Innovating @ IBM in the New Sandbox

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Agenda

- Foundation for training, education, and professional growth
- IBM's traditional industry driven education vs. new education and sharing model
- Growing New Professional Skills
- Heartbleed – A Real Example
- Our *Innovation Exchange*
- Goals and Format
- Using Social Technology
- What Worked

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All I Really Need To Know I Learned in Kindergarten

From Robert Fulghum's book: "All I Really Need to Know I Learned in Kindergarten: Uncommon Thoughts on Common Things"

- We **learned it all** in kindergarten
- We "**live it**" and share our experiences every day

A simple foundation for training, education, and professional growth:

- Share and play fair, don't hit
- Put things back and clean up after your own mess
- Don't take things that are not yours
- Be creative every day
- Strive for balance, and stick together

History of Traditional Industry Driven Education: An IBM Perspective

It was not that long ago:

- Classroom training and workshops

- Discipline-driven with limited cross training

- Money, time, and travel for face-to-face sessions

Slowly, with advances in technology, change took place.

- Virtual training to increase participation

- Blended offerings with diverse skill sets

- Customer-driven to meet key market trends

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Today, We Focus on the User Experience

"Design must reflect the practical and aesthetic in business **but above all... good design must primarily serve people.**"

Thomas J Watson, Chairman and CEO of IBM Business, 1914-1956

"The biggest driver of sustained growth is the **Client Experience.**"

Ginni Rometty, current CEO of IBM

"At IBM we've become great at speaking about the enterprise value proposition..... now we will deliver the **personal value proposition**."

Phil Gilbert, VP IBM Design

Encouraging Professional Growth: The "Four P's"

- **Patents**, or Intellectual Property, teach us to be innovative and approach difficult issues with a keen eye for change.

- **Papers** and **presentations** are an effective way to develop new ideas, and easily share our experiences.

- **Participating** in projects and workgroups teach us how to work "outside of our comfort area" to collaborate, share, and grow ideas that benefit the larger community.

- Leverage social technology to create, tailor, and deliver an education experience that meets our needs and expectations.

- Foundation which is based on collaboration, sharing of skills and experience, and guided by the user's experience.

Why do we need to grow our professional skills to support a new design model?

- Modern global challenges demand rapid, effecient solutions

- Demands lead to expectations

- These expectations demand novel approaches to:

    - Collaboration
    - Rapid development
    - Wide participation
    - Thorough testing
    - Support

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Demand for rapid development to keep up with global challenges

Create entirely fresh **collaborative endeavors** merging **across a multiplicity of disciplines**, sectors, and global regions

Support with **new technologies** and tools—high performance computing

Use input from Big Data, amplified by **new platforms** such as the **Semantic Web**, probed by **advanced analytics**, and guided by **societal concerns and ethics**

Engage a broad spectrum of participants to **facilitate novel and effective approaches to global challenges**

An Example:
Modern Global Challenge: Heartbleed

- A bug in OpenSSL, a popular encryption software, could compromise the personal information (passwords and credit card data)

- Affected billions of internet users

- Facebook, Instagram, Pinterest, Tumblr, Twitter, Google, Yahoo, Amazon Web Services, Etsy, GoDaddy, Flickr, Netflix, Minecraft, Smart, Youtube, Dropbox, Healthcare.gov, Wordpress, Wikipedia, OKCupid

What was at the Heart of Heartbleed?

"We have standards for coding in mission-critical systems like the airline industry, but I'm not sure we want those standards applied everywhere" *

Testing and development done by a small set of volunteers

"Stricter security standards mean programmers would need to spend significantly more time testing their work, and neither technology companies nor consumers can stomach such delays. We don't want to wait 20 years for the next Google and Facebook,"

What was accepted as a standard quickly become a vulnerability

***Matthew Green, a cryptographer and professor at Johns Hopkins, told to The New York Times.**

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How do we respond?
Leverage Social Technology

- Use tools like IBM Connections, Jive, Yammer, Microsoft Sharepoint

- Provide interest driven solutions

- Advertise opportunity

- Encourage cross-discipline solutions

- Provide a broad platform for participation

- Open patent development

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Looking For a New Education and Sharing Model
The New "Sandbox"

- Focus on user or client experience

- Engage the team in a collaborative environment

- Leverage familiar training concepts as a foundation

- Rejuvenate business environment, using IBM social communication tools

- Generate new ideas, and accept a few "throwaway" concepts

- Simplify the process for everyone and maximize ROI

- Make it fun, focus on diversity, and integrate skills and experiences

- Transform our learning model

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How The *Innovation Exchange* Came to Life: Event Format

- Created tracks around a set of business themes

- Provided conference-like format with session registration

- Hosted an executive kick off for each event

- Jump started the event with a passionate keynote speaker

- Started each session with a single overview chart, followed by discussion and exchange

- Used optional scribes and moderators – helped presenter to focus on topic and audience exchange

- Provided face to face, virtual and pre-recorded sessions to support global teams

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How The *Innovation Exchange* Came to Life: Social Technology

- Promoted and advertised event using blogs

- Shared files and templates using IBM Connections

- Used wikis and activity functions to monitor all logistics

- Created forums to engage in pre and post session (topic) discussion - created a global presence for each topic

- Recorded sessions and hosted them in IBM Connections community

How The *Innovation Exchange* Came to Life: What Worked Well

- Outstanding active participation

- Interactive, collaborative venue

- Enthusiasm for many new ideas

- Unique and "fun" model for education

- An easy forum for remote and global teams

- Traditional format using new social technology

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Conclusion

- Global challenges today demand rapid solutions

- These demands have created expectations

- Expectations created the need for an educational paradigm shift (from an industry perspective)

- We have responded with new collaborative events while leveraging social technology

- Focus on the customer needs

- Most importantly – grow our "sandbox skills" by living and experience change every day

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Thank You