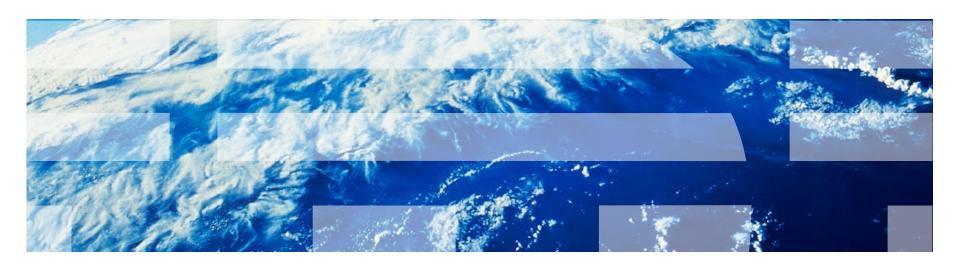


IBM Jams: a decade of collaborative innovation™

Liam J Cleaver, Global Program Director

Jam Program Office
IBM Enterprise Transformation | Office of the CIO



What is a Jam? IBM's online approach to large-scale collaborative innovation™ for business and social impact

- By invitation, online collaborative discussions for focused audiences ranging in size from a few hundred to hundreds of thousands
- Innovation events over a defined period of time to capture the pulse of the group or to solicit specific ideas to critical business or societal issues



- Jam Hosts and facilitators guide participants to build on each other's ideas supporting a meaningful exchange of perspectives by a focused audience around a shared topic
- Real-time text analysis and data mining to highlight emerging trends and distill actionable results

Issues CEOs and public officials seek to address are an IBM Jam 'sweet spot'

- Kick start the innovation process across the organisation, industry, extended ecosystem, and even with citizens
- Transcend culture, generation, language, and geographic challenges to harness collective brainpower to a given problem or challenge
- Use online, virtual collaboration to drive increased, longer-term real world collaboration and awareness around specific topics



 Employees, business partners and customers often cited as the top three sources of innovation by CEOs and public officials



A uniquely IBM franchise: Jams have transformed IBM internally and our face to the world

WorldJam2001

a new collaborative medium to capture best practices on 10 urgent IBM issues.

An experiment of the power of the Intranet to harness the collective smarts of the company

ValuesJam2003

an in-depth exploration of IBM's values and beliefs by employees

Reestablished the core of IBM's culture and brand

WorldJam2004

focused on pragmatic solutions around growth, innovation and bringing the company's values to life

Top 35 ideas lead to over \$500M in operational savings; over \$80B in sales supported; and IBM-wide restructuring

InnovationJam™ 2006

Client's, business partners and family members explored emerging technology for benefit of business and society

10 new businesses established within IBM generating close to \$700M in revenue by 2010; half represented in IBM's Smarter Planet initiative launched in 2008

InnovationJam™ 2008

Leading thinkers from thousands of companies helped advance the vision of IBM's recently released CEO Study, "The Enterprise of the Future"

Industry roadmaps for use by all on "how" to best move forward to reflect an Enterprise of the Future

"Jams have helped change our culture and the fundamental way we collaborate across our business."
Sam Palmisano, Chairman and CEO, IBM

Jams are opening tremendous opportunities for our clients – new ways of working across disciplines, the enterprise and national borders



- Connect all GTS employees with senior management around key initiatives shaping GTS' growth in the future
- Participation from over 50% of GTS across 88 countries contributing over 6k posts on "unlocking opportunities for growth"
- Results: level of participation and quality of discussion spearheaded GTS' Web 2.0 initiative for internal and external client collaboration (background on GTS Jam)



- Create affiliation for new P&T organisation across 8200 globally dispersed employees
- Participation across 117 countries and 50% of P&T
- Results: Increased sense of inclusiveness and one idea netted \$10M in cost avoidance (background on My P&T Jam)



- Supported by the EU and NATO to generate new insights on the 21st Century security landscape
- Participation by over 120 countries and 4k military, diplomatic and civilian experts
- Results: Ten specific recommendations presented to EU and NATO for input to NATO defense strategy (background on Security Jam)



- CEO sponsored to generate practical ideas to help drive and realise the new values into the company.
- Over 50% of Lilly participated from 40 countries including factory workers, sales teams, R&D and manufacturing
- Results: Greater adoption of new values program, and hundreds of ideas, one example in SCM packaging saved \$14M (background on lilly.com)



^{*} See additional case studies in appendix

Jams are events and require 8 - 10 (plus) weeks preparation prior to the live event depending on the specifics of the Jam event

- Define purpose and articulate key intent
- Outline intended outcomes
- Define qualitative and quantitative measures of success
- Assess purpose, intent and outcomes with key stakeholder groups
- Outline overarching topics/questions
- Identify required resources for activities
- Finalize project plan with tasks and milestones

- Develop and execute comprehensive on and offline communications and marketing campaign
- Define and invite target audience
- Finalize all Jam forum and supporting content within the application
- Develop live event script
- Identify, recruit and train event facilitation team: Jam Hosts,
 Facilitators, and SMEs
- Identify and secure VIP Guests
- Define rating and/or post event survey as necessary
- Build Jam application to requirements

- Execute live event script
- In-Jam communications and marketing to encourage broader participation
- Active facilitation to encourage meaningful exchange between participants
- Generate Theme Clouds to represent evolution of conversation for participants
- Promote focused discussions and "hot ideas"
- Real-time data/ trend analysis of content and participation rates to inform management actions

- Executive communication on participation results and next steps immediately following
- Conduct initial review of forum themes and ideas using COBRA data mining tool and event facilitation input
- Capture prioritized list of actions and relevant owners
- Develop final report for participants and stakeholders on Jam event and outcomes
- Maintain live event application in a 'read-only' status for participants to return and read over for a defined period



Analytics to aid analysis: Machines in the conversation

Social Networking

Drives additional participants to live event and identifies natural champions for post event implementation



Viral registration referral program

Collective Intelligence

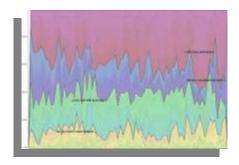
Real-time business analytics on emerging themes during live event and in post event analysis

net adversing ajax apple architecture art article audio bit200f06 community computer costing cool CSS culture daily distablistic entertainment tim finance firefox flash sider tools food free handware health history home how/to tank humor illustration image java javascript job language library lithhads linux mac mps music network news ordine opensource assumptions perfolio productively programming byton radio radio ratio satis as nutry science search security see sga shop Shopping cread travel tutorial totorials to utumu us video web vordpress work writing and youtube.

IBM Research data analytics tool (COBRA)

Data Visualization

Monitor rate of participation by location, job role, other demographics during live event and as part of post event analysis



IBM Research data visualization tool (Many Eyes)

Machine Language Translation (2010)

Statistical machine translation evaluates vast amounts of parallel corpora to determine best translation

n.Fluent
Translation to the power of rs.

IBM Research real-time translation service & crowdsourcing (n.Fluent)

Predictive Analytics (tbd - 2011)

Deploy models, predictions and deeper insight from text analytics



IBM Software Business Analytics (SPSS)



Frequently asked questions

What kind of participation rate can we expect?

Isn't this just an online discussion forum? How do you ensure good quality input?

Shouldn't the Jam be anonymous? Aren't there issues of privacy?

Can the infrastructure really handle the traffic?

What if we only want a Jam for a few hundred to several thousand people?

20% participation is statistically satisfactory, and we've seen a low/ highend of 15% to over 80%. High participation depends on having a disciplined comms/marketing program and clear senior executive support for implementation of outcomes from the event.

The Jam approach combines a disciplined "behind the scenes" facilitation approach with IBM Research's text analysis tools scanning forum comments for common threads to identify as hot topics and emerging themes. This approach encourages participants to build on each other's comments and keep the discussion very focused.

We have found lack of anonymity ensures that feedback remains constructive, even if critical. Jams are also about connecting people, and not just ideas. People who can connect on ideas afterwards. This approach builds trust.

IBM runs the Jam in the same environment as the US Open, Wimbledon, Roland Garros and the Masters. This triple-redundant infrastructure is built for massive hits within a very short period of time.

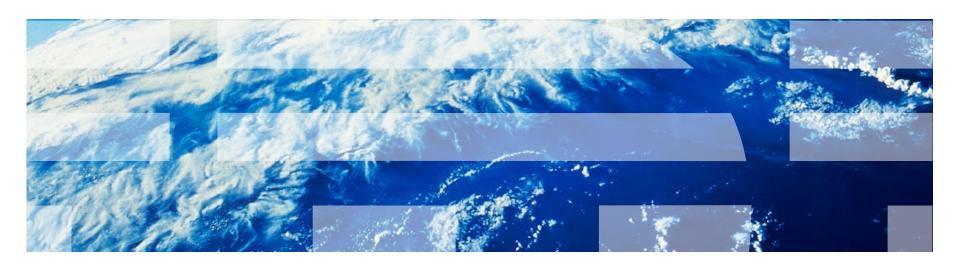
The MiniJam is a hosted, smaller-scale online brainstorming, based on IBM's award-winning InnovationJam™ events. MiniJam's template-driven platform is targeted for audience sizes between 300 upwards of 20,000 registered participants.





Appendix

How to Jam: an innovation to collaborate



Invitation to collaborate: "How to Jam"

Brought to you by:

Einnovationiam™

IBM.

• Features multiple tabs: Home (default view), Hot Ideas, Themes, About the Jam, and

MyJam Welcome Nora Jones! (Sign out) | Help IBM Demo Jam Advanced Search ~ Select a forum English Jam Time Remaining Welcome to the Jam! 2405 hrs. 30 mins. 12 secs. For the next several hours, you will have the opportunity to engage with colleagues from around the world to surface pragmatic ideas and solutions to some very real issues and Global Activity Select a forum below and dive right in! Since I last logged out # of posts: 16 # of logins: 27 # of new Themes: 0 Welcome to the Jam! Please take a moment to explore the site. For some useful hints and tips, # of Hot Ideas: 0 check out the Help section # of Threads: 16 Since the start of the Jam # of total posts: 32 Reinventing innovation and growth # of total logins: 58 Explore ways in which your organization can go green. Find new ways of working smarter, faster and better. Making talent a strategic priority Creating one voice Rethink the way your organization is attracting, Review - and renew - your organization's value motivating and retaining employees. will they hold true for the next 100 years? Building better partnerships Collaborating across borders Investigate the effectiveness of both internal and Discover some new ways -- and the means -- by external partnerships. which your organization can instill a culture of 0% collaboration. My vote is: Unsure 4 Jammers voted topics The following are the most active discussions Ein Jam bindet Ihre Stall by Michael Römer (0 replies) Themengebiete eines Jams by Michael Römer (0 replies) Das Jam Dashboard by Michael Römer (0 replies) ▶ View all

- Jam Dashboard
 - Jam statistics
 - "What's new" since Jammer last logged in
- Quick polls (get the immediate pulse of participants)
- Jam Alert! to drive awareness and traffic to specific ideas or
- Multiple discussion forums covering specific business challenges



© IBM, 2009 I Jam Rules I Feedback

IBM Demo Jam is a forum for registered employees to share and brainstorm ideas

Solicitation, profanity, personal attacks, threats or harassment is not acceptable and subject to editing or removal

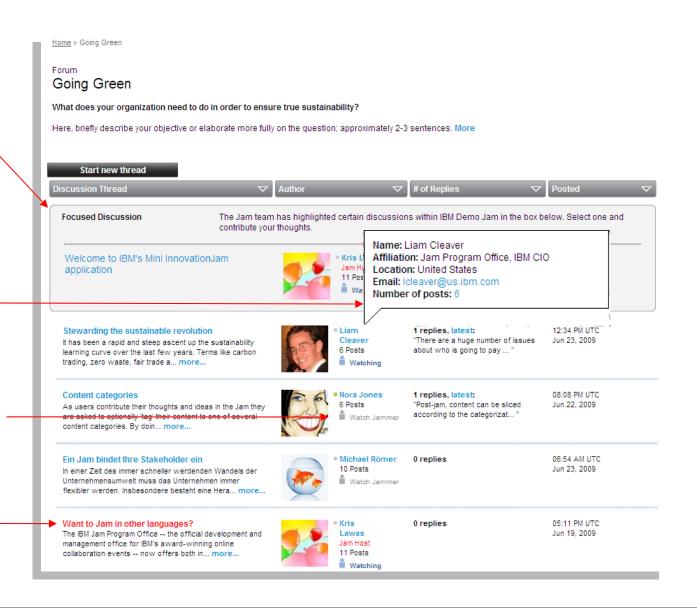
Discussion Forum page

Focused Discussion

- Facilitators promote threads to draw awareness and promote deeper dialogue
- Jammer's "business card" to provide quick background on person

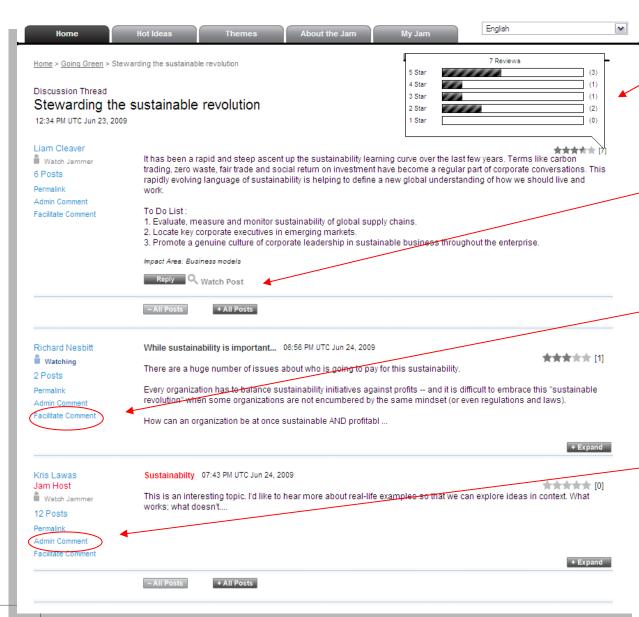
Note: Green dot signifies that user is logged into the application

- 'Watch Jammer' to track people of interest aggregated on MyJam tab
- Jam Hosts help guide and steer conversations given the nature of their role within the organisation





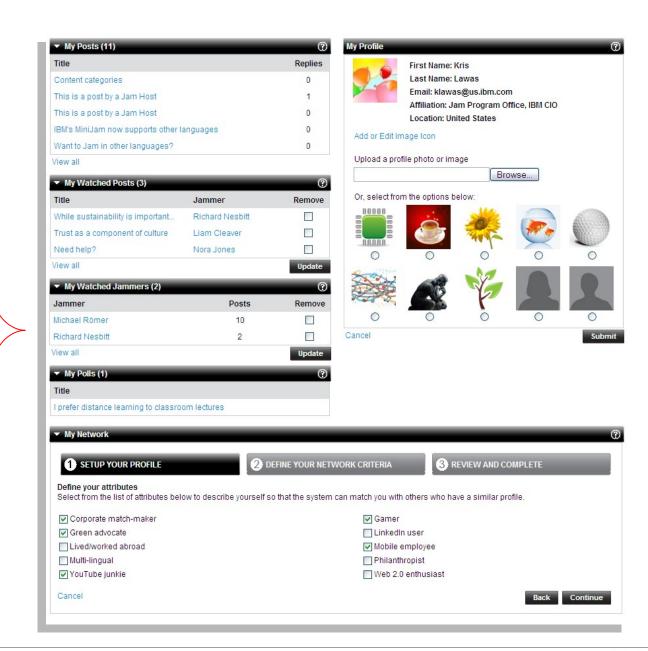
Discussion Thread level



- Rating a post is an optional feature and results are tallied in the Jam admin tool
- 'Watch Post' to track a discussion thread of interest and quickly find via the MyJam tab
- Facilitate
 Comment is how
 the client's trained
 facilitators promote
 content during the
 event
- Admin Comment
 is accessible only by
 the event
 administrator to take
 action on a post in
 the event a
 participant's
 comments violate the
 agreed to Jam Rules

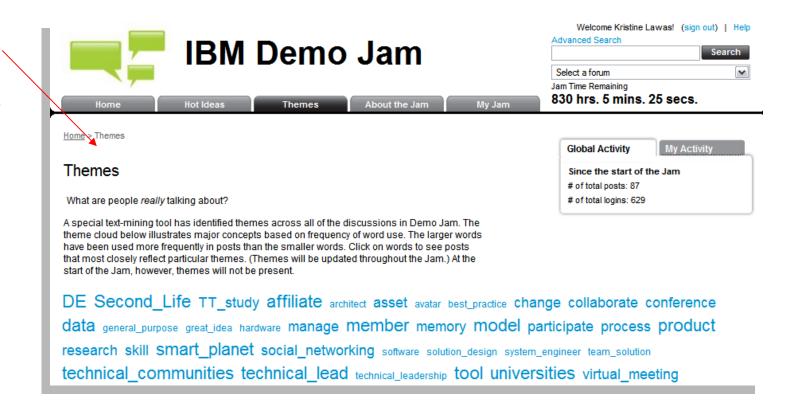
My Jam tab

- 'My Posts' allows you to keep track of your posts and any replies
- 'My Watch Post' to track a discussion of interest or one you want to find quickly over the course of the Jam
- 'My Watch Jammer' to track individuals you work with, respect, or appreciate their perspective on a given topic
- 'My Polls' to view the results of the polls you participated in
- 'My Network' to find participants of the most interest or relevance to you in the event



Themes tab

The Theme Cloud helps users quickly engage in a discussion of interest to them; it also visually depicts what jammers are really talking about



COBRA, IBM's text-mining tool developed out of our Almaden Research Lab, is used to mine the content and publish periodic 'theme clouds' – representing discussion themes from across all forums.



Appendix *Case studies*



Citibank Global Transaction Service (GTS) – "GTS Jam"



- Provide an opportunity for all GTS employees to engage directly with senior management around key initiatives shaping GTS' growth in the future
- Listen to one another in a constructive exchange of ideas expanding employees' networks across the business
- Results: Participation from over 50% of GTS across 88 countries contributing over 6k posts on: "unlocking opportunities for growth;" "working smarter;" and "ideas in action." Levels of participation and quality of discussion spearheaded GTS' Web 2.0 initiative for internal and external collaboration



"From where I sit, it would have taken 10 years travelling around the globe and asking questions and doing presentations to gather this wealth of intellectual capital. The power of the Jam is that not only do I have visibility over those ideas, but every GTS employee does also."

Francesco Vanni d'Archirafi, Citibank Global Transaction Services CEO, June 2010

Eli Lilly – "Vision Jam: Making it happen"



- Generate practical ideas to help drive increased understanding of the company's new vision to realise the company's business and strategy goals
- Draw upon the energy and enthusiasm of Lilly's global workforce to demonstrate a commitment to "new ways of working" and collaboration across the divisions
- Results: Participation from nearly 50% of Lilly across 40 countries identifying specific recommendations. One innovative packaging idea cut waste and saved \$14M. Other ideas met four of six 2010 environmental and safety goals early leading to more aggressive goals in 2013



"The Jam left Lilly with literally thousands of fresh ideas and well-argued debates focused on our transformation. It also left us convinced that Lilly has the necessary creativity and commitment among its people."

John Lechleiter, Ph.D., Chairman of the Board and CEO, Eli Lilly, February 2008

Nokia – "Nokia Way Jam: Creating the New Nokia"



- Ask it's global workforce the fundamental question, "What does it take to be an Internet company?" as part of shifting Nokia's business and strategy
- Engage broader set of employees building off a year long "high touch" corporate values program with a "high tech" Jam to demonstrate new ways of working and engagement
- Results: Participation from over 40% of Nokia including "white collar" and factory workers across 40 countries. Ideas resulted in restructuring to focus revenue growth in expanding Asia Pacific consumer markets



"The collaborative nature of the Jam was itself an expression of Nokia's culture and the value we place on achieving together. We identified several key corporate initiatives to be included in our future plans and several initiatives within our business groups." Olli-Pekka Kallasvuo, Chief Executive Officer, Nokia, March 2008

Royal Dutch Shell Projects & Technology – "My P&T Jam: Building an inclusive global culture"



- Create affiliation for new P&T organisation across 8200 globally dispersed employees while demonstrating "new ways of working" (i.e., focused, fast, virtual and high tech)
- Locate and brainstorm new ideas for cheaper, better, faster and safer alternatives to existing methods to show rapid impact of new business group on Shell
- Results: Participation across 117 countries and 50% of P&T outlining specific recommendations for new ideas and process improvements. One improvement outlined and adopted during the Jam netted \$10M in cost avoidance



"We asked you to speak up, and you surely have! The discussions over the last 3 days have revealed a wealth of insights, ideas and constructive actions that we can take as individuals, teams and across P&T."

Matthias Bichsel, Shell Executive Committee, Projects & Technology Director, February 2010

Coventry launches first UK city's mass online brainstorm: CovJam



- UK's Coventry City Council wanted to engage in a deeper, more dynamic conversation with constituents about future directions for the city of Coventry
- Nearly 900 local residents, businesses and public bodies discussed opportunities and specific ideas to improve Coventry.



Results: Immediate and longer-term practical ideas incorporated in to future planning initiatives

"What makes a city great? It's the people. The IBM Jam has helped us to harness the wisdom, energy and restless ambition of the people of Coventry."

Martin Reeves Chief Executive Coventry City Council, June 2010



USAID Global Pulse 2010 Jam



- Sponsored by USAID and the White House to share ideas and create innovative solutions to social issues facing the global community
- Connect participants who are champions for similar social issues to build new, or strengthen existing relationships, and to inform U.S. foreign assistance and diplomatic strategies
- Results: Over 150 countries and 10k participants across government agencies, NGOs and academia. Over 60% of participants outside of the US, and the resulting ideas and energy used to expand USAID outreach efforts and inform development planning



"Global Pulse 2010 answers this call [President Obama's 2009 Cairo speech] to engage and partner with the international community in a meaningful way." Sonal Shah, Deputy Assistance to the President of the United States and Director of the Office of Social Innovation and Civic Participation, March 2010

European Union and NATO Security Jam







- Security Jam 2010 supported by the EU and NATO brought the creativity of many minds focused on ideas around the changing nature of the 21st Century security landscape
- Over 120 countries, 7 continents and 4k military, diplomatic and civilian experts international institutions, government agencies, soldiers, NGOs, and academia.
- Results: Ten specific recommendations synthesized in a final report to EU and NATO decision makers for input to NATO Defense strategy



Larry Hirst, Chairman IBM EMEA, presenting **NATO Secretary General Rasmussen** with EU NATO Security Jam final report and recommendations,
June 2010



"This is exciting! The world increasingly connects via chat, blog and the cyberworld – we all need to jump in the deep end of the pool and start swimming. I know I'll end up learning from all of the participants."

Admiral James Stavridis, Supreme Allied Commander Europe (SACEUR), February 2010

UK Foreign & Commonwealth Office (FCO) – "One Team, Many Voices: Our Future"



- Model the behaviour for the future organisation: inclusivity, creativity, risk taking, collaborative working and embrace new technology
- Promote "One Team" breaking down divisions between home office/overseas,
 career diplomats and civil service, while identifying talent around the FCO
- Results: Global participation across hierarchy with a candidness that surprised everyone and practical outcomes for the future of the FCO presented to Prime Minister Brown at FCO's annual leadership conference



"The effect (of the Jam) has been to give staff the oxygen of innovation and communication, and to advance our strategies for a 'one team' approach to providing an integrated global service to citizens, businesses and governments of the highest standard."

British Foreign Secretary David Miliband, March 2009

United Nations and World Urban Forum (WUF3): Habitat Jam

- The World Urban Forum (WUF) was established by the United Nations to examine rapid urbanization and its impact on cities, economies and policies
- HabitatJam was the largest brainstorming event on urban sustainability bringing together not only NGOs, politicians and academia – but the slum dwellers whose lives were directly impacted by this body
- Results: Over 30,000 participants from 158 countries generated 600+ ideas. 70 of these were presented and adopted at the WUF3 conference as its official platform









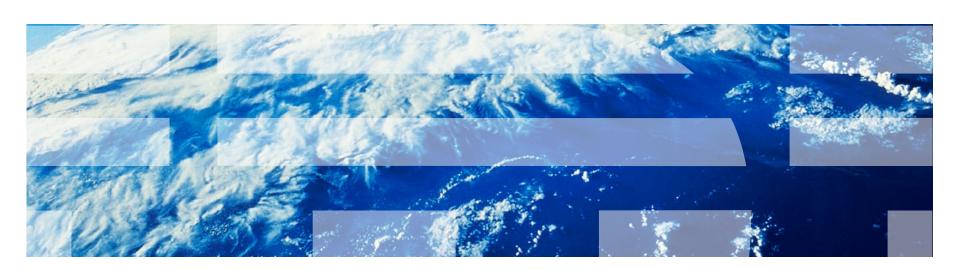
"At the heart of the urban crisis is a failure to allow the full participation of ordinary people in the development of the city. It is my hope that innovative technologies associated with Habitat Jam will help bring people closer together to plan and develop truly human settlements." Mrs. Anna Tibaijuka, former Under-Secretary-General of the United Nations and Executive Director of UN-HABITAT

Resource links

- Global Pulse 2010 remarks by Sonal Shah http://www.whitehouse.gov/blog/2010/03/30/global-pulse-2010
- Coventry City Jam http://www-03.ibm.com/press/uk/en/pressrelease/32208.wss
- EU NATO Security Jam http://bit.ly/a0UcZr
- USAID Global Pulse 2010 Jam http://www.globalpulse2010.gov/index.html
- UN Habitat Jam http://www.globaldialoguecenter.com/exhibits/backbone/index.shtml
- Veteran Success Jam http://bit.ly/9xXB7Y
- IBM's InnovationJamTM 2008: The Enterprise of the Future http://www.ibm.com/ibm/jam/
- Royal Dutch Shell Projects & Technology (P&T) Jam http://diversityjournal.com/images/2010_Innovations_in_Diversity_Awards_Winners.pdf
- Nokia Jam http://www.nokia.com/A4942631
- Nokia Siemens Networks (NSN) Jam http://www.nokiasiemensnetworks.com/global/AboutUs/Corporate+responsibility/employees/culture-and-values.htm?languagecode=e
- Eli Lilly Jam http://www.elililly.com/pdf/corporate_responsibility_2008.pdf



Appendix *Text and visual analytics*



Analytics to aid analysis: Machines in the conversation *

Generation of COBRA reports

- Final Themes across the Jam and by Discussion Forum
- Themes by: location, affiliation, other profile parameters. (as defined in registration)
- "Hot words" → any particular words or phrases of interest contributed in the jam?
- Category report → isolating all posts that were "categorized" by users
- Hosts' posts → isolating all posts contributed by hosts

Generation of Many Eyes reports

- Data visuals by: location, affiliation, other profile parameters. (as defined in registration)
- Real-time access in live event to participation levels by registration parameters

Generation of Jam Administration reports

- Registration & live event statistics
- Results of Quick Polls, Hot Idea report
- Results of Rating report (if used)
- All user and content data

Forum PDFs (transcripts)

Post Jam Input Form for Facilitators, Jam Hosts and/or SMEs

"Machines in the conversation: Detecting themes and trends in informal communication streams," by W.S. Spangler published in the IBM Systems Journal, Volume 45 October 2006



Analytics to aid analysis: Machines in the conversation

IBM Research's <u>COrporate Brand Recognition and Awareness</u> (COBRA)

- Organises content by major themes across the Jam, by each Discussion Forum and by registration profile parameters
- Identifies "hot words" or phrases of particular interest
- Co-occurrence reports illustrate relationship/strength of a theme to profile parameters (e.g., CTO and Water in illustration)

red = High affinity, pink = moderate affinity, yellow = some affinity, white = no affinity

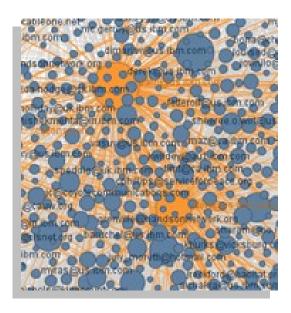
Class Name	Class Size	Other	IT Strategy	Other IT Role	сто	Chief Environmental Officer	Plant and Facilities Management	C00	Applications	CIO	IT Operations Management
Miscellaneous	211	128	33	13	14	10	6	1	4	1	0
green	118	85	20	2	6	0	0	1	1	1	1
energy_efficiency	95	57	18	2	10	3	5	0	0	0	0
water	87	48	8	6	14	3	6	0	1	0	0
data_centers	69	43	19	4	0	2	1	0	0	0	0
buildings	68	33	14	5	5	4	2	1	2	0	1
power	59	27	13	5	4	0	2	0	2	3	2

Source: IBM Global Eco-efficiency Jam

Analytics to aid analysis (continued)

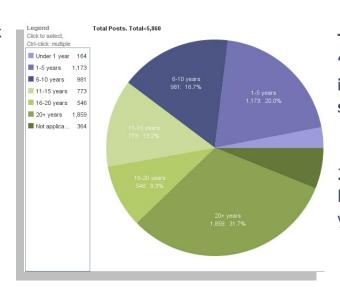
IBM Research and Cognos data visualisation experiment, Many Eyes

- Provides a quick visual snapshot of the conversation by registration data fields for "who" and "where" as opposed to "what" as presented by COBRA
- Data visuals by: location, affiliation, other profile parameters. (as defined in registration)
- Real-time access to visualisations allows the client sponsor to understand participation levels in the live event and take action as/if necessary



Post/Reply Network Visualisation.

Depicts impact of jammers' posts in Service Jam (combination of their direct posts and replies to their posts)



Total posts by 'years of involvement in service.'

32% of posts from 20+ years; followed by 20% from 1-5 years of experience

Source: IBM Service Jam

