collaborate & Automate
(= Be Transparent & Accountable)
- Turn Data into Knowledge & Wisdom
- Tell Stories



Reframe this Problem







Flip the Learning
Experience



Era of
Apprenticeship



Era of
Institution



Era of
Learner



**Disruptions of
Books & Industrial Work**



**Disruptions of
Web & Knowledge Economy**



Saul Kaplan @skap5

1h

18K applied to MIT 1600 were admitted. Flip the tunnel. 155K signed up for EdX Circuits & Electronics class. Agarwal # NEBHE

How?

coursera

edX

UDACITY

=

**Massive
Open
Online
Courses**

MOOCs

The Learning & Mastery Marketplace

Community-led
Learning Experience

SKILLSHARE
A platform to learn anything, from anyone.

Web-based MOOC
Massive Open Online Courses



UDACITY

coursera



Tip #1: Prepare for Uncertainty in Age of Globalization

Tip #2: Going Beyond the Resume: Portfolios & Presence

Tip #3: Show Your 'T-Shaped' Breadth of Skills

Tip #4:

Expand Your Base of Teachers & Learning Communities

SKILLSHARE
A platform to learn anything, from anyone.

edX

UDACITY

coursera

A photograph of a city street scene. In the foreground, a traffic light is visible, and below it is a white sign with a red circle and a diagonal slash, indicating a 'No Right Turn' restriction. The background shows green trees and a clear blue sky.

Reframe this Problem



Cost of Ownership vs Access



zipcars
live in your neighborhood

A yellow Mini Cooper car is shown from a front-three-quarter view. It has a green Zipcar logo on its side. The background behind the car is a green gradient with radiating lines.

Drive by the **hour** or **day** from \$9/hr!
Gas, parking and insurance included.

GM vehicle owners can rent out their vehicle with RelayRides



I have a car:

Enroll: A GM car owner decides to enroll his car in RelayRides

Schedule: He sets both the car's availability and the rates

Drive: He sits back, and makes the easiest cash he's ever earned



I need a car:

Enroll: A woman living without a car signs up with RelayRides to gain access to affordable wheels in her neighborhood

Schedule: She searches RelayRides' online marketplace for available cars that meet her needs

Drive: She can use an application* on her phone to unlock the car through OnStar technology

Everybody Wins: He earns some much needed cash. She gets access to wheels when she needs them. Everybody wins!

*mobile app available early 2012



2008



Today



**What problems
would you redefine?**



Employee of the Future

I am someone who can...

- Reframe Problems
- Stand at Intersections of Change**
- Collaborate & Automate
(= Be Transparent & Accountable)
- Outcomes-Focused
Turn Data into Knowledge & Wisdom
- Tell Stories



**Stand at
Intersections**

Intersection of **Robotics & Warehouse (Logistics & Fulfillment)**



Intersection of

Fashion & Wearable Technologies & Behavior Change





Intersections

[Fill in the blank] + [Fill in the Blank]





Intersections with Aging Baby Boomers + _____

An aerial, top-down view of a complex city intersection. The scene is filled with various vehicles including cars, buses, and trucks. Pedestrians are visible crossing the streets. The image is overlaid with a semi-transparent dark grey band containing white text. A white horizontal line is positioned below the text.

Intersections with Mobile Technology +



Intersections with Food + ---





An aerial, high-angle photograph of a busy city intersection. The image is semi-transparent, serving as a background for the text. It shows multiple lanes of traffic, with several cars, a large white bus, and a truck. A crosswalk is visible on the right side, and a small landscaped area with trees is on the left. The overall scene is a complex network of urban infrastructure.

Tip #1: Prepare for Uncertainty in Age of Globalization

Tip #2: Going Beyond the Resume: Portfolios & Presence

Tip #3: Show Your 'T-Shaped' Breadth of Skills

Tip #4: Expand Your Base of Teachers & Learning Communities

Tip #5:

**Describe Your Future Work Opportunities
Around Intersections of Change**

Employee of the Future

I am someone who can...

- Reframe Problems
- Stand at Intersections of Change
- Collaborate & Automate
(= Be Transparent & Accountable)
- Outcomes-Focused**
Turn Data into Knowledge & Wisdom
- Tell Stories

Employee of Future Outcomes Focused Approach to Data



Jeopardy
2011, IBM



Watson for a smarter > Industry Perspectives > Healthcare



2:16 SHARE


Healthcare

Medical records, tests, journals and research documents are all written in natural language – a language that computers traditionally struggle to understand. A system that instantly delivers a single, precise answer from these documents could transform the healthcare industry.

"In healthcare, we talk about turning data into knowledge. That's really what Watson does."

*Joe Jastrow
Program Director,
IBM Healthcare and Life Sciences
Research*

Thought leaders including Dr. Herbert Chase, Professor of Clinical Medicine at Columbia University School of Physicians and Surgeons, share their thoughts on how the DeepQA technology that powers Watson could impact the way doctors diagnose and treat patients.



1:54 SHARE


Finance

Enormous amounts of data are generated every day in the financial industry. Watson, the IBM computer system designed to compete on Jeopardy!, has the Deep Analytics capabilities that could help businesses extract knowledge from this data in order to identify patterns and make more informed financial decisions.

"The currency of financial services is information."

*Car Abrams
Financial Services Sector Business
Executive for IBM Research*

See how leaders in analytics think the DeepQA technology that powers Watson could transform how the financial industry does business.



1:02 SHARE

Customer Services

IBM experts share their thoughts on how DeepQA technology could help transform the customer service industry into a faster, more accurate experience.

"Imagine if you had a system where you just called Watson, asked a question, and you get the answer in real time."

*Ravi Bloom
IBM Chief Technology Officer for
Telecommunications Research*



True

False

Data (Personal & Work) = Biggest Asset?





Like



**I Don't
Understand**

Prescriptive

What should happen..!

Predictive

What might happen..

Descriptive

What happened..

Outcomes & Value Chain of Data



Data as Source of Innovation

Employee of Future Goals & Achievement

**How might the future or
work / careers look like:**



Gamification of Life Experiences?

'Gaming Mechanics' Design Principles:

- Rules & Rewards
- Challenges & Goals
- Badges & Recognition
(‘Level up’ Stages of Mastery)
- Reputation Management
- Teamwork & Strategy
- Continual Micro-experiences



Goal of Outcomes: *Novice to Master Level Skills*



Ford Hybrid Fusion: Leaderboards, Points, and Status

THE SMART WAY TO A BETTER YOU

Basis is a device that tracks heartbeats and more to paint the most useful picture of your health. Stay motivated by accumulating points and praise for your progress.

[RESERVE NOW](#)

510



214



173 people

Track calories, lose weight



Follow Your Heart

Advanced sensors capture heartbeats and more to paint a picture of your health that's richer than motion-based devices. No chest straps, no headbands. Just Basis.

[TAKE THE TOUR](#)

Look Good

Work or play, rain or shine, Basis is with you in all walks of life. Attractive, comfortable... you'll look great wearing it.

[TAKE THE TOUR](#)

Keep Track

Monitor daily, weekly, and monthly progress...right down to the calorie, step or minute of sleep. No fiddling with exercise or sleep "modes" like other devices. Just put it on and go. We'll do the rest.

[TAKE THE TOUR](#)

Have Fun

Share your milestones with friends. Stay motivated by accumulating points and praise for your progress. Smile! Fitness feels good.

[TAKE THE TOUR](#)



WELCOME TO PLAYGROUND

A NEW GENERATION OF PIANO LESSONS
Choose a hit song from contemporary artists and start playing piano immediately.

- 1 Download Software
- 2 Plug in a Keyboard
- 3 Start Playing and Learning

DOWNLOAD FREE TRIAL

EXPLORE THE PLAYGROUND



PLAY LIKE DAVID SIDES

LEARN PIANO BY PLAYING THE SONGS YOU LOVE



You may not be a self-taught virtuoso like David, but with Playground Sessions you don't have to be. Play along, learn with ease, and have fun as he shares his methods.



WATCH & LEARN MORE

SEE FULL LIBRARY

Playground Sessions: 30 days to play

by PlaygroundPiano

HIDE

First day on a piano, EVER!
And only 29 days to the concert...



2:29 / 2:52

YouTube

mozilla

OpenBadges

Get public recognition for your skills and achievements



LEVEL UP
in life, work and learning



Mozilla's Open Badges infrastructure makes it easy to issue, display and manage badges across the web -- opening new ways to show your skills and achievements to the world.

Open Badges is a project of Mozilla with support from the MacArthur Foundation.

MacArthur
Foundation

Tip #1: Prepare for Uncertainty in Age of Globalization

Tip #2: Going Beyond the Resume: Portfolios & Presence

Tip #3: Show Your 'T-Shaped' Breadth of Skills

Tip #4: Expand Your Base of Teachers & Learning Communities

Tip #5: Describe Your Opportunities at Intersections of Change

Tip #6:

**Get Involved in Skills-building Experiences that Teach
Transparency & Accountability**

(Gamification of Work Experiences)

Employee of the Future

I am someone who can...

- Reframe Problems
- Stand at Intersections of Change
- Collaborate & Automate
(= Be Transparent & Accountable)
- Outcomes-Focused
Turn Data into Knowledge & Wisdom
- Tell Stories**



story



vision

Communicate via the Video Camera!



Design A Portfolio/Presence that Tell Your Story

Who's your **top follower**? What was your **top tweet**?

SEE YOUR YEAR ON TWITTER

Vizify

FAST. EASY. FREE. [SIGN UP NOW!](#)

[SIGN IN](#)

A personal website powered by your data

Plug in your social media sites and Vizify creates a series of interactive infographics that show the best of you.

SHOW ME MINE!

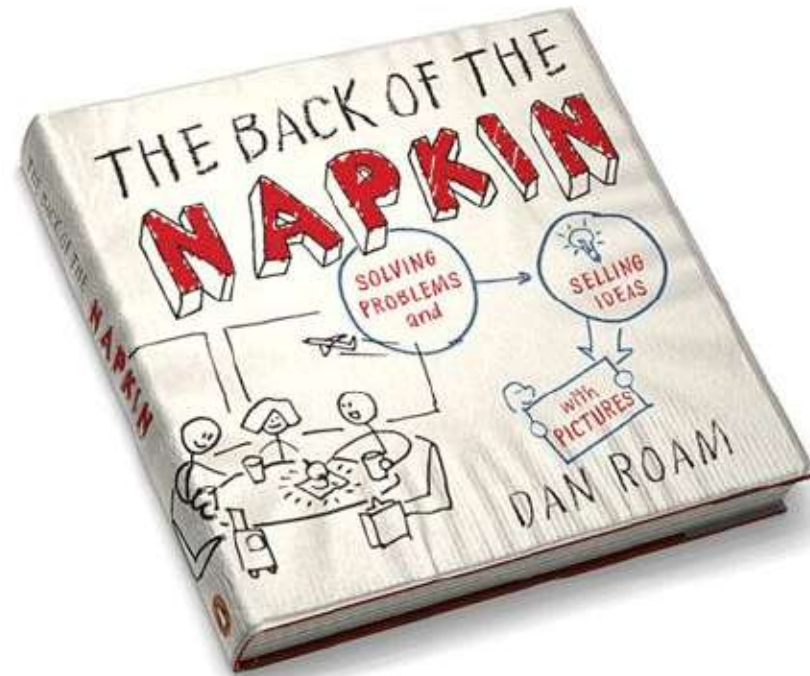


See how others are using Vizify

Design Product Interfaces that Tell Stories



Learning from Masters of Storytelling

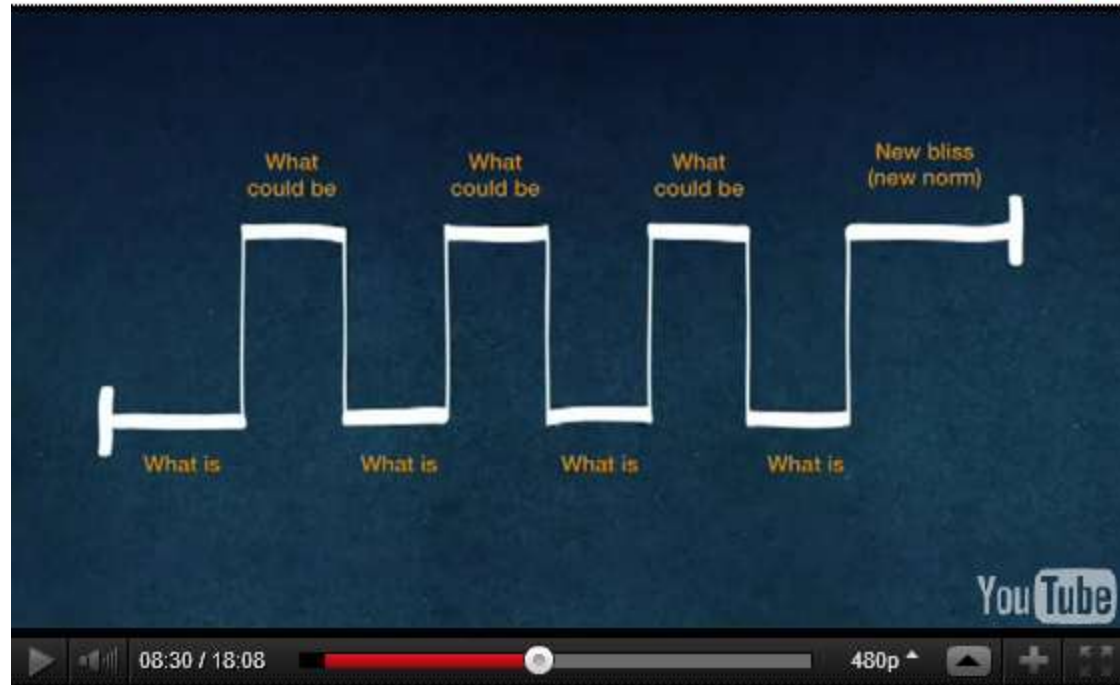


Danroam.com

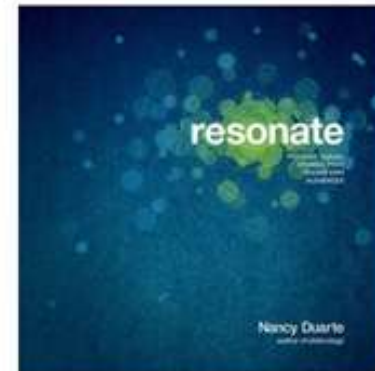
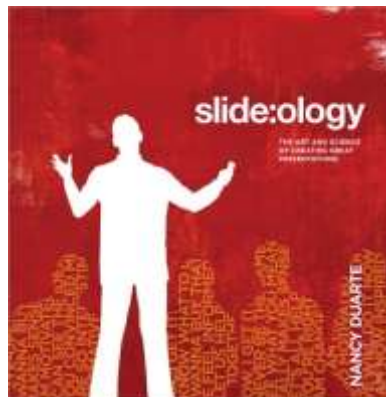
Nancy Duarte: The secret structure of great talks

TEDxEast, Filmed Nov 2011; Posted Feb 2012

TEDx



Nancy Duarte
Duarte Design





Neil deGrasse Tyson



Neil deGrasse Tyson - World to End In 2012...or Not

Complete video at: [fora.tv](#) Author and astrophysicist **Neil deGrasse Tyson** dismisses the popular internet doomsday theory that a "Planet X," aka ...

by ForaTV · 3 years ago · 613,493 views



10 Questions for Neil deGrasse Tyson

LISTEN TO FULL AUDIO: [tinyurl.com](#) **Tyson** is the director of the Hayden Planetarium at the American Museum of Natural History and host of NOVA ...

by TimeMagazine · 3 years ago · 321,457 views



Stephen Colbert Interviews Neil deGrasse Tyson at Montclair...

Jump to 6:15 for the start of the interview. Now with captions! Took me three days to transcribe. -P Download captions: [siles.google.com](#) if you ...

CC by london · 3 months ago · 491,536 views



Authors@Google: Neil deGrasse Tyson

The Authors@Google program welcomed **Neil deGrasse Tyson** to Google's New York office to discuss his book, "The Pluto Files". About the Book: "The ...

by ATGoogleTalks · 2 years ago · 104,108 views



Neil DeGrasse Tyson - Greatest Sermon Ever

2006 **Neil deGrasse Tyson** closes the three day lecture series with an excellent final "sermon" on cosmic perspective and the impact of science ...

by playd76 · 2 years ago · 175,522 views



The Most Astounding Fact (Neil deGrasse Tyson)

Please subscribe above! Watch on Vimeo: [vimeo.com](#) Astrophysicist Dr. **Neil DeGrasse Tyson** was asked by a reader of TIME magazine, "What is the most ...

HD CC by MaxSchlick · 1 week ago · 1,712,541 views

Tip #1: Prepare for Uncertainty in Age of Globalization

Tip #2: Going Beyond the Resume: Portfolios & Presence

Tip #3: Show Your 'T-Shaped' Breadth of Skills

Tip #4: Expand Your Base of Teachers & Learning Communities

Tip #5: Describe Your Opportunities at Intersections of Change

Tip #6:

Become a Student in the Art of Storytelling

Introducing TED-Ed: Short lessons for teachers and students to spark curiosity

Introducing TED-Ed: Lessons worth sharing

TEDEd
LESSONS WORTH SHARING



Nancy Duarte



Neil deGrasse Tyson

I don't
like the
future...





The Future
NEXT EXIT ↗



Badges

**Third
Place**

Globalization

**Learning
Management
Systems**

Aging Boomers

**Learning
More...**

Prescriptive Data

**Millennial
Parents**

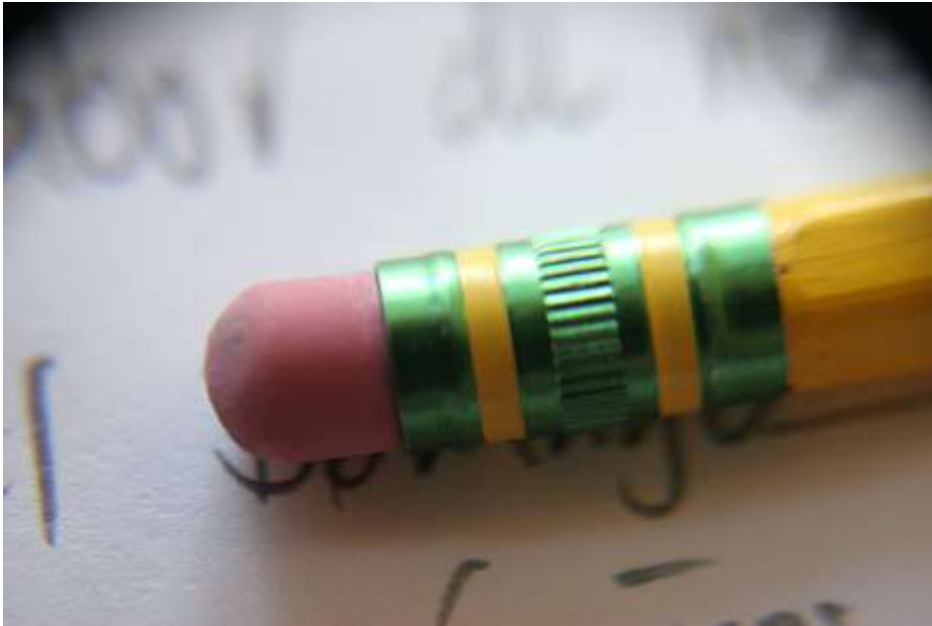
Big Data

**Personal
Assistants**

**Behavior-Change Gaming
Mechanics**

Tip #7

Embrace Mistakes



FAILfa[💡]re

Tip #8

Follow Passionate People & Smart Conversations



Tim O'Reilly



Nancy Duarte



Hans Rosling



Neil deGrasse Tyson



Tip #1: Prepare for Uncertainty in Age of Globalization

Tip #2: Going Beyond the Resume: Portfolios & Presence

Tip #3: Show Your 'T-Shaped' Breadth of Skills

Tip #4: Expand Base of Teachers & Learning Communities

Tip #5: Describe Opportunities at Intersections of Change

Tip #6: Become a Student in the Art of Storytelling

Tip #7: Embrace Failure / Fail Fast & Forward

Tip #8: Follow Smart Passionate Conversations

Garry Golden (Two Rs)

garrygolden@gmail.com

347-463-7412

Twitter: [garrygolden](https://twitter.com/garrygolden)

PDF Copy of Presentation:

www.garrygolden.net/BC2013



Most uncomfortable = _____

Most Inspired = _____

Biggest Opportunity = _____

Biggest Risk = _____





Industry description	Sector
Fastest growing	
Home health care services	Health care and social assistance
Individual and family services	Health care and social assistance
Management, scientific, and technical consulting services	Professional and business services
Veneer, plywood, and engineered wood product manufacturing	Manufacturing
Computer systems design and related services	Professional and business services
Cement and concrete product manufacturing	Manufacturing
Outpatient, laboratory, and other ambulatory care services	Health care and social assistance
Offices of health practitioners	Health care and social assistance
Software publishers	Information
Construction	Construction
Commercial and industrial machinery and equipment rental and leasing	Financial activities
Other professional, scientific, and technical services	Professional and business services
Facilities support services	Professional and business services
Community and vocational rehabilitation services	Health care and social assistance
Lessors of nonfinancial intangible assets (except copyrighted works)	Financial activities
Other educational services	Educational services
Automotive repair and maintenance	Leisure and hospitality
Grantmaking and giving services and social advocacy organizations	Other services
Sawmills and wood preservation	Manufacturing
Child day care services	Health care and social assistance

Most Rapidly declining

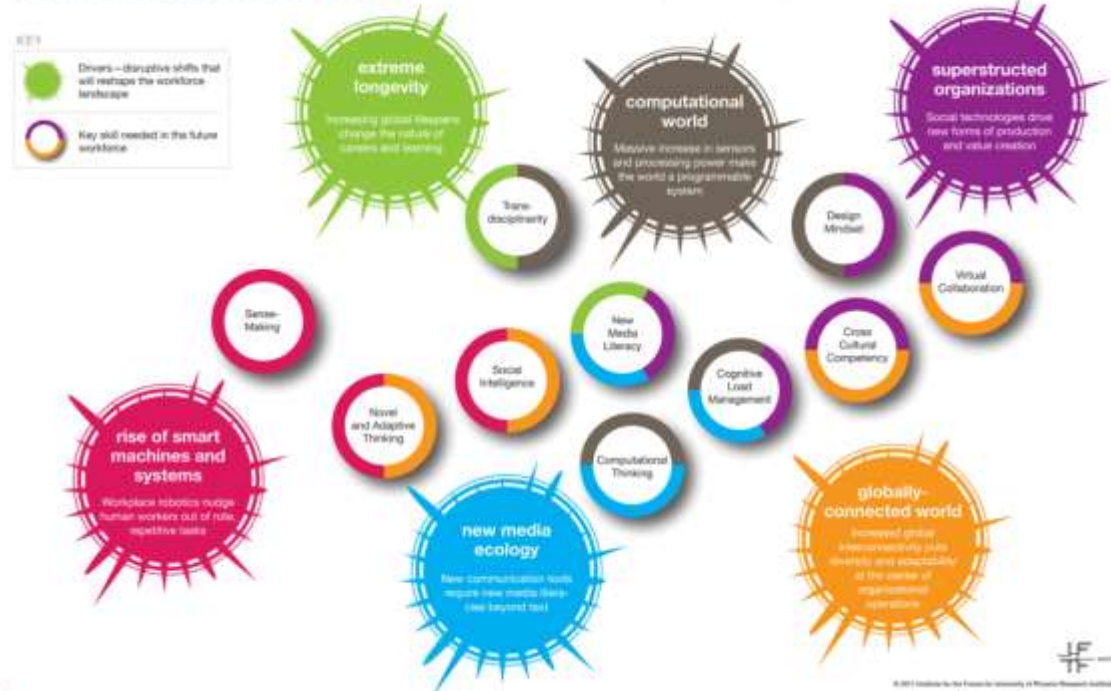
Apparel knitting mills	Manufacturing
Leather and hide tanning and finishing, and other leather and allied product manufacturing	Manufacturing
Postal Service	Federal government
Communications equipment manufacturing	Manufacturing
Computer and peripheral equipment manufacturing	Manufacturing
Pipeline transportation	Transportation and Warehousing
Metal ore mining	Mining
Pesticide, fertilizer, and other agricultural chemical manufacturing	Manufacturing
Federal enterprises except the Postal Service and electric utilities	Federal government
Other miscellaneous manufacturing	Manufacturing
Other chemical product and preparation manufacturing	Manufacturing
Metalworking machinery manufacturing	Manufacturing
Glass and glass product manufacturing	Manufacturing
Basic chemical manufacturing	Manufacturing
Electrical equipment manufacturing	Manufacturing
Pulp, paper, and paperboard mills	Manufacturing
Fiber, yarn, and thread mills	Manufacturing
Iron and steel mills and ferroalloy manufacturing	Manufacturing
Petroleum and coal products manufacturing	Manufacturing
Newspaper, periodical, book, and directory publishers	Information

Source: Employment Projections program, U.S. Department of Labor, U.S. Bureau of Labor Statistics



Future Work Skills 2020

While all six drivers are important in shaping the landscape in which each skill emerges, the color-coding and placement here indicate which drivers have particular relevance to the development of each of the skills.



Additional Resource: Strategic Questions to Consider

The following strategic questions are helpful in engaging colleagues conversations about the future.

Trends are slow changes over time; they reveal direction & momentum.

- Which trends are most likely to *converge*?
- Which trends are most likely to have the **greatest impact**?
- Which trends have *the most uncertainty* in terms of implications/outcomes/solutions?

Events are moments that can amplify or lead to discontinuities of existing trends. With your colleagues, list and describe potential implications of:

- Scheduled Events (e.g. Elections; Civic/Cultural Events; Campus events)
- Plausible Events (e.g. End of 501c3; Student Financial Aid Legislation]
- Wildcard Events – High impact, low probability (e.g. Bio; Cyber attack)

Choices reflect investments and actions towards a preferred future. With your colleagues, list and describe potential implications of:

- Institutional Choices (e.g. Capital Campaigns; Academic Programs; Staff Training)
- Plausible Events
- Wildcard Events – High impact, low probability (e.g. Bio; Cyber attack)

Additional Resource: Learning More

Books

- ❑ *Teaching about the Future (Textbook)*

Thinking about the Future

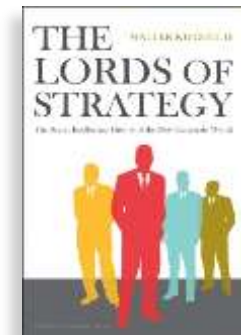
By Andy Hines & Peter Bishop

- ❑ *The Five Futures Glasses*

By Pero Micic

- ❑ *The Lords of Strategy*

By Walter Kiechel



Executive Level Foresight Training

- ❑ *University of Houston Studies of Future Program*
- ❑ *Foresight Education and Research Network (FERN)*

Additional Resource: Foresight Tools & Frameworks

Qualitative Focus:

Scanning

Scenarios

Simulations & Games

Backcasting

Genius Forecasting

Morphological Analysis

Role-playing

Ambient Futures

Casual Layered Analysis

Futures Wheel

Relevance Tree

Appreciative Inquiry

Qual-Quan Hybrid

Delphi Survey

Cross Impact Analysis

Survey / Focus Group

Agent Modeling

CA Systems Modeling

Decision Modeling

Gartner Hype Cycle

Text Mining

S-Curve Analysis

Field Anomaly Relaxation

Roadmapping

Fisher-Pry Analysis

Quantitative

Trend Extrapolation

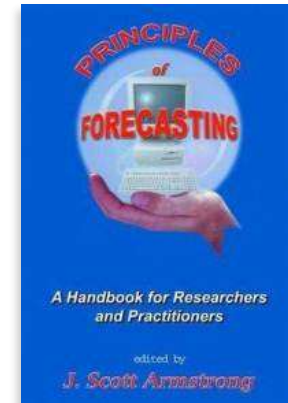
Benchmarking

Patent Analysis

Systems Dynamics

Probability Forecasting

Monte Carlo Models



Principles of Forecasting
By Scott Armstrong