

Tapping Our Inner Futurist **Designing a 21st Century Roadmap** **for Public Libraries**

Designed by:
Garry Golden
Forward Elements, Inc



Friday April 26, 2013
10 AM—1 PM

Sponsored by the
Southeast PA Regional District Centers



This program is supported in whole by the Institute of Museum and Library Services under the provisions of the Library Services and Technology Act as administered by the Office of Commonwealth Libraries.

Start

End



***Warm up &
Foresight 101***



**Drivers of Change
Learning, Local
& Place**



***Bringing it Home
Learning More...***



“...Quote...”



Not Changing?

Most uncertainty
& impact...



How will we communicate our value?

Mission:
Access to Collections



Outputs focus on
Access & Usage

Mission:
Mastery of Skills

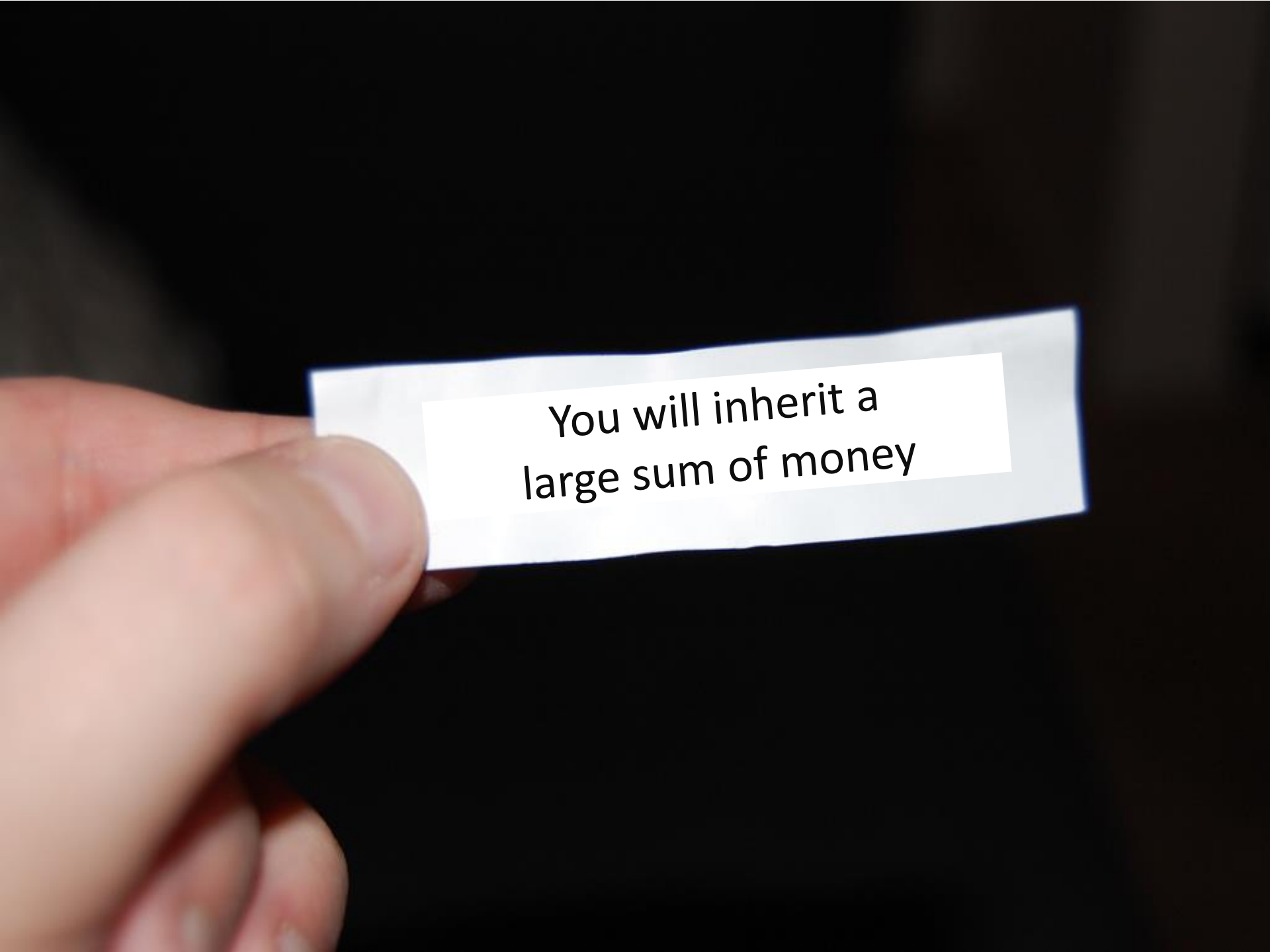


Outcomes focused
on **Behavior Change**

**Direction
of Change**

Who is this “Futurist” ?



A close-up photograph of a person's hand holding a small, white, rectangular slip of paper against a black 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



ESSEMIC

← Leopterodon

Maple at El Arque

DM7

El Grato tal

Kelly

← 40 minutes

Benny Clark

John Clark

~~HN~~
9/22/11

Maple



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

Yo-Yo Ma

Fundamentals of Foresight

Identifying & Monitoring Change

- **Horizon Scanning**
- **Issues Analysis**
- **STEEP Categories**
 - S**ociety
 - T**echnology
 - E**conomics
 - E**nvironment
 - P**olitics

Exploring Implications

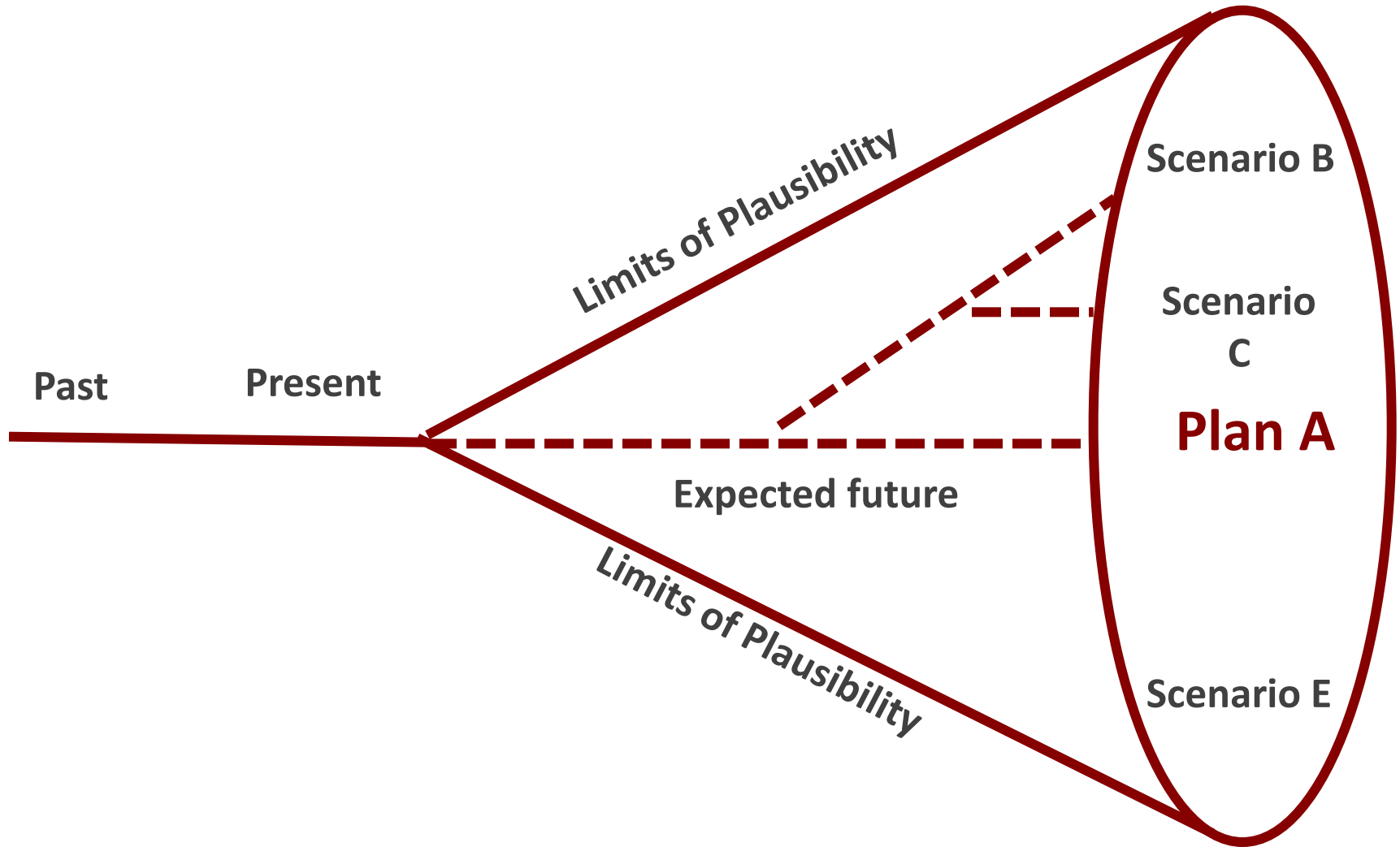
- **Forecasts**
(Most likely...)
- **Scenarios**
(What if...)

Communicating Need for Change

- **Visioning**
- **Planning**
- **Assessment & Evaluation**
- **Culture Change**

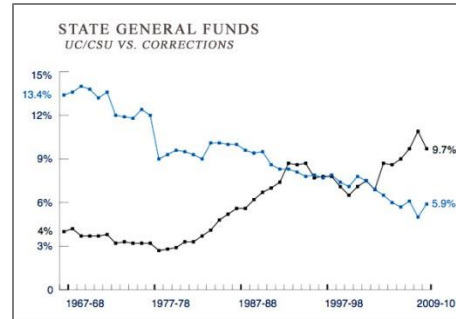
Describing our Cone of Plausibility

Planning for Multiple Outcomes & Multiple Horizons



Foresight 101: Three Mechanisms of Change

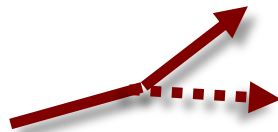
Trends
(Continuities)



**Plausible
Future**

Forecasts

Events
(Discontinuities)



**BEAR
STEARNS**

**Possible
Futures**

Scenarios

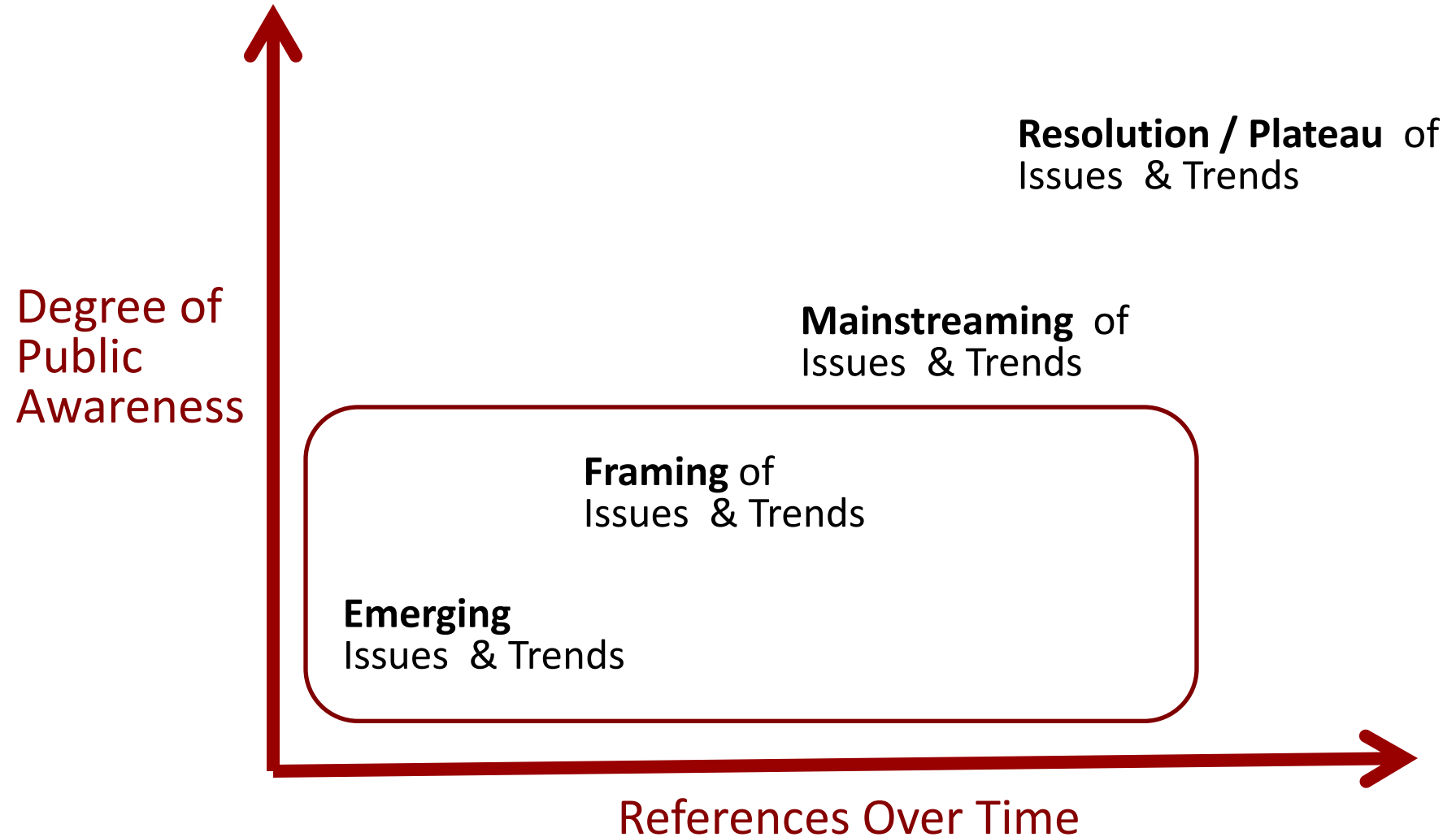
Choices
(Discontinuities)



**Preferred
Futures**

Visions

Trend Diffusion Frameworks



Rise of Personal Data



How to prepare for communities for managing data?

Business/Institutional Rights to Use Personal/Social Data

2016

**US Supreme Court Rules on
Business Rights to use 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**



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

**What are the three
big questions we
need to answer?**





In the News

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



- ✓ How do we evolve from providing 'programs and services' to having a reputation of innovative 'experience designers' for library learners?
- ✓ Are we selling the *lower stress* benefits of learning within libraries? (e.g. no high-stakes tests!; learner habits)

The Washington Post has developed an application called Truth Teller to check speeches in near real-time, and reveal degree of accuracy in claims.

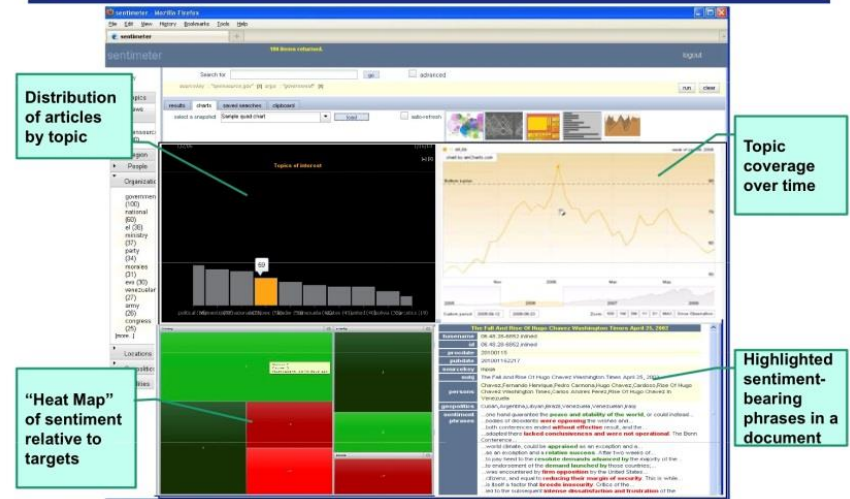


✓ Are we teaching information literacy as a 21st century skillset?



Notional "Social Radar" Desktop

The US Air Force is exploring the development of a *Social Radar* dashboard to identify potential *tipping points* in social behavior change.



Social Radar Dashboard

- ✓ Do we have the right sentiment capture tools & the trust factors in place for this future scenario?
- ✓ How do we program differently to support positive momentum vs mitigating negative tipping points?

The Manufacturing Institute is creating a National Manufacturing Badge System for skills and achievements needed to be successful in today's Advanced Manufacturing workplace

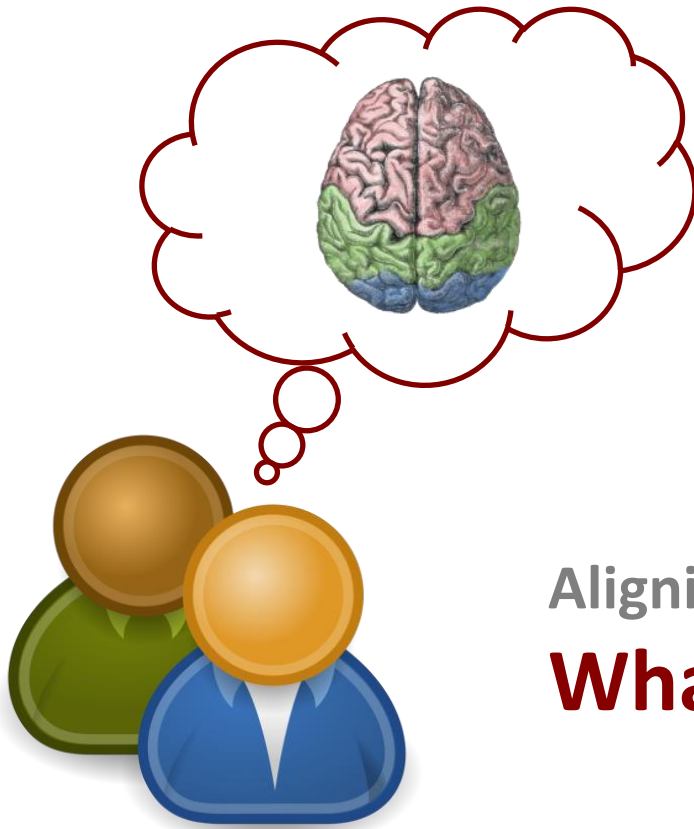


**RIGHT
SKILLS
NOW**
FOR MANUFACTURING



T

How do we rethink the role of libraries in certifications of lifelong learning?



Aligning Trends & Talent

What is our People strategy?

Future-Proofing Our Skill sets & Mindsets

I versus T-shaped Library Teams



Depth of Subject Expertise

I versus T-shaped Culture and Training

Broad set of Skillsets & Mindsets

Depth of Subject Expertise

List possible T-Shaped Library Team Skills:

- **Service/Experience Design**
- **Data Science**
- **Design Thinking**
- **Visual Communication**
- **Ethnography**
- **Social Media**
- **Creative Aging Services**
- ***Crowd* Facilitation**
- **Programming**
- **Mediation / Conflict Resolution**



**Lifelong
Learning**



**Rethinking &
Retooling *Local***



**Place-based
Experiences**



Era of
Apprenticeship



Era of
Institution



Era of
Learner



**Disruptions of
Books & Industrial Work**



**Disruptions of
Web & Knowledge Economy**





KHAN
ACADEMY

Flip the
Learning Experience

Could a *flipped* model of education
shift demand within public libraries?

coursera

edX

=

**Massive
Open
Online
Courses**

MOOCs

UDACITY

Early days, but can we imagine a new scale for community programs?

Library Experiences with Authors vs Instructors

Thinking beyond collections, might libraries facilitate relationships between learners & instructors?



Pearl's
Lifeclass

**Celebrity
Instructors**



KHANSHARE
A platform to learn anything, from anyone.

**Community
Instructors**

Culture vs Technology

Culture & Technology

Technology as Culture

**Forget about technology,
culture drives social change**

How the Web is Changing Social Norms & Culture

©Cartoonbank.com



"On the Internet, nobody knows you're a dog."

**"On Facebook, 273 people know I'm a dog.
The rest can only see my limited profile."**



Anonymous Web to a more
1995

Social Web
2008

Libraries & Culture of Mastery

Everyone knows
I'm working on
some personal
growth issues

The web is becoming a
platform for managing our lives
& personal behavior change.

How might libraries adjust
to this new era?

Andrea Arden
• Mastering...
• Personal...
• Drug...
• Behavior...

BARRON'S

Era Transition: Adaptive Learning/ Media Consumption

Is it 'offline'
or 'online'?

Direction of Change

Is it 'software-guided' or not?

How might libraries adjust to an era where software guides information searching/discovery, media consumption and knowledge building?

arterer



THE WALL STREET JOURNAL.

ARTS & ENTERTAINMENT | Updated July 19, 2012, 3:24 p.m. ET

Your E-Book Is Reading You



How do libraries translate data into improve user experiences?

Libraries & Expanding Feedback Mechanisms



Like



**I Don't
Understand**

*Coming Soon!

Adaptive Era:

What will guide library behavior & relationships?

Prescriptive

What should happen..!

Predictive

What might happen..

Descriptive

What happened..

Outcomes & Value Chain of Data



Borrowing from 'Gaming Mechanics' Design Principles:

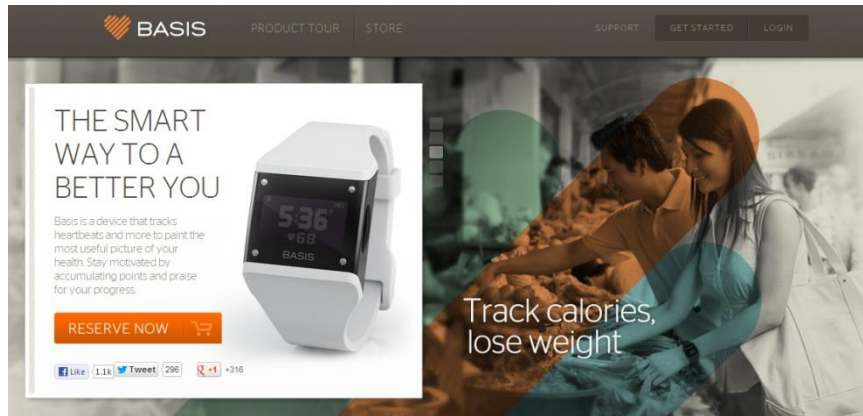
- **Rules & Rewards**
- **Quests & Challenges**
- **Badges & Recognition**
(‘Level up’ Stages of Mastery)
- **Reputation Management**
- **Teamwork & Strategy**
- **Continual Feedback**

=



Experience Design = *Novice to Expert* Level Skills

Learning from Outside Industries



Health Industry
Data-driven Experience Design



Education
Data-driven Learning Experiences

Playground Sessions: 30 days to play

by PlaygroundPiano

HIDE

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



What skills and mindset-building Quests
might our communities pursue?

How might libraries help learners tell stories of their growth and development?

mozilla



OpenBadges

Get public recognition for your skills and achievements

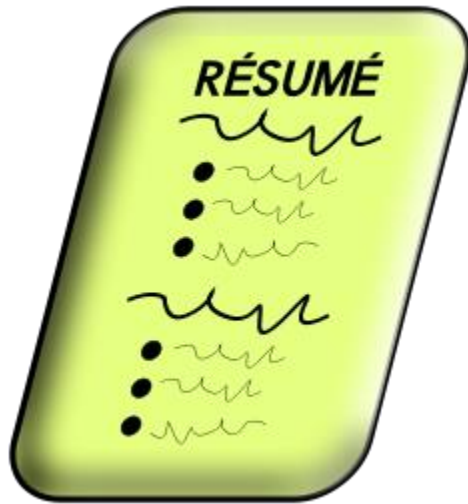


badges = visual representations of a **skill** or **achievement**

Pilot Project to Explore:



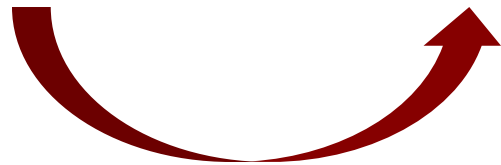
How might libraries help learners tell stories of their growth and development?



Resume

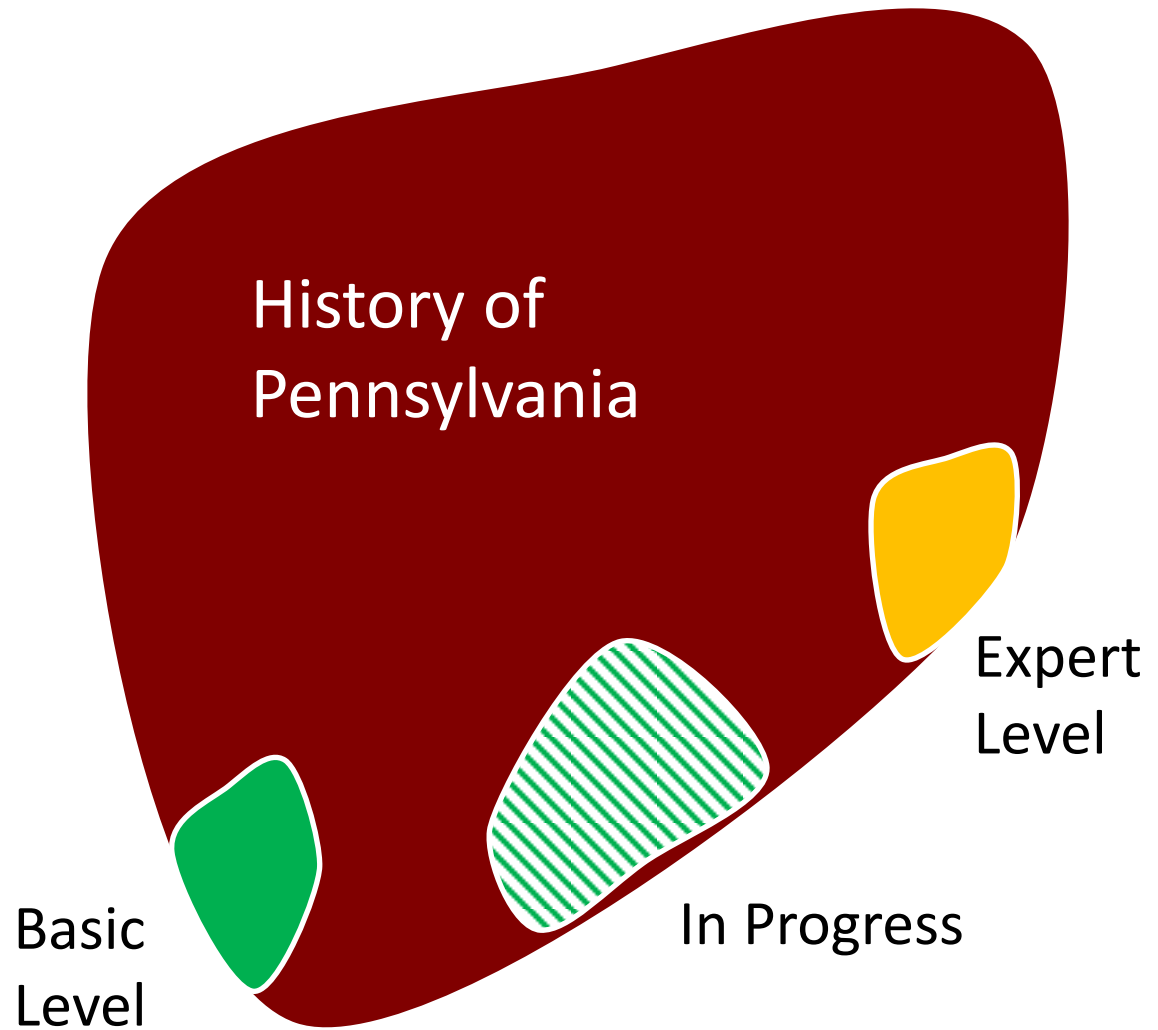
Portfolio

Presence



How might libraries help learners tell stories of their growth and development?

Concept to Watch:
Learning Graph



Advocate: Danny Hillis

Library Role in Shaping a Culture of Lifelong Learning?

Rethinking Library Membership for Outcomes Era

- **Mastery-focused**
- **Personal Story-based:
Role of 'Badges' or Learning Graphs**
- **Expanding Collections
of Learning Media & Linking to Behavior Change**



Use three (3) words to describe your vision for a new learner-focused library experience.

Build a bridge to the future.
Outline a new partnership strategy and/or concept for a *learner*-focused program



Break





Lifelong
Learning



Retooling *Local*
From Collections
to Connections



Place-based
Experiences

What is unique about your
local community?

What are potential missing
ingredients to success?
Barriers to take down?



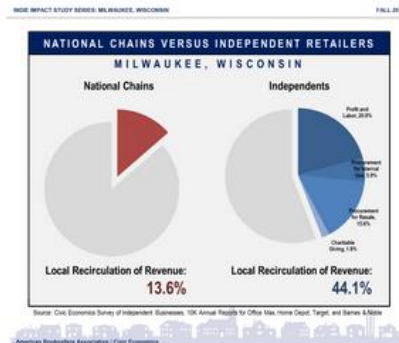
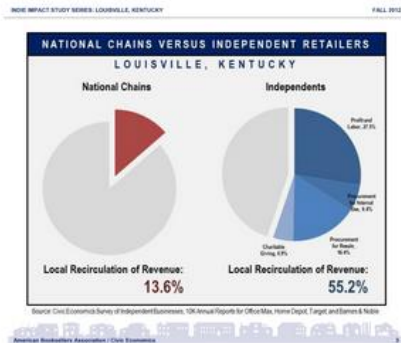
The Case for Retooling Local

Capturing the Local Economic Premium

Understanding Communities & Institutions at Crossroads

Louisville, KY

Milwaukee, WI



Spending at indie retailers generates **4 times** more local economic return than spending at chains in Louisville.

3.24 times more in Milwaukee



Public Libraries as Outlet for Engaging in Local Platforms



**Data-driven
Insight Generation**
(Tools & Databases)

Citizen-X Tools

**Social Connections
as Marketplace**

Libraries & (Physical) Local Dashboards



THEWAYWE MOVE

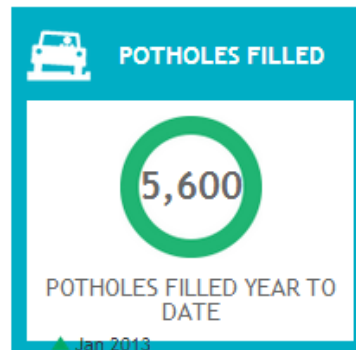
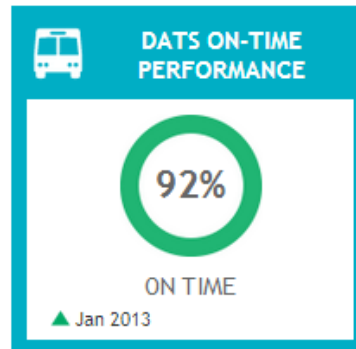
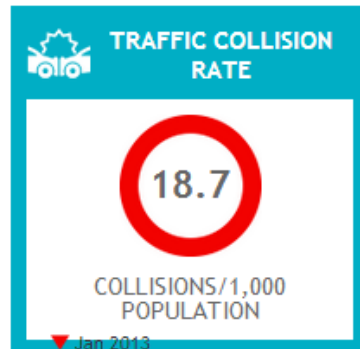
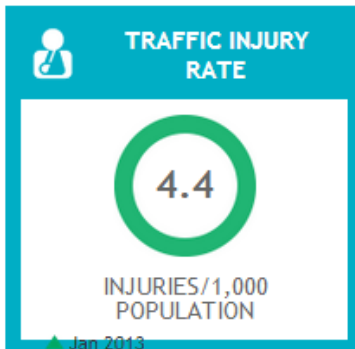
THEWAYWE LIVE

THEWAYWE GREEN

THEWAYWE GROW

THEWAYWE PROSPER

THEWAYWE FINANCE



▲ Meets or Exceeds Target ► Near Target ▼ Needs Improvement

Civicware: Issues Engagement

[Check out the Federal Budget](#)

or, choose a state:



WIDESCOPE

CODE *for*
AMERICA

Aunt _____
BERTHA
_____.COM
CONNECTING PEOPLE AND PROGRAMS





Rethinking & Retooling *Local*

Retooling & Retooling Local

- Culture Shaping (Civicware)
- Open Data Platforms
- Small Business Empowerment
- Focus on Levels of Social Connectivity & Local Market Dynamics
- Private Partnerships

Describe 2-3 new service innovations or program concepts that you might deliver in 2014 and beyond



Place-based Experiences



What changes do you see around libraries and the expanding role (and notions) of place-based experiences?



Community-based

Pop-up Libraries

Social Discovery

Location-based Experiences

Online-based

Maker-Space

Hacker-space

Playscapes

Immersive

Collaboration-scapes

Civicware

Learning Environments

Library-based



Managing Identity on the Go

...guest lecture tonight!

...on my way to the library then dinner downtown

...studying for exam tomorrow!

...heading to my book club

...join me.. photographing campus

...special discount at bookstore

How do we leverage place-based discovery and sharing?

CONTEMPORARY ARTS CENTER
FaireyTrek

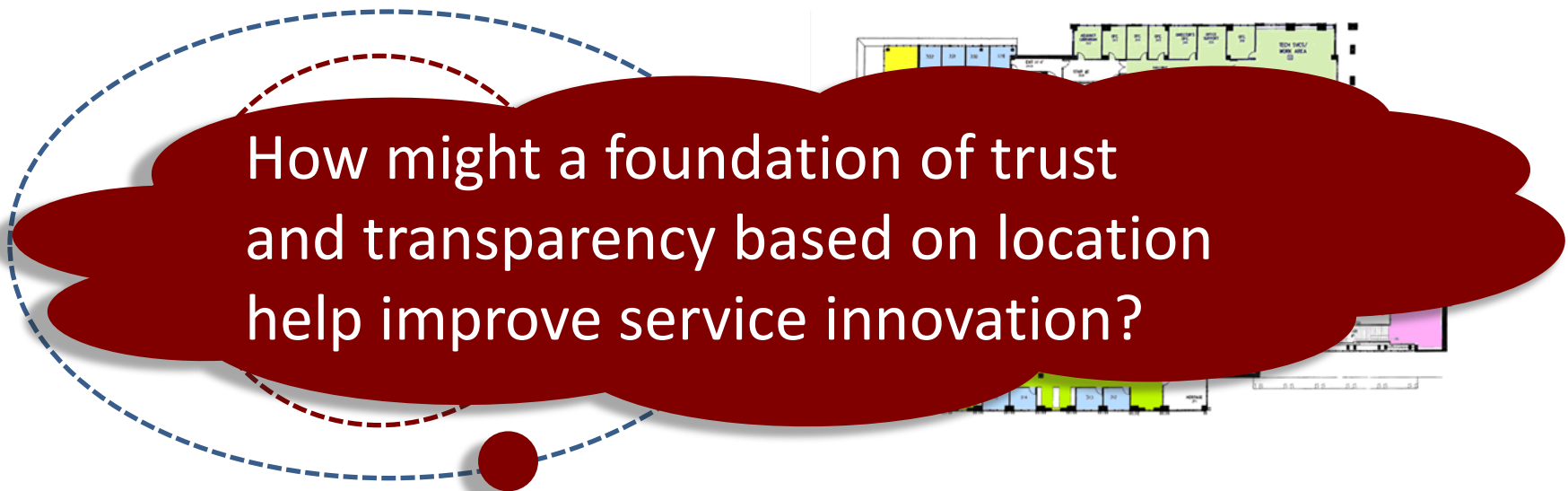


Learning from Geo Caching Culture

- Place as Storytelling
(Community as setting)
- Community members as 'authors' of place
- Place-based Learning Discovery

Connecting Places to Programs

Cultural Support for *Geo-Fenced* Relationships?



How might a foundation of trust and transparency based on location help improve service innovation?

Community Navigation

 Glympse

 Geoloqi

Indoor Navigation

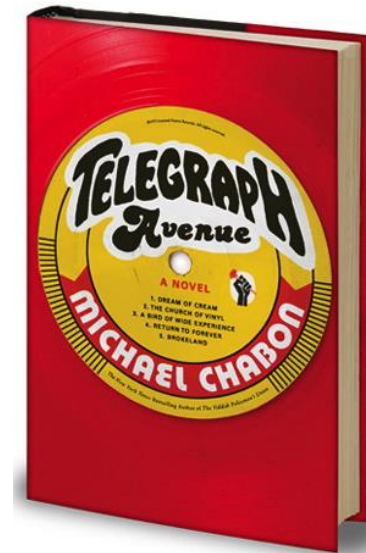
How do we leverage place-based story extensions?

Michael Chabon's *Telegraph Avenue*

HarperCollins Publishers



Converted Deisel store into pop-up Brokeland store



Created an interactive map of Oakland linking to storyline

How do we build satellite learning places beyond our home institutions?



Architect John Locke



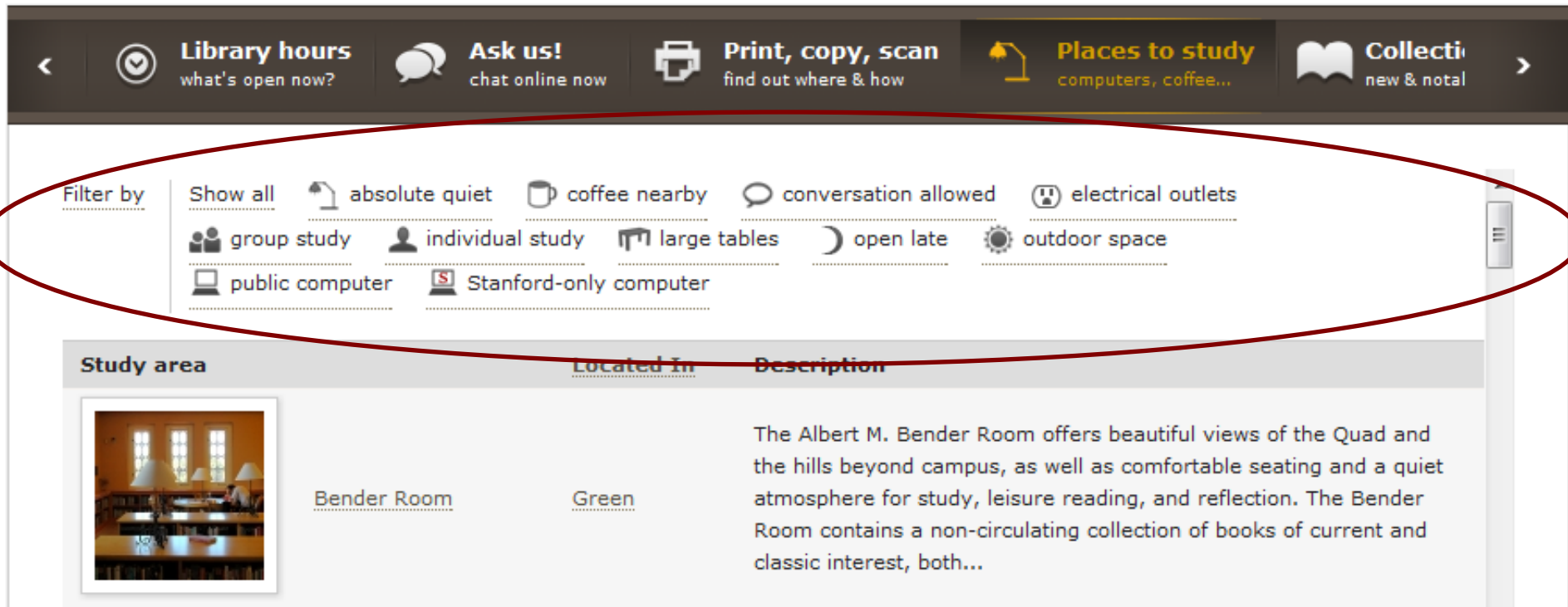
The Uni Project

KICKSTARTER

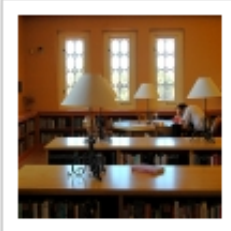
Pop-up Architecture:

- Event / Site-specific
- Value Spectrum:
Unexpected; On-Demand; Convenient

Shifting Expectations & Demand for Place as Service



The screenshot displays a library website interface. At the top, a dark navigation bar contains several menu items: 'Library hours' (what's open now?), 'Ask us!' (chat online now), 'Print, copy, scan' (find out where & how), 'Places to study' (computers, coffee...), and 'Collecti' (new & notal). Below this, a filter section is highlighted with a red oval. It includes a 'Filter by' dropdown and several filter options: 'Show all', 'absolute quiet', 'coffee nearby', 'conversation allowed', 'electrical outlets', 'group study', 'individual study', 'large tables', 'open late', 'outdoor space', 'public computer', and 'Stanford-only computer'. Below the filters is a table with three columns: 'Study area', 'Located in', and 'Description'. The first row of the table shows the 'Bender Room' located in 'Green'.

Study area	Located in	Description
 Bender Room	Green	The Albert M. Bender Room offers beautiful views of the Quad and the hills beyond campus, as well as comfortable seating and a quiet atmosphere for study, leisure reading, and reflection. The Bender Room contains a non-circulating collection of books of current and classic interest, both...

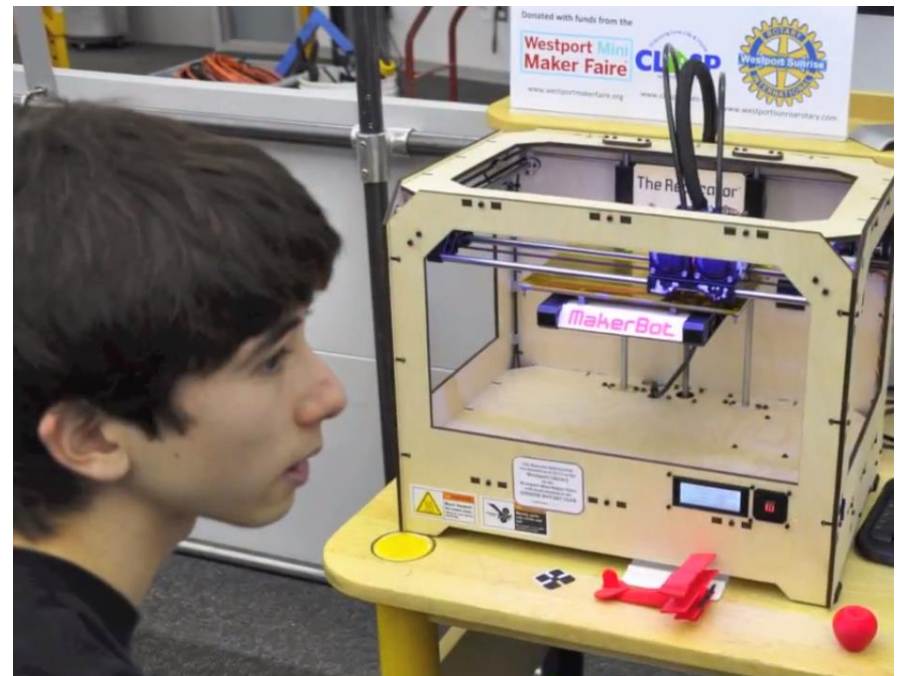
Fort Wayne Regional Maker Faire®



A Public Art & Technology Laboratory
Interconnecting Imagination, Technology and Community



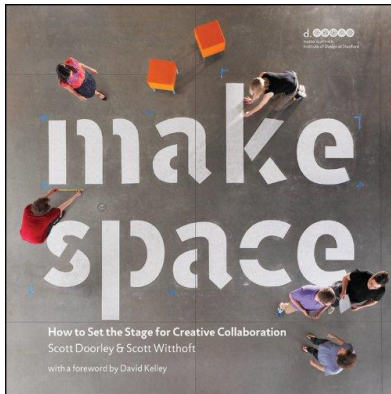
Integration of Materials, Process and Play



FAST COMPANY

11 Ways You Can Make Your Space as Collaborative as the Stanford d.school

BY LINDA TISCHLER | MAY 6, 2010



Collaboration Spaces

MetLife



Creative Aging Environments



20-Somethings 'Emerging Adulthood'

What are civic problems to solve via 'Hacker' events?

Civic Experiences &
Purpose-driven Events

HACK NY

**REINVENT NYC.GOV, NEW YORK CITY
GOVERNMENT'S FIRST HACKATHON**

NYC gov hosts first hackathon



ARTPLACE



*** Placemaking
Leadership Council



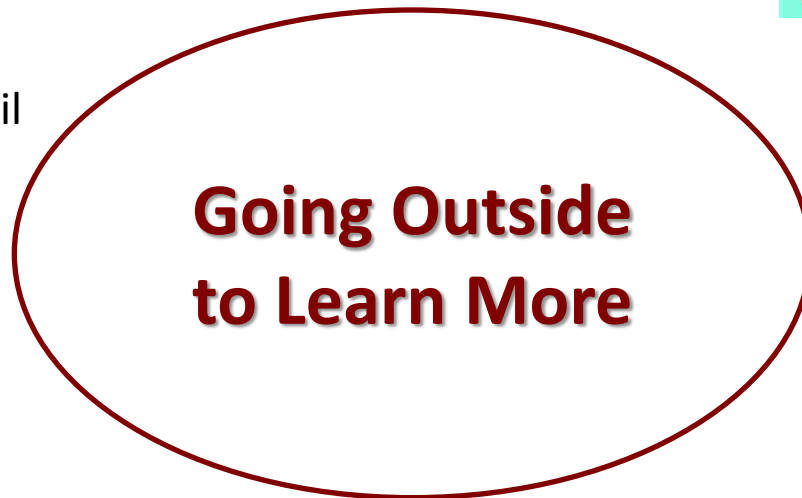
Cultivate.



Engaging Places

Strategies and ideas to connect people with historic places

SOCIAL SPACES

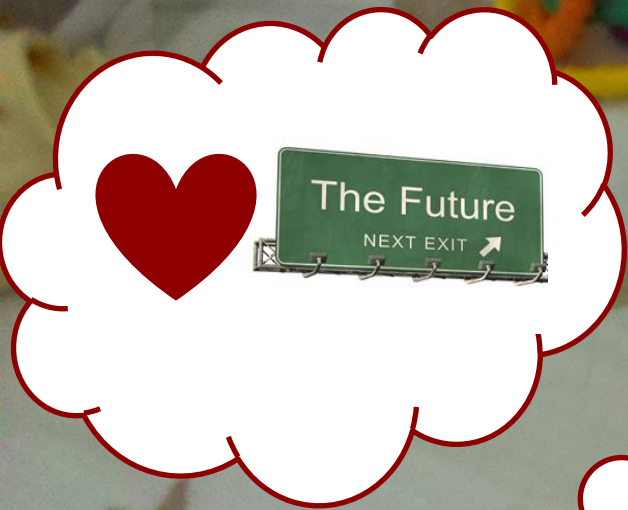


Describe place-based strategies for kids, teens, emerging adults, adults, aging populations and staff

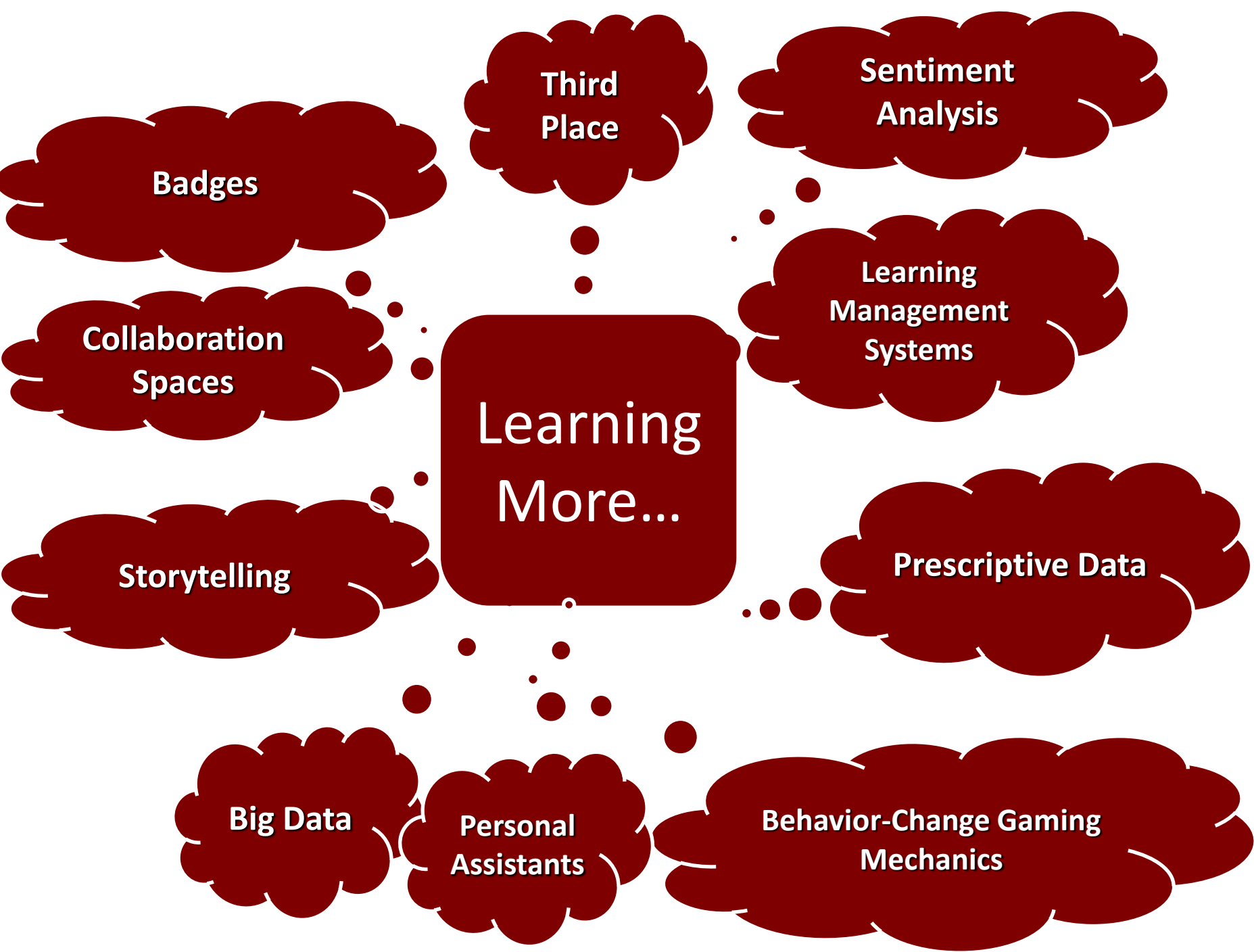


I don't
like the
future...





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



Follow Passionate People & Smart Conversations



Tim O'Reilly



Hans Rosling



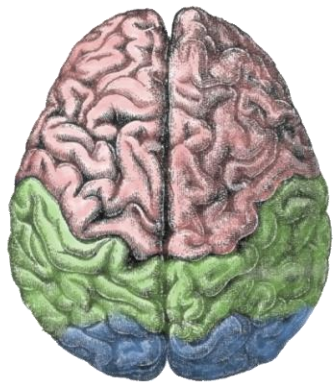
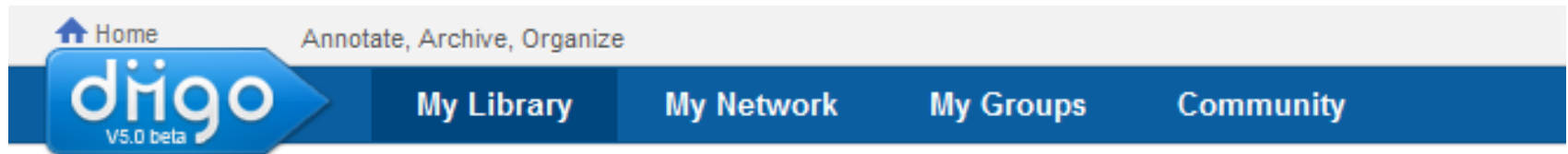
Nancy Duarte



Neil deGrasse Tyson



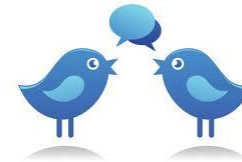
Set up a 'Signals Team' to Monitor Change & Explore Implications



**Social
Bookmarking
External Brain**



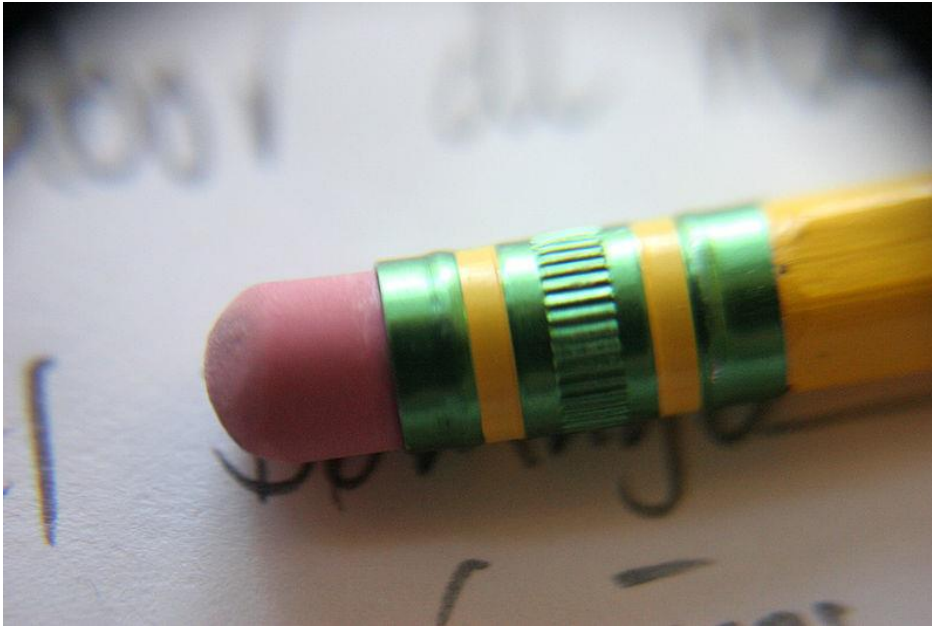
**Social Learning /
Shared Awareness**



**Programs &
Products**



Embrace Mistakes: Fail Fast & Forward



FAILfa[💡]re

Engage Stakeholders in Scenario Thinking



IDEO



● Art Center College of Design



ARUP

Learning to Rehearse the Future: 'Instant' Scenarios & Trend Cards

Food 2.0

Food continues to be an aspect of public and private life that is characterized by a wide range of bifurcating trends – healthy and otherwise. Despite evidence of continued poor eating habits – and limited choices in areas officially labeled as *food deserts*, there are signals of positive changes ahead for better food choices.

There are dynamic new cultural influencers in the world of food. Celebrity chefs and self-made YouTube stars are elevating the art of cooking across television and the social media landscape. *Foodpreneurs* are expanding options of artisan foods at local supermarkets, farmer markets and pop-up carts that deliver healthier options in unique places.

Locovores are people who commit to buying foods produced within a 100 mile distance. And some restaurants are promoting *Agri-Chefs* that use ingredients grown by themselves onsite or at local farms. Developers of food-based social and mobile web apps are helping people make more informed choices.

There are even positive signs around shifts in food supply chains able to accommodate changing expectations. Institutional demand from hospitals and schools for higher quality and more diverse produce pushed Sysco to rethink its supply chain to integrate local produce and products for regional markets. Two test pilots in Kansas City and Grand Rapids (MI) have shown an economical way to return to local food chains.

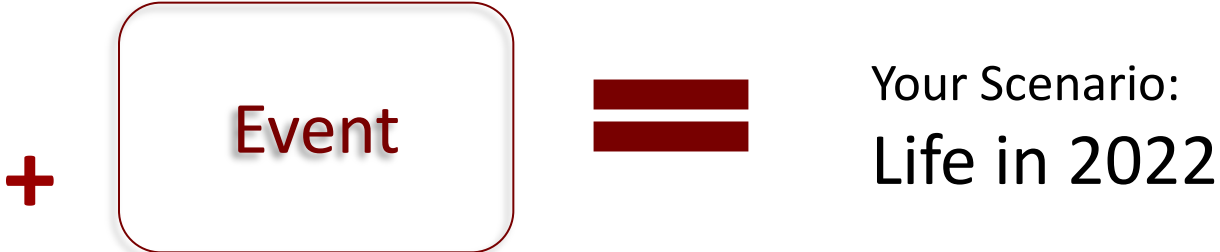
Create an PA-Focused Trends Card Deck by Spring 2014

Rise of 'Third Place'

The creation of *Third Places* – which refer to those *not* home, *not* work public-private gathering places – is now widely embraced by institutional leaders, urban planners, and elected officials as a strategy to design livable communities and welcoming civic institutions.

Starbucks and Barnes & Noble built their fortunes and brands on quality of place – and institutions such as the Rubin Museum and Walker Art Center have created compelling *third place*-based experiences that exist outside their traditional exhibit halls.

Looking towards the future, *third places* are being re-shaped by a growing community of interaction designers who merge principles of architecture, social ergonomics and technology-mediated experiences to reset expectations for civic engagement and the creation of a *cultural commons*.



Collaborative Consumption

Collaborative Consumption refers to platforms that allow friends and strangers to share in offering, buying or borrowing of products, services and experiences. These *sharing economy* innovations are enabled by web-based social networks that connect communities and allow users/companies to build and manage reputations as a form of currency.

Social commerce empowers buyers and sellers by maximizing local economies. It also creates vast amounts of aggregated data that can be used to understand communities and user behavior.

- Relay Rides is a peer-to-peer car sharing service that recently announced a partnership with GM OnStar™
- AirBnB is trusted match network of homeowners who have available rooms for business travelers and tourists
- Barter Card allows you to store and pay with tradable talents
- Vayable connects tourists with people who provide personalized services in local communities

Companies, institutions and communities are looking towards Collaborative Consumption as way of expanding access and leveraging reputation to improve the authenticity of experiences.



September 11, 2019 IBM Watson Teaches First Class at Harvard

'Killer Questions' to Brainstorm Ideas



killerquestion

@killerquestion

A feed of killer questions that will unlock killer ideas .. also

follow @philmckinney

<http://www.killerinnovations.com>



killerquestion killerquestion

#KQ What **#customer #segment** will emerge in 5 years that doesn't exist today? <http://om.ly/ytUv>

28 Oct

1. What if we invited a gaming mechanics team to redesign library membership levels?
2. What if formed a Creative Aging or an Emerging Adulthood Services Division?
3. What if libraries were charged with economic development services?



Garry Golden

www.garrygolden.net (Two Rs)

garrygolden@gmail.com

347-463-7412

<http://www.garrygolden.net/PA2013>

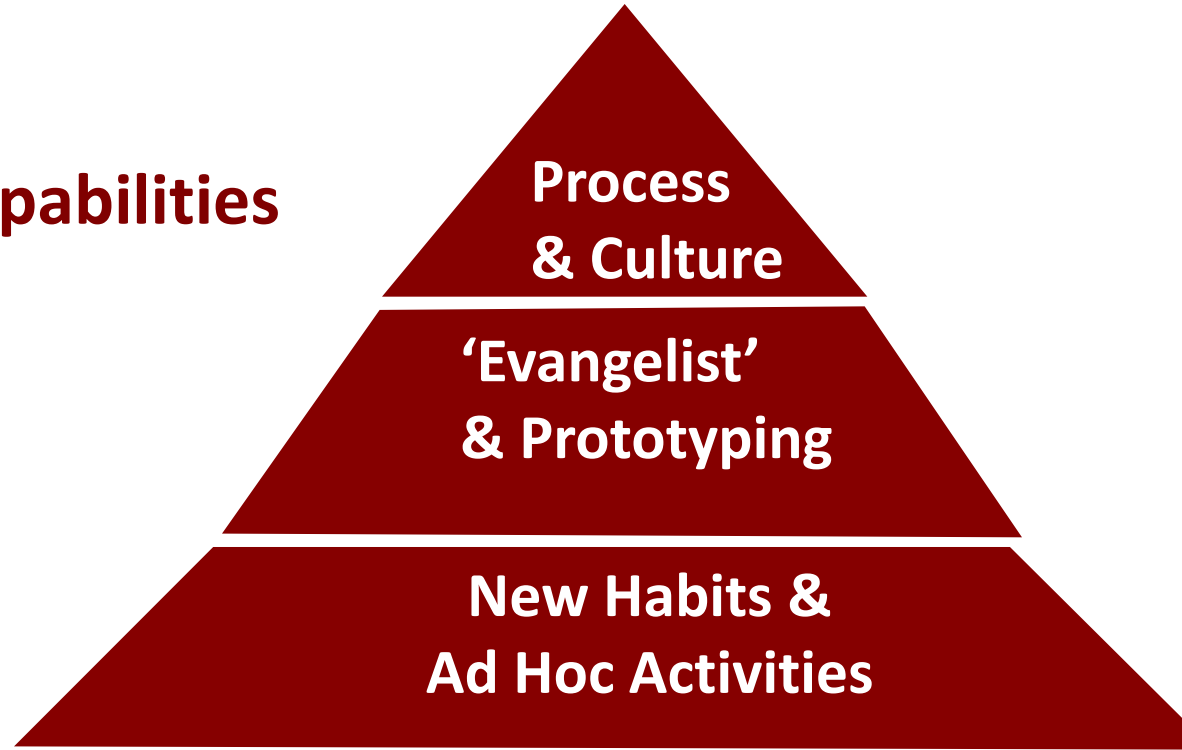
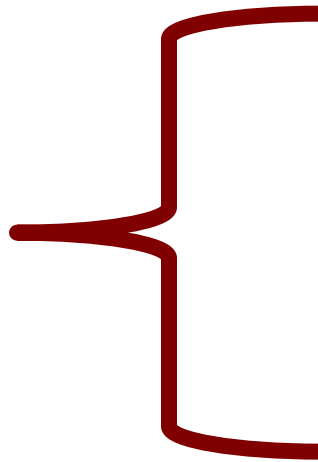
Learning more about...?



Steps to Building

Foresight Culture & Capabilities

Focus Here



Process
& Culture

'Evangelist'
& Prototyping

New Habits &
Ad Hoc Activities

Social

(Demographics/Culture)

Life stage: Aging

Life stage: *Family* Formation

Urbanization

Rural / Small Town Divides

Globalization (Economic/Cultural)

Religion / Faith

Gender Issues

Education (Lifestage vs. Lifelong Learning)

Multi-generational Households

Leisure Industry (e.g. *Stay-cations*)

Philanthropy

Technology

Cloud Computing

Location-based Services (LBS)

Machine-to-Machine (M2M)

Internet of Things (IoT)

LTE/4G (Broadband Wireless)

Big Data / Prescriptive Data

Algorithms (Machine Learning)

Personal Assistants (e.g. Watson/Siri)

Neuro – Marketing; -Economics

Textiles / *Wearables*

Additive Manufacturing

Robotics`

Environment

Third Places (Built Environments)

Pop-up Architecture

Energy Resources

Rise of Toxins (BPA-Free)

Green Building Standards

Waste Capture / Waste to Energy

Economics (Macro/Micro)

Entrepreneurship

Social Entrepreneurship

Base of Pyramid (BoP)

Manufacturing

Warehouse & Logistics

Service/Knowledge Economy

Creative Industries

Behavior Change (Gaming

Mechanics)

Neuro-economics

Trade Policies

BRIC Economies

South-to-South Globalization

Localization

Politics

Regulatory Frameworks

Tax Policies

Values Fragmentation

Regulatory Harmonization

Radical Transparency

Civicware / Govt. 2.0

Library specific or PA specific

Structure Brainstorming:

Redefining the Problem



Activity: Tell Me Why It Won't Work!

Looking for an activity to shock your team and surface critical, but often unspoken issues?

Design a 30 minute rapid fire meeting where you ask everyone to give reasons why a project won't work. Aim high for 20-40 reasons why an idea might... lack support, miss changing customer attitudes, et al. Then have groups vote on the best reasons for why a project might fail. Hand out prizes to top winners who provided those ideas. Now you have a list of barriers to change.

Next design a half day session where staff work against the list developing counter strategies to reframe barriers in a way that the problems can be solved. Now you have a set of potential solutions to internal and external barriers to change.

Additional Resource: Learning More

Books

- ❑ *Teaching about the Future (Textbook)*

Thinking about the Future

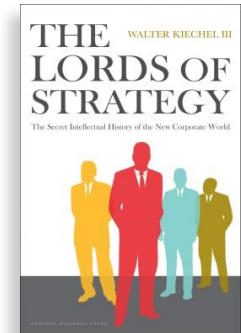
By Andy Hines & Peter Bishop

- ❑ *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

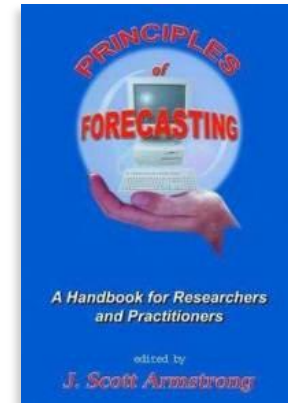
Benchmarking

Patent Analysis

Systems Dynamics

Probability Forecasting

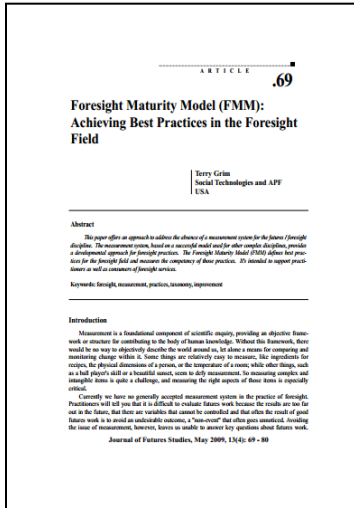
Monte Carlo Models



Principles of Forecasting
By Scott Armstrong

Foresight Maturity Model

Developed by Terry Grim- Foresight Alliance



Foresight
Alliance



SurveyMonkey™

- Leadership
- Framing
- Planning
- Scanning
- Forecasting
- Visioning

Learn More

Assess Your Organization