A New Sandbox

2014 Enterprise Computing Community Conference

Marist College

June 9-10, 2014

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Introduction

"Put down that bucket, and play nice!" "Stop bothering your sister!" As a child, you may remember having heard these words repeatedly. In recalling those long summer days, when playing with others and working out your differences, we are all reminded how these rudimentary interpersonal skills are the stepping-stones for developing critical professional skills later in life.

In Robert Fulghum's groundbreaking essay, "All I Really Need to Know I Learned in Kindergarten," we realize that yes indeed he was right. Those first sandbox and playground experiences set the stage for how we as adults would live and experience the rest of our lives. Experience has taught us to hone the basic rules we learned early on. Admittedly, we have all had moments when we wanted to take away that plastic shovel from someone, but we knew better. Today, we talk through our concerns and compromise to work out any differences. Those crayons we used to draw pictures as a child, sometimes on classroom desks and walls, are now the tools of our innovation. The proverbial hands that we held on the playground or on field trips are some of the same ones we reach out to for help when we create team-based solutions.

Today the System z® Software organization at IBM® has not strayed far from those early lessons, while focusing on the 4Ps: patents, papers, presentations, and participation. The group's commitment to designing creative solutions and sharing their experiences is essential to every aspect of each team member's professional development. As we reminisce about the lessons of our youth, we realize that the basic rules of life have not changed much today from those learned early on.

What has changed and what will continue to evolve is the technology and practices that guide ones ability to collaborate and grow professionally. A core group of professionals from the IBM System z Software team recently demonstrated this. The team recently created an atmosphere, akin to a kindergarten classroom, which was structured in a fast-paced conference setting to promote a diverse exchange of innovative ideas. Tabbed the Innovation Exchange, the team piloted their approach across a 100 person organization. Then they used that event's results, including feedback from participants, to expand the Innovation Exchange across a 300-member organization, followed by another event for a global organization with 2000 members. Throughout these events, the team used several social communication tools that fostered virtual sharing, promoted a range of diverse thoughts and ideas to emerge, which in turn allowed the global team to engage in the four Ps.

This paper will explore the genesis of this innovative program, and the results and feedback it generated across the enterprise development community. In addition, the paper will include examples of projects and programs that grew out of the Innovation Exchanges, and what the team has learned to help better share, leverage, and learn from each other in their new global sandbox.

The Evolution of Training…

If you joined the workforce around the time that Robert Fulghum was reminding us of our early sandbox skills, back in 1989, then you remember the more traditional and standard classroom training programs. Much of the IT industry's training was discipline-driven, and, unfortunately as we learned later, was segmented into silos. While budgets allowed for travel and face-to-face education, there was very little cross training or the opportunity to share ideas from different skills bases.

Over time, budget challenges and advances in technology created the need for, and availability of, virtual training. Video conferencing became very popular and soon, web-based education and Massive Open Online Courses became prevalent. This education format not only made the "classroom more accessible", but it created a new environment where students with diverse skills, interests, and experiences learned from each other.

Today, a new objective for training at IBM has taken center stage, which involves applying skills to address the needs of its customers and to keep up with industry trends. The company's focus on the personal and client experience is stronger than ever. Vice President for Design Phil Gilbert, said it best, *"At IBM we've become great at speaking about the enterprise value proposition... now we will deliver the personal value proposition."* Teams at IBM have made a commitment to focus on delivering personal value through a new framework called IBM Design Thinking. Understanding how to develop products that focus on customers and their needs is essential. Creative ideas are just one part of the solution. Working in a collaborative environment to address critical customer problems with timely and effective solutions, is the game changer in our constantly changing business culture.

The Four Ps

While the IT industry's professional development education model has evolved, teams across IBM continue to take advantage of new technologies, social communication tools, and trends. In parallel, the System z Software team continues to focus on being creative, promoting diverse skills, and sharing their experiences to help develop key customer focused business offerings. The team does so by focusing on the four Ps of professional growth at IBM.

The first P is for patents; specifically how the team works together to turn creative ideas and problem solving solutions into valuable intellectual property and client solutions. The next two Ps stand for papers and presentations. In a traditional sense, writing a paper or sharing ideas in a presentation are effective ways to share ideas and plans, just like sharing toys. In today's fast paced and socially driven marketplace, effective tweets and blog posts serve as avenues for publishing valuable information. The final P is for participation, which translates into how the team collaborates to invest their time, energy, and skills to engage in projects and workgroups.

Taking these first steps to make "new friends" allows many team members to work outside of their comfort zone to collaborate, share, and grow ideas that benefit the larger community.

With a vision in mind to develop an enhanced learning experience, the managers of the System z Software team encouraged some early tenured team members to explore new and innovative approaches. Leveraging that team with an enthusiasm for using social communications and exploring new technologies, they set out to build a new Sandbox.

Looking For a New Education and Sharing Model: A New Sandbox

A late afternoon meeting during the summer of 2012 started the team working on plans for constructing a new sandbox. Prepared with ideas and enthusiasm, three software engineers met and exchanged ideas on how to address a wide range of learning objectives. It was clear to the team that any new approach to learning or information exchange would have to meet four distinct objectives.

1. Provide a collaborative, innovative team environment. This would be essential for any learning experience, but the team had to figure out how to include remote teams and also encourage a wide range of disciplines to come together.

2. Create an atmosphere where everyone was comfortable sharing ideas. Different backgrounds and job roles presented a wide range of unique topics. Generating interest in learning more about the issues and being able to create worthwhile conversation was important.

3. Leverage familiar training concepts while actively exploring new social communication tools. There is something to be said for starting with familiar constructs or format. Being able to create a comfort zone for everyone, and then build from that point was fundamental to creating a new paradigm.

4. Make the event fun and something everyone would want to do all over again. Most importantly, the team knew they were asking everyone to invest valuable time in a pilot approach, so they wanted the event to be an interesting and enjoyable learning experience.

The ideas started to flow, and before too long, the team had defined their first Innovation Exchange, along with an outline for the event format. Now, it was time to start working out the details. Exploring available technology, promoting the idea, and, of course, ensuring it would be successful.

Innovation Exchange, the New Sandbox

Piloted in Poughkeepsie, NY, the Innovation Exchange offered a platform for presenters, individuals or teams, to present a challenge that they were facing or a new idea around themes based on a set of initiatives at IBM. For example, some of the event themes included “Client Engagement,” “Professional Development,” and “Digital IBMer.”

The event gave presenters the opportunity to obtain feedback, generate new ideas, and discuss innovative solutions with an audience. The emphasis was on audience participation and discussion, in contrast to giving a formal lecture on a previously worked on project.

Presenters were encouraged to limit presentation materials to one slide to give an overview of their problem or idea, and then to open up the session to the audience, so that there could be an exchange of innovative ideas. To ensure that ideas were not limited to any physical location boundaries, a larger group of global team members was included.

Innovation Exchange Format

To meet the objectives of creating a new sandbox, as listed above, the team defined a set of guidelines for presentations. A call for abstracts was then sent out to the organization, and those who were interested in presenting on topics related to the three themes submitted a short abstract to be considered. Once the team approved abstracts, sessions were scheduled and session signups were opened.

An executive who emphasized the importance of innovative thinking within IBM kicked off each event. A keynote presentation followed the kick off, where a technical leader presented on one or more of the Innovation Exchange themes. Afterwards, participants attended up to three sessions that varied in length from 30 to 45 minutes.

The planning team worked diligently to ensure that everyone within the organization was included. The event offered face-to-face sessions, and teleconferences were setup for remote employees to call into sessions. There were also virtual sessions, so remote employees could present and participate in the discussion. Global team members who wanted to present, had the opportunity to pre-record their sessions, to help manage the difference in time zones. Access to these pre-recorded sessions, was given to all members of the System z Software organization, so that they could provide feedback on the topic and engage with the presenter on the topic.

Social Technology

Exploring social technology was a major focus of each of the Innovation Exchange events. When the team was preparing for the November 2012 event, IBM was promoting the internal use of IBM Connections (a leading social network platform for business). The team incorporated several applications from IBM Connections, when they pioneered the first Innovation Exchange. For example, they used the “Blog” application to communicate event logistics, and implemented the “Wiki” application to accept abstracts and track attendance for each session.

At the start of the second Innovation Exchange iteration in June 2013, the team’s target participants had grown more comfortable using IBM Connections. For the June event, the team decided to use IBM Connections exclusively—specifically, the Community and Wiki applications—to review abstracts, schedule sessions, and track updates. In addition, a few moderators introduced “prep work” for the sessions, and used the “Forum” application to help guide the discussions.

As the team planned the third Innovation Exchange, the primary objective was to open the event for global participation. This introduced new logistical challenges, which included hosting sessions that spanned across multiple geographies and time zones. IBM Connections provided a platform for global participation, and helped the team to host virtual sessions that could be viewed and developed for a specified window of time. This afforded the team the flexibility to offer sessions at a convenient time for each participant, but still allowed for forum-based, organized interactivity. Each session had its own wiki, forum and recorded feature. Every session offered a live audience who could easily interact with other participants through a variety of methods (including both in-person and virtual attendance using social technology). The session leader responded to all open questions after the event, to close the loop for feedback and discussion.

The Innovation Exchange team relied on IBM Connections to deliver and support each of the three successful events. In doing so, participants grew comfortable using social technology, and gained valuable skills in becoming true “Digital IBMers”.

What Worked Well

Over the course of 18 months and three different Innovation Exchange events, the System z Software organization learned a great deal from many successes, and even a few logistical mishaps. Team members shared new ideas, participated in virtual meetings with remote team members, explored innovative uses for new technology, and—most importantly—enjoyed themselves while engaging in a collaborative educational venue.

Using a traditional conference-like format was a win-win. It helped break the ice during the first session, and provided a shared venue for all team members to meet and collaborate more openly. Introducing aspects of social technology into the workplace was a good way to get team members more comfortable blogging, using wikis, and communicating in other innovative ways.

For each session, participation exceeded the team's expectations. For the first event, the smallest of the three, almost 80% of the 100+ functional area joined the event, By the time the team hosted its third event (for the 2000+ worldwide organization), almost 25% signed up to lead or attend a session. Many others participated by listening to recorded sessions or providing feedback to one of the different tracks set up in the Innovation Exchange Community.

Most importantly, survey feedback and anecdotal comments consistently supported one of the most important objectives for each event - create a fun-filled atmosphere. Although not every session produced concrete innovation, more often than not, participants commented on the unique and “fun” approach to creating an atmosphere for growing different levels of professional skills. The “easy-to-use, easy-to-follow, and easy-to-participate” approaches were in line with what professionals were looking for in this educational offering.

Lessons Learned

Participants answered a brief survey after each event, and the Innovation Exchange team carefully considered the feedback. Here are a few examples of the feedback, along with the actions the team took or plans to incorporate in future events.

Comment: “Clearly define goals and objectives that sessions are for brainstorming and exchanging ideas.”
Action: After receiving this suggestion, the team clearly defined the purpose of each session, so that audience members were not expecting the presentations to be formal lectures.

Comment: “Provide flexible attendance guidelines.”
Action: This request made the team realize the importance of making it clear that it is permissible to leave a session, to attend another, if it wasn’t what the attendee expected it to be.

Comments: “Use the IBM Sametime® chat in web conference to capture ideas and foster more discussion.” “Make better use of the virtual and pre-recorded sessions to promote more diverse participation.”
Action: These requests went hand-in-hand with the team’s emphasis on effectively using social communication tools. In the future, the team will use technology, such as IBM Sametime chat as a way of taking notes, capturing ideas, and fostering discussion. The team will also think of additional ways that they can use the pre-recorded sessions so a diverse set of team members will continue to participate.

Examples of Innovation Exchange Sessions

The session topics were as diverse as the teams that participated in the events. Many of the sessions explored creative concepts, some of which smaller groups of team members worked on after the Innovation Exchange to turn ideas into formal intellectual property. Other sessions highlighted "blockers" or process points, and team members brainstormed new approaches to help keep the larger team moving. A couple sessions dealt with specific release enhancements that were lacking required resources. Participants saw value in the enhancements and provided much needed support to help close resource gaps and keep the project on track.

Here are a few specific examples to highlight the diversity of ideas shared at the Innovation Exchange events.

- Using your workstation effectively and safely. Participants explored current approaches to workstation support, and suggested solutions that took advantage of the many features supported in IBM Connections. Effective use of forums and file sharing allowed skilled community members to provide improved virtual support.

- Powering the Internet with zLAMP allowed team members to brainstorm better ways to use the zLAMP stack from a technical and business perspective.

- Customer profiling through data mining generated a great deal of discussion and support to help the test organization, and increase work in analyzing customer data. The project also brought together teams from different disciplines to explore linkages between service data and key stakeholder feedback aimed at enhancing product development.

- Offering real life experiences using Rational Team Concert™ for development and service. Team members filled the room for this particular session, expecting to listen and learn, but by the end of the session, a lively exchange of ideas created a new set of approaches for rolling out revised education plans.

With each Innovation Exchange, session topics became more diverse. Teams became more comfortable with the format, and engaged in sharing ideas, creating new education modules, and networking with team members from across the entire System z Software organization.

Closing Thoughts

After three very successful Innovation Exchanges, the team started receiving questions about the event. People inquired about how their teams might utilize this type of event. It is clear that the team iteratively improved each new event, by incorporating feedback to design and deploy subsequent events. By focusing on sharing creative ideas and collaborating on new solutions, the team has been able to demonstrate its ability to follow the four Ps.

The team iteratively developed a valuable new sandbox in the shape of three Innovation Exchanges that were truly creative and innovative. While some of the sessions resulted in intellectual property, for the participants, no idea has yet to generate a patent. The team presented the results of their efforts in June 2014 at Union College's Engineering and Liberal Education Symposium and Marist College's National Enterprise Computing Conference. The team gained valuable experiences throughout their mission to create a new sandbox, which they realized and opted to share with the broader IT community in this report. Finally, everyone involved in the Innovation Exchange, from event leaders to the presenters and attendees, participated fully in the events. They clearly stepped outside their comfort zone to explore new and innovative ideas.

The System z Software organization continues to use an IBM Connections community to record, maintain content and share feedback from the Innovation Exchanges, and to keep many of the ideas, discussions, and projects going. Individuals from other teams within IBM regularly join the community; sometimes just to obtain a small nugget of process or learning information that they can use and build on in their area.

In the end, the event feedback surveys confirmed the interest and value everyone gained from sharing their ideas. Many of the comments the team received, focused on the collaboration, teamwork, as well as the opportunities to get "creative juices" flowing with team members from across the global System z Software community. That, in and of itself, reminds us that it is great to be with “our friends” to share our toys, color outside the lines and have fun in a new sandbox!

About the Authors

Molly Bigness joined IBM after graduating from RPI (located in Troy, NY) with a degree in Information Technology and Web Science. She currently works in the User Technologies organization as a technical writer and a web services programmer, specializing in web design and database administration. Molly enjoys working with her alma mater to help college students become better innovators as they prepare for careers in engineering and technology.

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David Hans is a graduate of RPI, in Troy NY, and has held a wide variety of technical and management positions across the IBM System z Software organization. He also works closely with marketing, development and research teams at both Union College in Schenectady, NY and at RPI. He has received several awards for management excellence. In addition to his sw development management responsibilities, he is active in organization transformation, skills development and cross-discipline curriculum development programs. He has spoken extensively on career development with undergraduate and graduate students and is available to connect on linkedin.com and via twitter.