

From Outputs to Outcomes

# Building our 21<sup>st</sup> Century Roadmap for Libraries

**Design by:**

**Garry Golden**

Forward Elements, Inc

PDF Copy: [www.garrygolden.net/PUG2012](http://www.garrygolden.net/PUG2012)



*Start*

*End*



*Demystifying  
the Future*




*Drivers of Change*



*Next Step:  
Learning More*



A close-up photograph of a person's hand holding a small, white, rectangular slip of paper against a dark background. The paper is held between the thumb and index finger. The text on the paper is printed in a clean, black, sans-serif font. The text is arranged in two lines, with the first line being shorter than the second. The lighting is soft, highlighting the texture of the skin and 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 markings on the sign.

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
  - Society
  - Technology
  - Economics
  - Environment
  - Politics

## Exploring Implications

- Forecasts
- Scenarios

## Communicating Change

- Visioning
- Planning / Roadmaps
- Goals – Objectives - Actions
- Assessment & Evaluation
- Iterative Planning

Limits of Incremental Innovation

## Avoiding Mindset of Managing the Decline



Evolution of Library Mission from:  
Improving Access (Service/Programs)  
to Era of Mastery (Experience Design)





**What type of community  
do we want to become?**

# I versus T-shaped Culture and Training

**Ability to Apply Broadly Across  
Situations & Disciplines**

**Depth of Subject Expertise**

**What does a future  
*T-shaped* library professional look like?**

**What does a T-shaped learner look like?**



**Outputs to Outcomes:  
Storytelling in an  
age of the Learner**



**Place-based  
Experiences**



**In the News**

The visionary entrepreneur has leaked plans in a recent interview on –what the magazine is calling - *Galactic Inner Space*--- retreat centers for *unplugging* and turning inward.

**True**



**False**

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

**True**

**False**





Team

Jobs

Contact

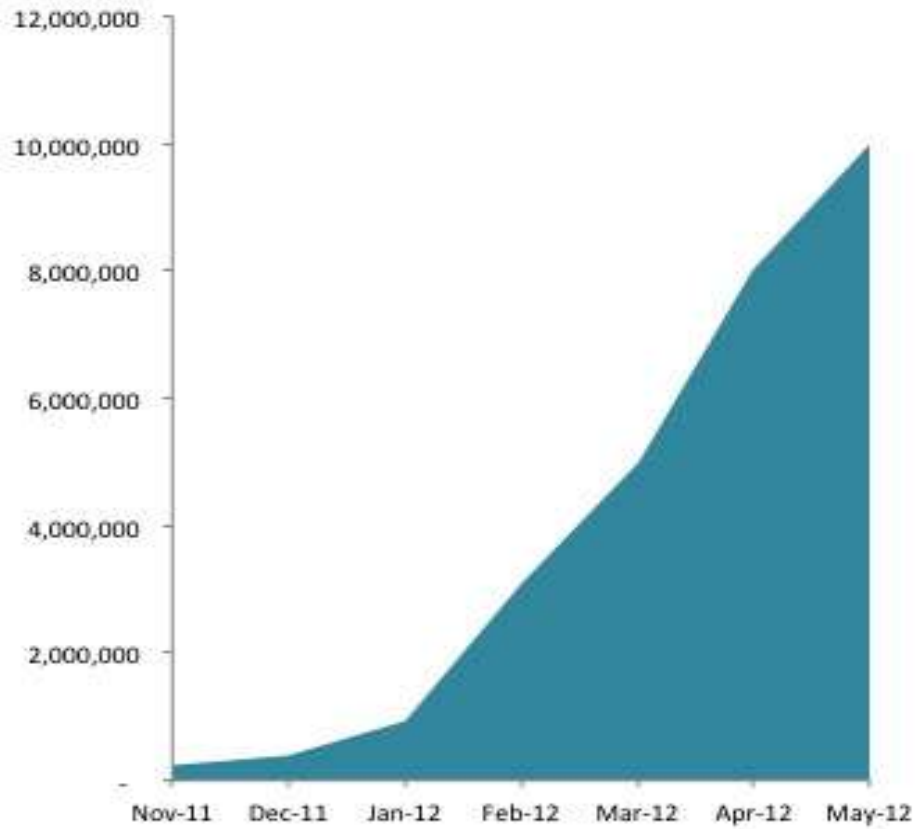
## Launching soon!

ToyTalk blends art and technology to create a whole new experience in mobile family entertainment.

**True**

**False**

## Cumulative Total Questions Answered



**True**

You're in the **top 44%** of Expert Users!

56%

BEGINNER FAMILIAR PROFICIENT **EXPERT** MASTER

Social Media  
783 Master

Excel  
763 Expert

HTML  
690 Proficient

BETA smarterer

**False**

## Output

A raw observable unit (e.g. number of visitors, materials checked out, amount of money spent on reading programs)

## Outcomes

Reflect impact and changed behavior (results) over time based on a greater emphasis on quality and the connection to real-world performance.



Library experience outcomes could measure impact on everything from reading levels to workforce skills to health issues, literacy, or cultural awareness.



**Outputs to Outcomes:  
Storytelling in an age  
of the Learner**



**Place-based  
Experiences**

©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."**

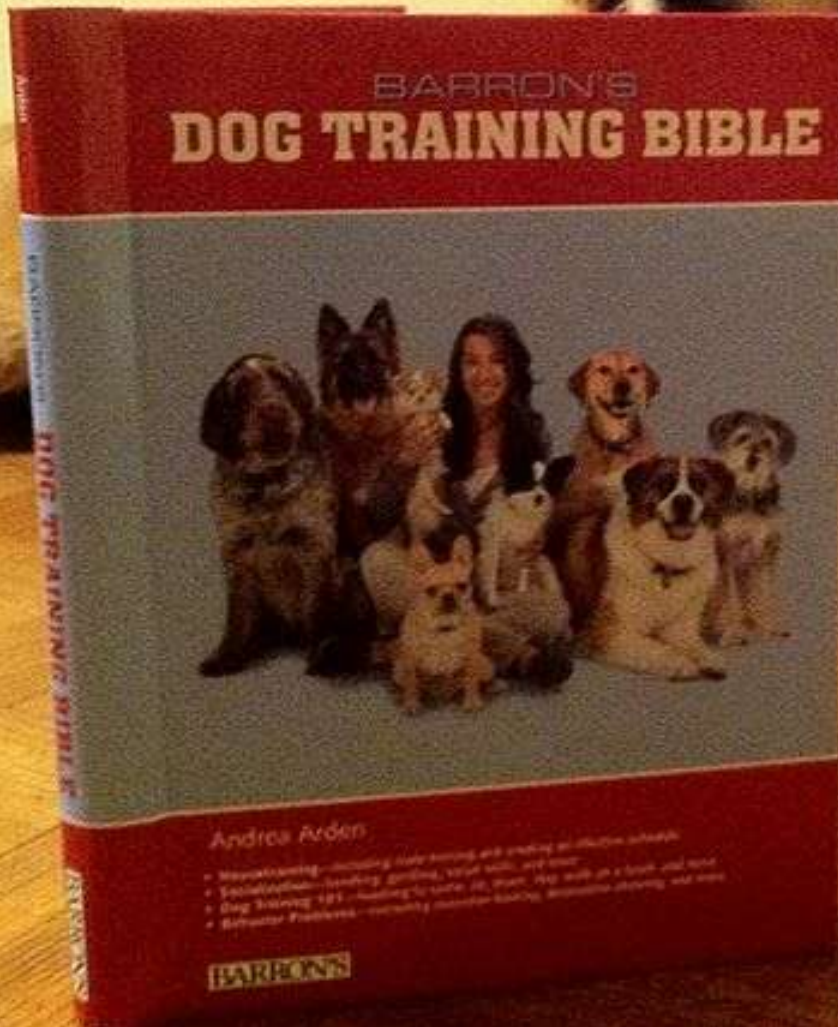


CC creative commons

**Anonymous Web .... to a more  
1998**

**Social Web  
2008**

Now everyone  
knows I'm working  
on some personal  
growth issues





Era of  
**Apprenticeship**



Era of  
**Institution**



Era of  
**Learner**



**Disruptions of  
Books & Industrial Work**



**Disruptions of  
Web & Knowledge Economy**







Flip the Learning Experience



Oprah's  
Lifeclass

OWN  
OPRAH WINFREY NETWORK

Get the chance for you and a friend to be Oprah's first guest and

How do libraries interface with personality driven learning experiences?

Celebrity-led Learning Media Landscape



How will libraries partner and interface with learning experiences shaped by these companies?



**Web + Algorithms =  
Platform for Scaling Personal  
Learning & Behavior Change**



Continuity of  
Outcomes

Institutional Role in  
Culture Change

# Role of Data: Self-Awareness & Behavior Change





Like



**I Don't  
Understand**

**Prescriptive**

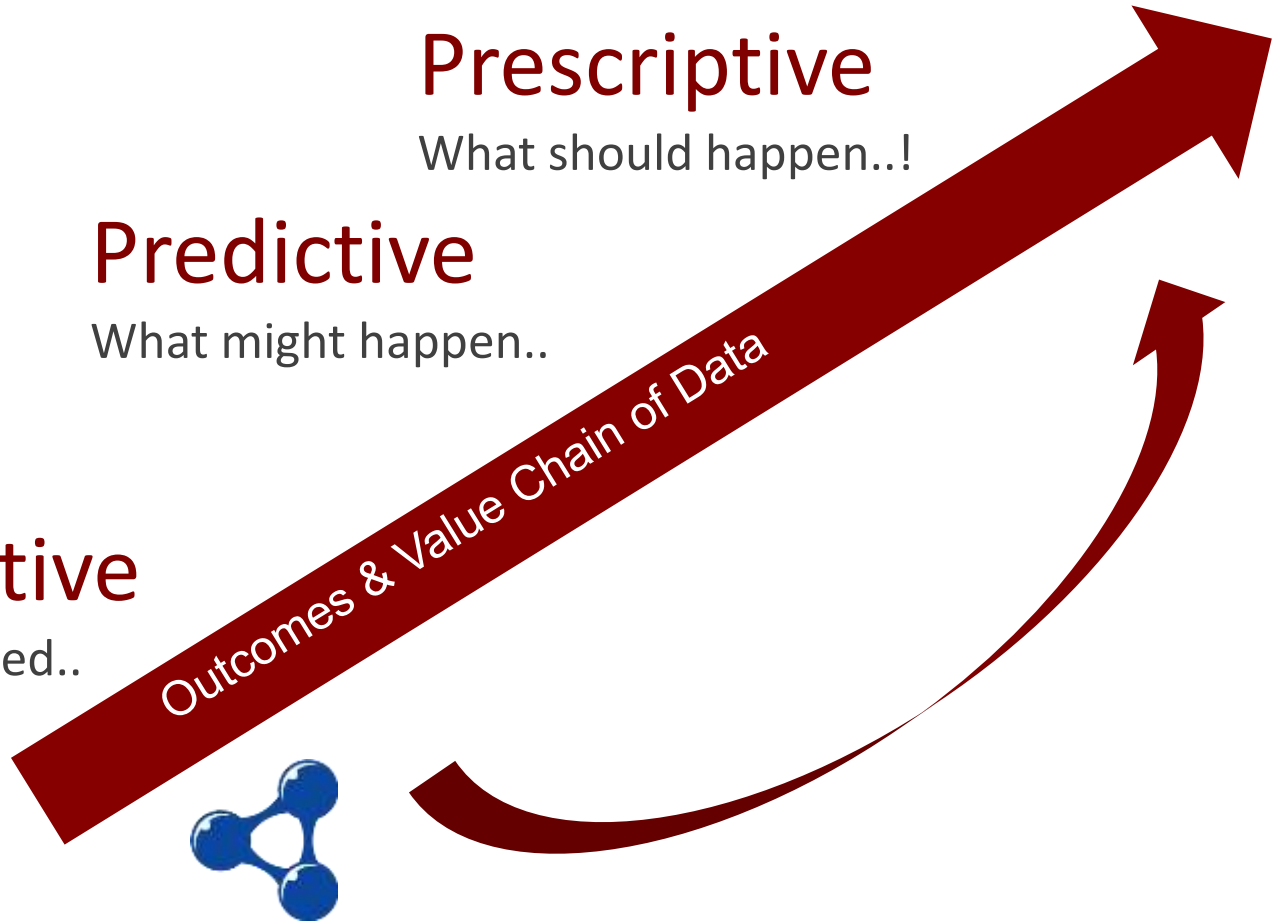
What should happen..!

**Predictive**

What might happen..

**Descriptive**

What happened..



Library Experience Design = Prescriptive Data

Creating Advanced User Culture

What can we learn from Weight  
Watchers on designing experiences  
to improve community outcomes?





## '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



Micro-Experiences

Make the Plant (Vine) 'Grow'



## 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.



### 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.



### 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.



### Have Fun

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

[TAKE THE TOUR](#) [TAKE THE TOUR](#) [TAKE THE TOUR](#) [TAKE THE TOUR](#)

# Send Staff to a Health 2.0 Conference



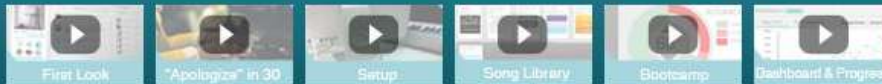
## WELCOME TO PLAYGROUND

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

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

2:29 / 2

YouTube

# mozilla

## OpenBadges

Get public recognition for your skills and achievements



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

Who is in...?





## Pathways to Mastery

**How do libraries help learners tell stories of the growth and development?**

# Evolution of Mastery-focused Storytelling?



Resume

Portfolio

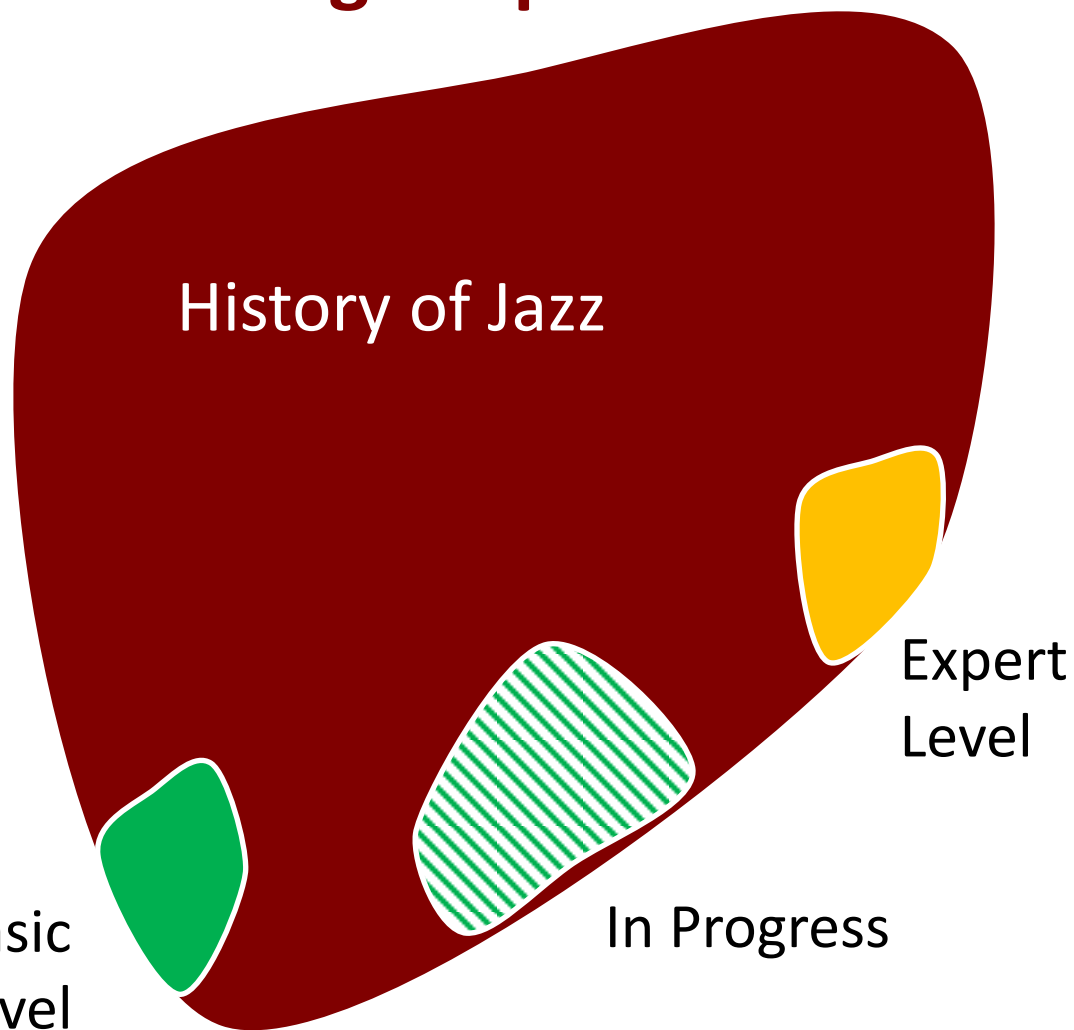
Presence





Visualization of Mastery - Growth & Aspiration

# Concept to Watch: **Learning Graph**



Talk by Danny Hillis  
OSCON 2012



## **Libraries & Culture of Mastery**

## **Storytelling leads to Improvement of Outcomes:**

- **Health**
- **Reading Levels**
- **Safety**
- **Workforce Issues**
- **21<sup>st</sup> Century Literacies**

21<sup>st</sup> Century Roadmap:

***Where might we begin with empowering the Learner?***

## **Rethinking Library Membership for Outcomes Era**

- **Visual Maps**
- **Dynamic Updates**
- **Story-based**
- **Group Oriented**





Learner Culture



**Place-based  
Experiences**

## Community-based Experiences

### Pop-up Libraries

**Social Discovery**  
(Geo-caching; Business Connections)

**Location-based Service  
& Experience Design**



## Library-based Experiences

Maker-Space

Hacker-space

Creative Aging

Playscapes

Learning Environments

Immersive

Collaboration-scapes

Civicware

# Community Experiences & Transformation of Place

...guest lecture tonight!

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

...starting a local reading group!

...heading to my book club

...join me.. photographing city

Brooklyn  
Public  
Library

BPL @brooklynpublic

Parents! Bring your kids to Central Library today at 3:30pm to see @Globies star Bucket Blakes show off his amazing ball handling skills!

Managing by Time, Activity, Location

# Digital Support for Geo-Fence Relationships



---

## Service Innovation

Drive up, Pick up

## Connecting Communities

Parents; Literacy Groups

# How do we leverage place-based discovery and sharing?



## Learning from Geo Caching Culture:

- User-Generated
- Shared Database of Caches
- Mobile Device-based
- Clue-based
- Participatory (Take, Leave)
- Cross-Generational Appeal



# How do we leverage place-based discovery and sharing?

## CONTEMPORARY ARTS CENTER **FaireyTrek**



### **Connecting Community Places to Library Programs**

Learning from Geo Caching Culture

#### **Library Strategies:**

- Place as Storytelling  
(Community as setting)
- Community members as  
'authors' of place
- Summer Reading Programs that  
include place-based discovery
- Healthy Habits (Aging/Kids)  
(Maps/Tours by subject)

# 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**

## **Pop-up Architecture:**

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

# How do we design places for the entire emotional spectrum?



**Secret Cinema**



**Flash Mobs**

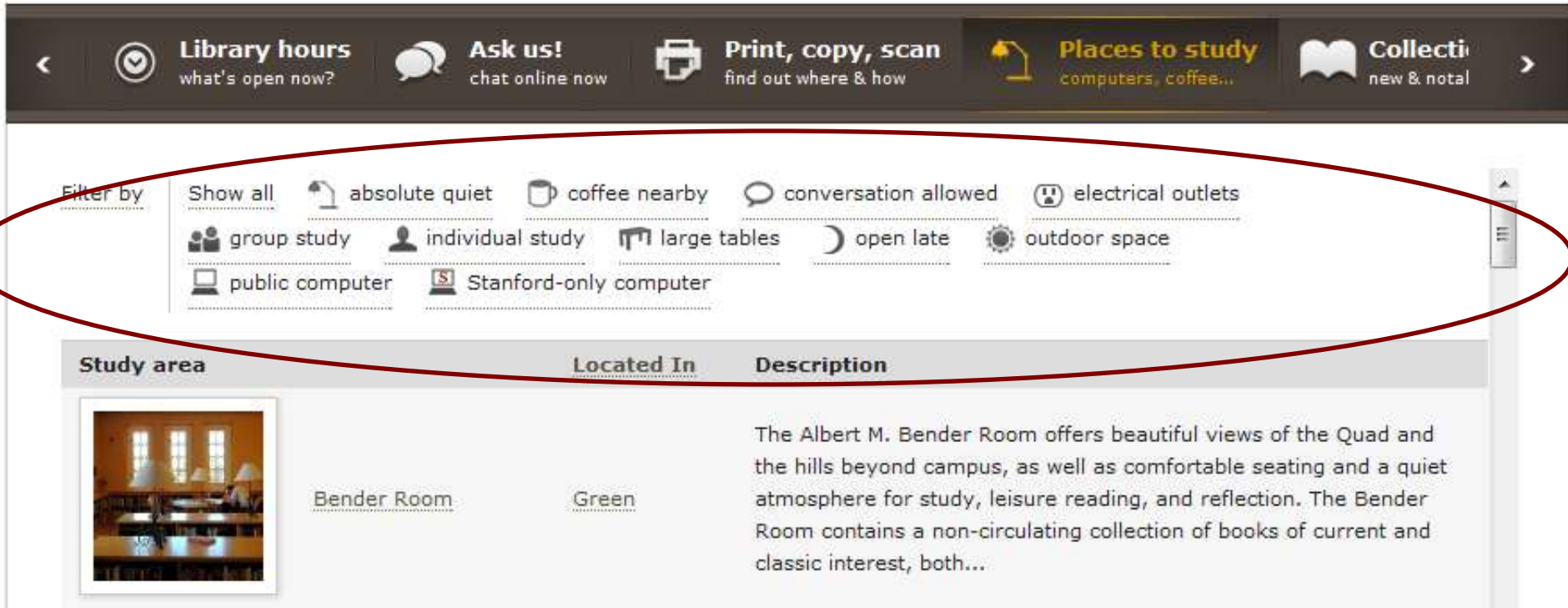
## **Library Program Strategies:**

- Memorable Programming (Delivering the Unexpected)
- Library as Theatre

Everyone is talking about... place



# Shifting Expectations & Demand for Place as Service



The screenshot shows a library website with a dark navigation bar at the top containing icons and text for 'Library hours', 'Ask us!', 'Print, copy, scan', 'Places to study', and 'Collecti'. Below this is a filter menu with various options like 'absolute quiet', 'coffee nearby', 'conversation allowed', etc. A red oval highlights the filter menu area.

Library hours what's open now

Ask us! chat online now

Print, copy, scan find out where & how

Places to study computers, coffee...

Collecti new & notal

Filter by

Show all

absolute quiet

coffee nearby

conversation allowed

electrical outlets

group study

individual study


large tables

open late

outdoor space

public computer

Stanford-only computer

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...



LIFELABS  
NEWYORK



LifeLabs New York is a practice lab for life's most useful skills...

What if you could go back to school, but instead of algebra & spelling classes you could take courses on the stuff of life, taught by philosophers, scientists, guerrilla happiness experts...

What if your neighborhood became your classroom, and each day became an experiment?

# Third Place – Not Work (School), Not Home Competition over Place-based Experience Design



cafes  
Lobbies Pedestrian-malls  
Hospitalsbookstores  
Lawns Pop-up-Architecture Nature-Trails  
Transit-Stations Co-Working-Spaces  
buildings  
Alleys Staircases Libraries  
streets parks Restaurants

# *Maker Culture*



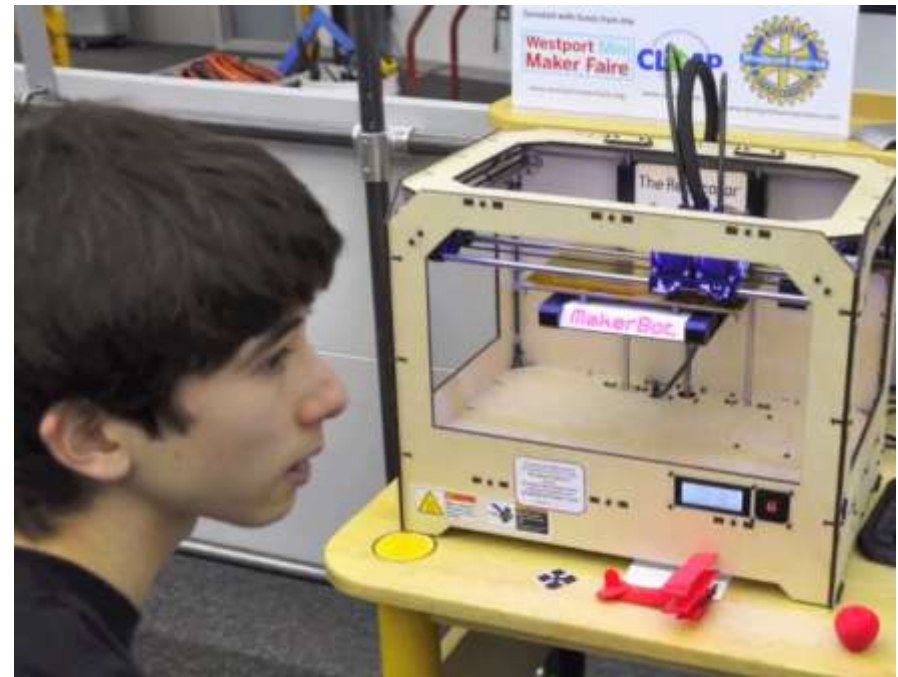


# Fort Wayne Regional Maker Faire

# Mainstreaming of Makerspaces



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



**Maker Culture:**  
Integration of  
Materials, Process  
and Play



## **Innovating around Maker Culture:**

- **Creative Aging Programs**
- **Local Industries & Companies**
- **Families**
- **Volunteer Groups**
- **Seasonal Design & Build Activities**

## **Learn More...**

**FFL Fab Lab**

Fayetteville Fab Lab



**How do we design place-based experiences for aging populations?**

**MetLife<sup>®</sup>**

# Creative Aging: Intersection Arts & Learning

*The MetLife Foundation*

*Creative Aging Libraries Project*



Lifetime Arts at the intersection of aging and the arts

NATIONAL CENTER FOR  
**CREATIVE AGING** 

*Society For Creative Aging*

- Alzheimer's Poetry Project
- Songwriting Works (health and wellness)

Lots of Tools, but no Home

## Civicware: Tools for Civic Engagement



**Textizen**



**CIVIC DATA  
CHALLENGE**

**NYC** OpenData



 **OPEN:STATES**



**neighbor.ly**

*The Civic Crowdfunding Platform*



**Catalyst!**

→ CITIZENS TRANSFORMING SOCIETY:  
TOOLS FOR CHANGE!

# 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



# Place-based Experience Design



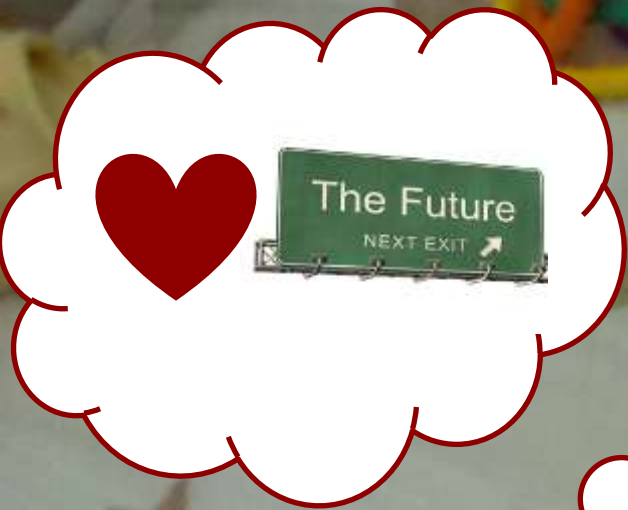
- What are new assumptions to embrace?
- What might be resisted within staff/community?
- What are natural-fit opportunities? (e.g. Program Areas; Physical location )
- What are new types of partnerships to explore?





I don't  
like the  
future...



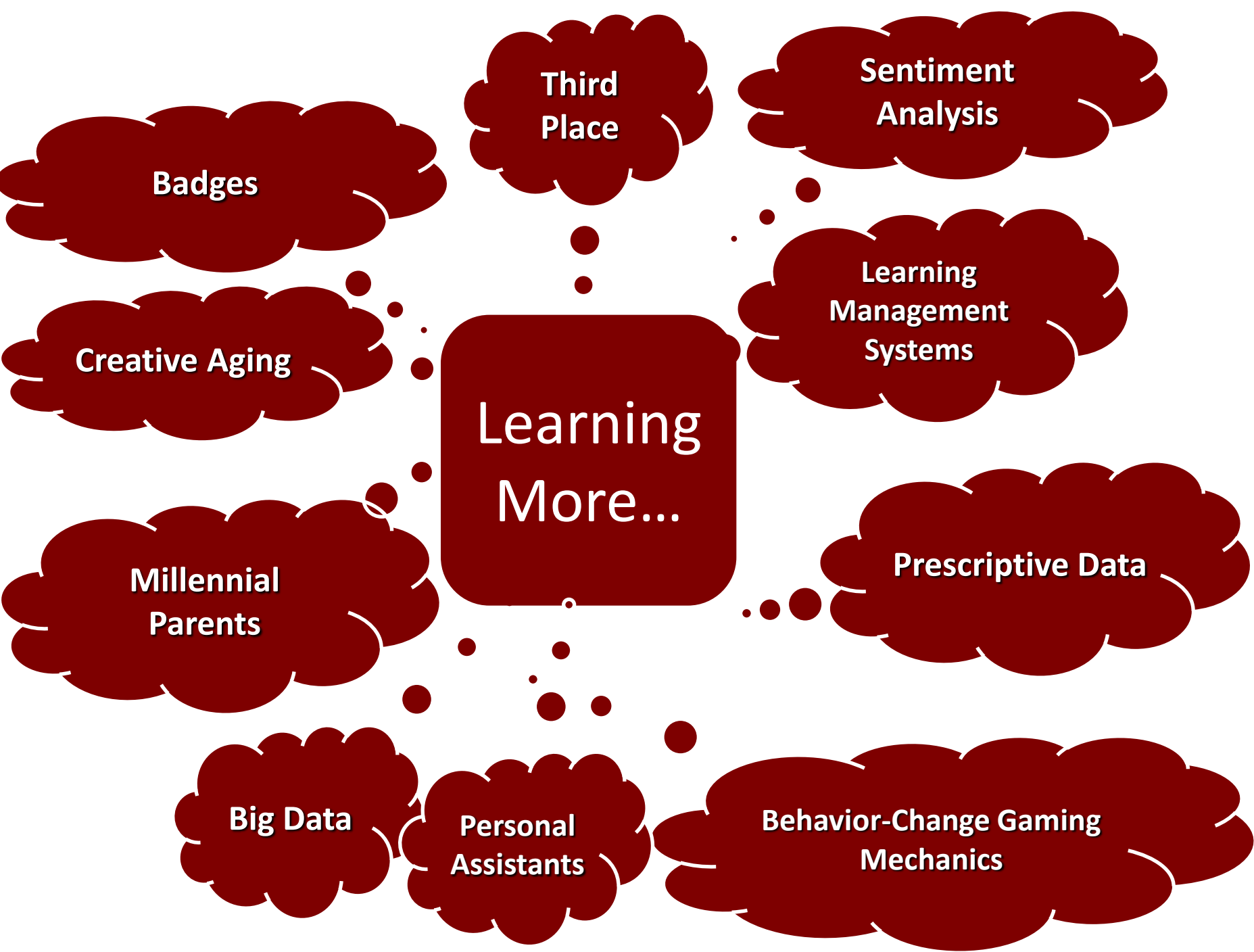


Every day I make an effort to go toward  
what I don't understand.

Yo-Yo Ma



Daddy is a  
futurist



Non-Library

# Follow Passionate People & Join Smart Conversations



Tim O'Reilly



Nancy Duarte



Hans Rosling



Neil deGrasse Tyson



# Form a Signals Team to Scan for Change

## Scan for Change & Externalize Your Brain



**External  
Memory**



**Social Learning /  
Shared Awareness**



**Programs &  
Products**



Tips & Instructions: Scanning for Change Guide:  
[www.garrygolden.net/PUG2012](http://www.garrygolden.net/PUG2012)

# Find Those 'Killer Questions'



**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 membership levels?

2. What if we had rooms (or services) that must be 'unlocked' via a quest?

Garry Golden

[www.garrygolden.net](http://www.garrygolden.net) (Two Rs)

[garrygolden@gmail.com](mailto:garrygolden@gmail.com)

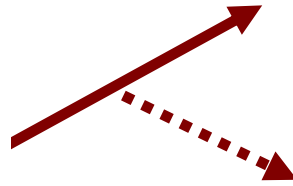
347-463-7412

[www.garrygolden.net/PUG2012](http://www.garrygolden.net/PUG2012)





# An Era-based Transformation?



amazonkindle

### Past is Prologue

Everything begins with a story.  
—Joseph Campbell

I was born in Toronto, one month early and during a blizzard that covered the city in snow and silence. The surprise and the low-visibility conditions that accompanied my arrival were parents, though they went unrecognized at the time. My mother, as a recent immigrant from India, was of two worlds, and she would pass that multiple identity on to me. My father was making his way to Canada, but had not yet arrived; his absence at my birth was a sign of the deeper absence yet to come. Looking back, I see all the ways in which my life was set the moment I was born into it. Whether in the stars or in atoms, whether by the hand of God or some unnameable force, it was already written, and every action of mine would serve to confirm the text.

25%

Locations: 32/41

3/8





Face to Face



Printed & Recorded



# I am an Artist living through eras of...



Broadcast Media (Audio / Visual)



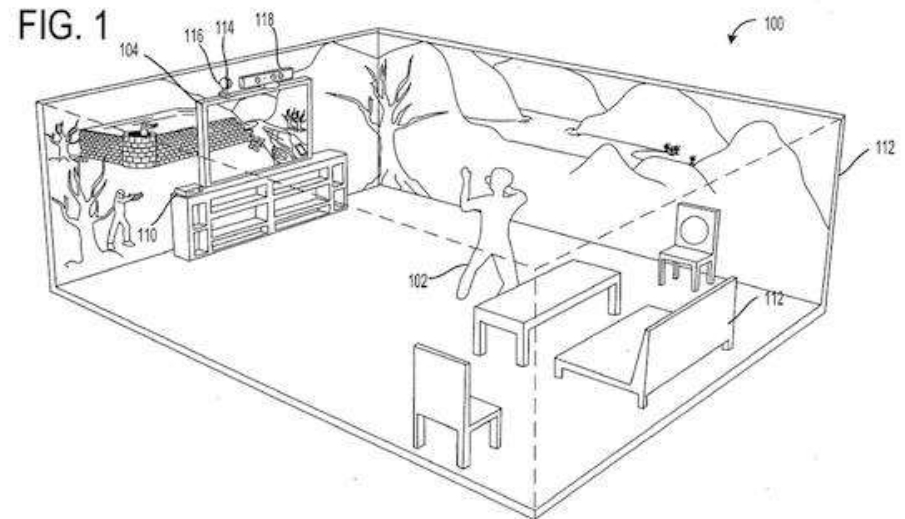
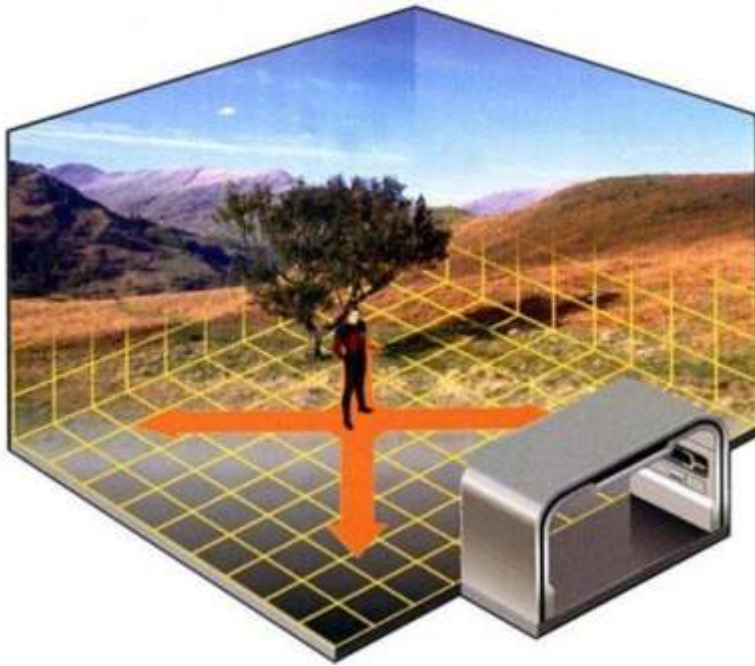
Social Media (Digital/Networked)



**Additional Slides**

# Monitoring the not-too-distant future

## From Computer Terminals to Rooms



### Indicators to Watch

- **3D Projection**
- **OLEDs**
- **Machine-to-Machine Connectivity**
- **Telepresence**



# Can an interactive paper revolutionise the print industry?

8



By Alex Masters

Science & Technology

Monday, 17 September 2012 at 11:35 am

Like 63

39 retweet



## Book as Interface – Concept

# Institutions & Digital Fluency 1995 - 2010



Lotus Notes 4.0

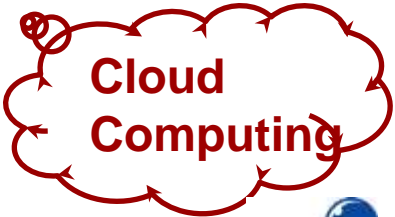


Web 1.0  
*Info Portal*



Web 2.0  
*Social Web*

Learning  
Systems



Data-Driven  
Services

Web 3.0  
*Services*



## Garry Golden

[Edit my profile](#)

42 followings, 54 followers

[Common Stuff](#)

[Send Message](#)

[Invite to a Group](#)

### Me elsewhere

[My EasyBlog](#)

[My Twitter](#)

[My Wpress](#)

[Library](#) [Network](#) [Groups](#) **[Profile](#)**

“ Garry Golden is a professionally trained Futurist (MS Future Studies) who writes, speaks, and consults on issues shaping society and business in the 21st century. Garry has consulted on wide range of projects related to the future of infrastructure for energy and transportation, education/learnin...

I am interested in Energy, Transportation, Learning Systems, Demographics, Programming (Javascript/nodejs/popcornjs; html5; scala); Foresight/Futures Studies.

I use Diigo because was a Delicious junkie... and the service failed to evolve ;-( Had a great Network of people to Follow but Diigo community looks very active!

Member since Oct 11, 2007, follows **42** people, **8** public groups, **17663** public bookmarks (18550 total).

### Tags

[More »](#)

Recent Tags: [learning](#), [blog+post](#), [forecast](#), [transportation](#), [EVs](#), [market+info](#), [future](#), [ideas](#), [company](#), [culture](#), [CAMFL](#), [education](#), [nyc](#), [data](#), [people](#), [artsedu2020](#), [guide](#), [tools](#)

Top Tags: [company](#), [energy](#), [blog](#), [data](#), [design](#), [people](#), [tools](#), [transportation](#), [software](#), [webdev](#)

### Recent Bookmarks and Annotations

[More »](#)

- [InnoBlog | The Insider's Guide to Innovation](#) about 1 hour ago
- [Occam's Razor by Avinash Kaushik - Digital Marketing and Analytics Blog](#) about 1 hour ago
- [5M Project](#) about 1 hour ago
- [MAKE | Time For Girl Scouts and Boy Scouts 2.0?](#) about 2 hours ago
- [Home • Touch Bionics](#) about 4 hours ago
- [Stories of Change - Inter-American Development Bank](#) about 4 hours ago

### My Friends (42)



[See More »](#)



## Save Bookmark

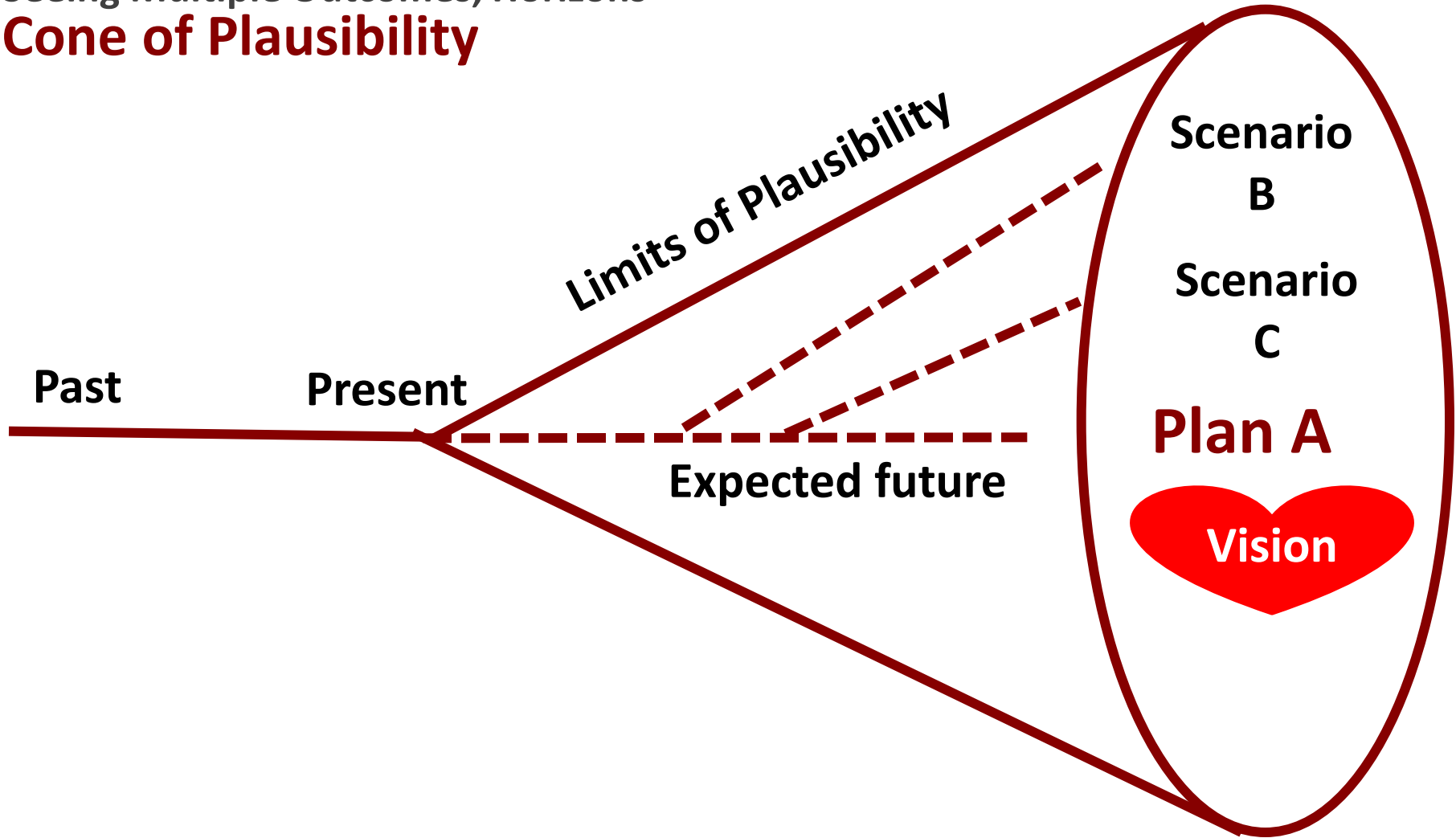
[Remove](#)Url Title  Private  Read later  CacheDescription Tags Used last time:    Recommended:      Group dictionary:         Add to a List Share to a Group 

Save

Save &amp; More

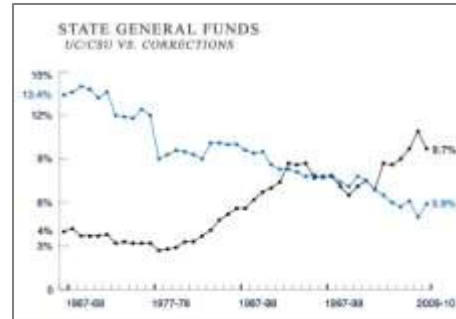
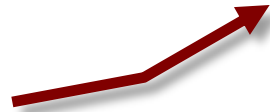
Cancel

Seeing Multiple Outcomes, Horizons  
**Cone of Plausibility**



# Foresight 101: Three Mechanisms of Change

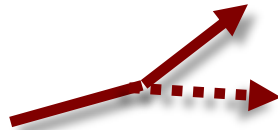
**Trends**  
(Continuities)



**Plausible  
Future**

Forecasts

**Events**  
(Discontinuities)



**Possible  
Futures**

Scenarios

**Choices**  
(Discontinuities)



**Preferred  
Futures**

Visions

# What?



Faster Horse  
vs Automobile



Tellers vs ATM



Apple iTunes

CDs vs Web

Looking for things that your customers  
are not telling you they want or need?

# What?



## Hundreds Register for New Facebook Website

Facebook creator seeks new reputation with latest online project

By ALAN COOPER, CRIMSON STAFF WRITER  
Published Monday, February 19, 2006

When Mark E. Zuckerberg launched his Harvard Facebook site last week, he was not alone. After about a week of development, the website is now open to the public. The website features a number of features that allow users to connect with friends and family.

"Everyone's been talking about it, and it's kind of crazy to see how many people can do it better than me," Zuckerberg said.

As of yesterday afternoon, the site had more than 100,000 members. He said he expects the number to continue to grow.

"I'm pretty happy with the response to the site. It's clear that people are interested in the site," Zuckerberg said.

But Director of Residential Computing Kevin S. Davis '08 said that the site was not as far off as Zuckerberg predicted.

"There is a project internally with computer services to create a new social network. It has been in touch with the Undergraduate Council, and this is the first step. We have every intention of completing the facebook by the end of the year," Davis said.

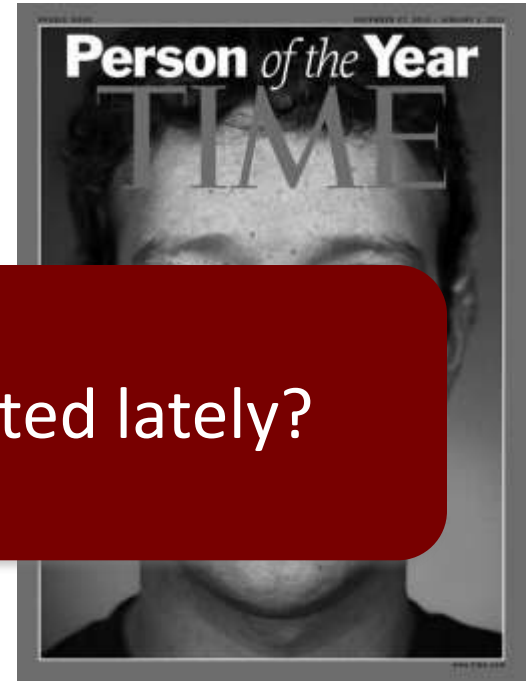
Davis said that the principle suspicion with the site was that it was a scam. He said that the site was not a scam.

## TechCrunch Facebook Launches Facebook Platform; They are the Anti-MySpace

MICHAEL ARRINGTON | Thursday, May 24th, 2007 | 1 Comments

Facebook is holding a massive press/developer event today in San Francisco to officially launch Facebook Platform. 750 or so people are here.

A number of third party applications will also be announced, including Microsoft, Amazon, Slide, RockYou, Box.net, Red Bull, and many others.



Any weak signals that you've detected lately?

2004

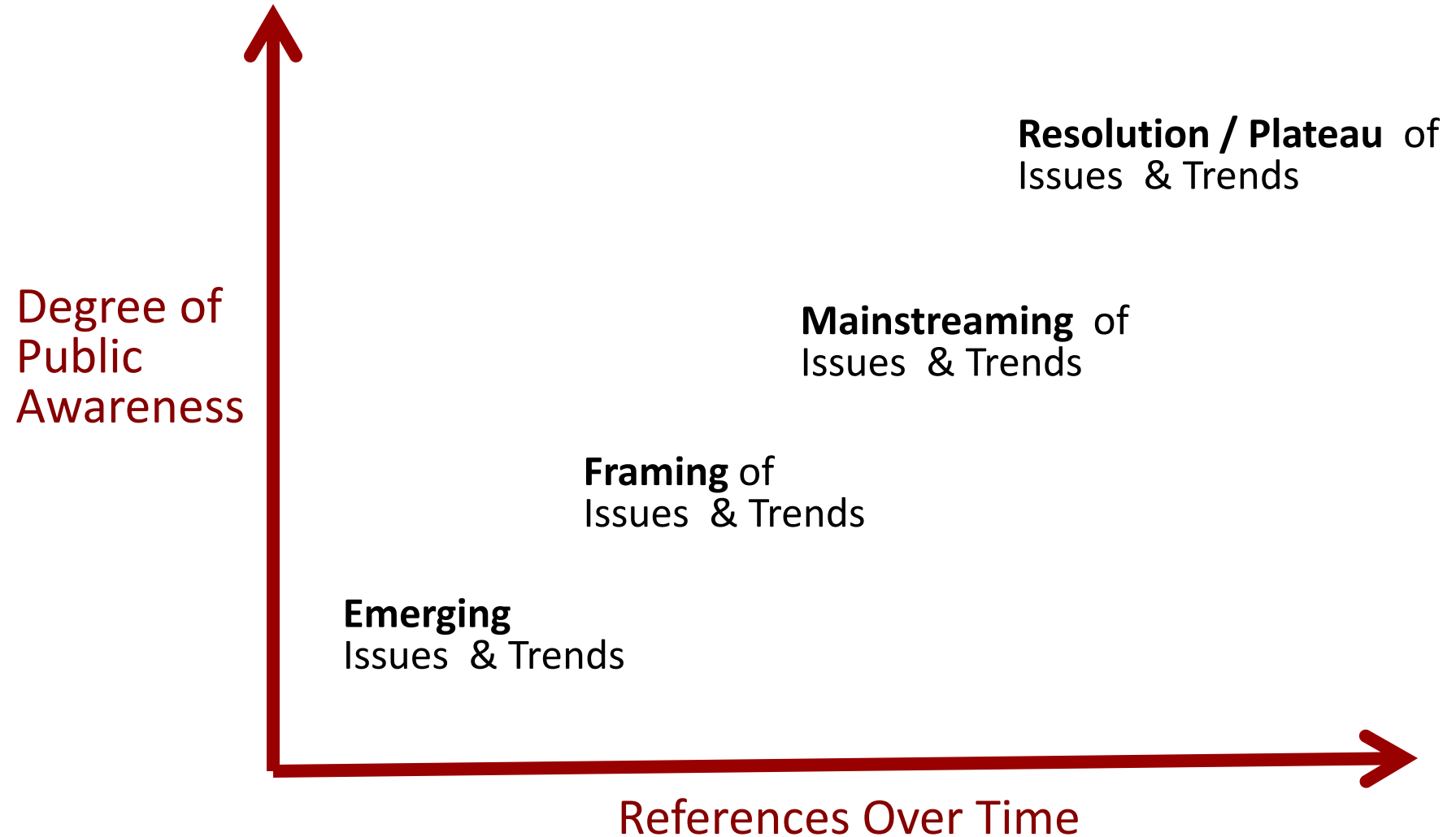
2007

2010



Great Scan Hits!

# Trend Diffusion Frameworks



Discussion

# Disruptive Events



Scheduled  
Events

Plausible  
Events

Wildcard  
Events

# What?



## **S.T.E.E.P. Categories**

**S**ociety **T**echnology **E**nvironment **E**conomics **P**olitics



# General Purpose Scanning Resources

PewResearchCenter



KICKSTARTER



The Chronicle of Higher Education

HYPERALLERGIC



gov20.govfresh

fedscope



Gartner

McKinsey&Company



PEHUB

INTERNATIONAL FOOD POLICY RESEARCH INSTITUTE

CURRENT INTELLIGENCE | BY THESISGERS



THE : FUTURE : LABORATORY



# Scanning Resources: Libraries, Museums, Arts Organizations & Community Design

Libraries and Life

**LIBRARY BOY**  
LEGAL RESEARCH NEWS FROM AN OTTAWA LAW LIBRARIAN

**David Lee King**  
social web | emerging trends | libraries



**Library ideas**



t h e a t r e n o t e s

**ExhibitFiles**  
A community site for exhibit designers and developers

we make money not art

**STREETFIGHT**  
INSIDE THE BUSINESS OF HYPERLOCAL



**John Palfrey**  
From the Berkman Center at Harvard Law School

**ASTC** ASSOCIATION OF SCIENCE - TECHNOLOGY CENTERS

Museum Analytics<sup>beta</sup>

**koven.j.smith dot com**  
"Making dreams reality since 1975"



**Rimini Protokoll**

**COLLABORATIVE CONSUMPTION HUB**



**DAILY CANDY**



**UrbanOmnibus**



**PLANETIZEN**

**Building a Smarter Planet**  
A Smarter Planet Blog



**theENGINEER**  
[Site for technology & innovation [www.theengineer.co.uk](http://www.theengineer.co.uk)]

**UrbanTick**

**cooltownstudios**  
The official blogger events, artist, programming

**OpenBlock**

**NokiaBetaLabs**

**de zeen** magazine

**The Geography Collective**  
Creator of *NationsExplore*

**SUBSTRATUM**  
A Series of Inspirational Interviews

# Scanning Resources: Data, Visualization, Behavior Change & Experience Design

**VISUAL NEWS**™

**COLOSSAL**  
ART & DESIGN

**DATA STORE**

MARKETING  
**VOX**



**UX** MAGAZINE

**factual.**

**InfoDesign** Understanding by Design

design mind business / technology / design

**UX** matters

**boxesandarrows**

**L+E** Logic - Emotion  
insights | ideas | interactions

**adaptive path**

**silicon ANGLE**  
where computers, science, media, culture collide

EXPERIENCE  
DRIVEN  
INNOVATION

**bokardo**  
the blog of Joshua Porter

**V2\_**

**DIY DAYS** NYC  
a roving gathering for those who create

**CultureCode**  
Initiative  
The CultureCode Initiative

**Swiss Army Librarian**  
Or, The Librarian's Guide To Your Best Looking At A Public Library Reference Desk

**Postscapes**  
Tracking the Internet of Things

**John Palfrey**  
from the Berkman Center at Harvard Law School

**Zythepsary**  
A Treasury of Thought

**Museum Analytics** beta

**knight-mozilla**  
**OpenNews**

**QS** Quantified Self  
self-knowledge through systems

**Swiss Army Librarian**  
Or, The Librarian's Guide To Your Best Looking At A Public Library Reference Desk

**Wise Gaming**  
Design. Pedagogy. Play

**Health 2.0** NEWS

**What Ed Said**

**Habit Labs**

**CITO Research**  
Research to solve your problems

**Brains, Behavior & Design Group**  
Understanding human behavior and influencing decision making

**many eyes**

**OPEN HEALTH TOOLS**

**New Learning Institute**

**ARTLAB+**  
A DESIGN STUDIO FOR TEENS

**OIC**  
OPEN INNOVATION CONSORTIUM

**Information is Beautiful**  
Ideas, issues, knowledge, data - visualized!

**LOSTGARDEN**

Institute for Visualization and Perception Research at  
**UMass Lowell**

**DATA.GOV**

**MetroBoston**  
**DataCommon**

**Gamestorming**  
A playbook for innovators, rule-breakers and changemakers

**DATAHAVEN** KNOWLEDGE CENTER

**DATAVERSITY**™

**OPEN GOVERNMENT**  
data initiative

**guerrilla**  
innovation  
com

**GAMASUTRA**  
The Art & Business of Making Games

**human media lab**

**Mission to Learn**  
Know Better. Live Better.