



# Innov8 & PowerUp

*Learning through “Serious Gaming”*

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September 11<sup>th</sup> 2008

# Agenda

- Innov8
  - Project Overview
  - High-Level Game Flow
  - Future Directions
- PowerUp
  - Game Overview
- Second Life



Innov8  
A BPM Simulator

Smart  
SOA

A 3D rendering of the text 'Smart SOA' in a light blue color. The word 'Smart' is written in a cursive, handwritten style and is positioned above the letters 'SOA', which are in a bold, sans-serif font. The letters are three-dimensional and cast a reflection on the dark blue, glossy floor below them. The background is a gradient of dark blue, with a faint grid pattern on the floor.

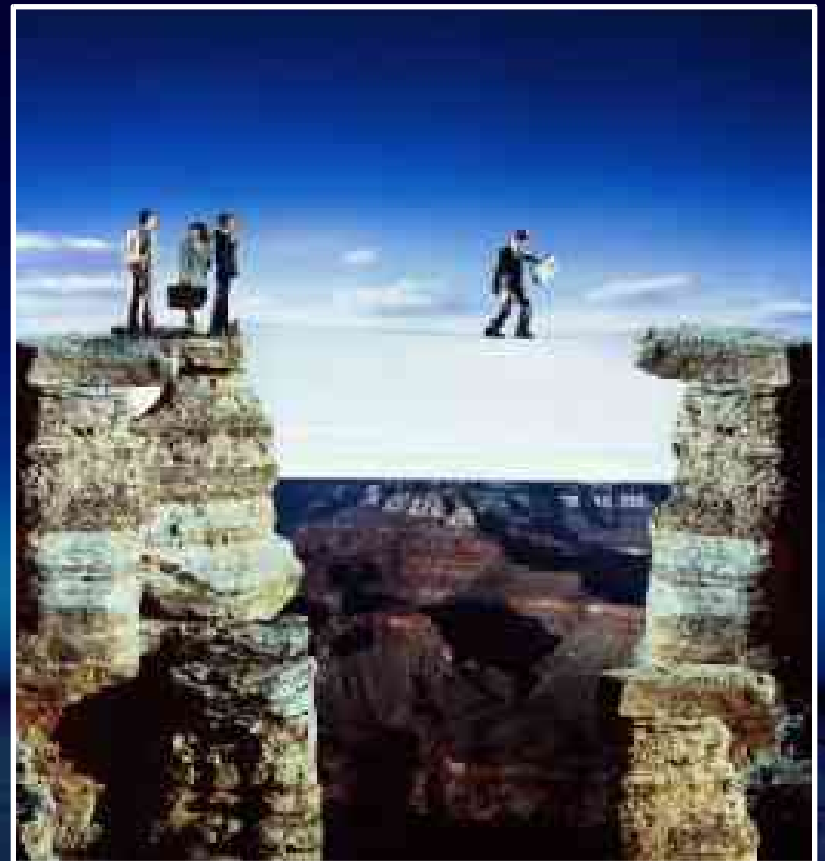
# Why Did We Develop Innov8?



# Business Challenge: Marketplace Skills Gap in SOA and BPM

## ➤ IBM IMPACT 2007 survey shows:

- Half of respondents said they have less than 25 percent of the necessary SOA skills to help their company meet long term goals.
- A combination of business and IT skills was cited by 68 percent of the respondents as a prerequisite to applying SOA to meet business goals.
- 80 percent are increasing SOA skills in their company this year
- More than 60 percent are focused on retraining existing staff on SOA



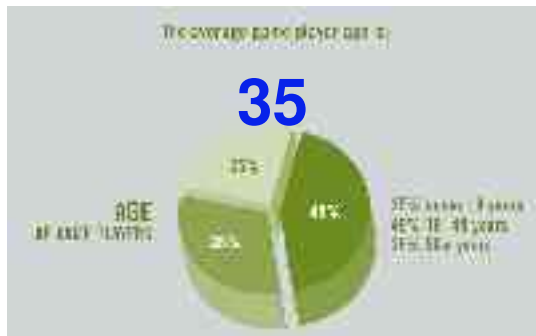
# Opportunity: Build Skills through Gaming

- Skills gap issue explored at annual IBM-sponsored MBA case competition (Jan '07)



***Gaming was overwhelmingly dominant theme in student proposals & recommendations***

- Widespread, historical use of business simulators in schools
- Numerous studies validating efficacy of simulators for skills-building
- Compelling demographics:



Average Age at Entry **28**  
Average Years Work Exp: 5.3



Average Age at Entry: **29**  
Average Years Work Exp. 5.8



*“Working with a truly inspiring team @ IBM on Innov8 was one of the highlights of my career. Helping to build out IBM’s Corporate Serious Games strategy for me is a **Nexus** between my two worlds of Business/IT and Gaming. There is so much opportunity to make a real difference and do something truly innovative.”*

## Phaedra Boinodiris

Serious Games Product Manager @ IBM  
CEO of WomenGamers.Com

Awarded Top 100 Women in Games by  
Women In Games International



Her Passion

Her Career



# Action: Innov8 BPM Game Project Initiated

## ➤ Stated Objectives:

- Create 'serious game' to assist in developing "T-shaped" skills around 'BPM 101 fundamentals'
- Interactive learning-lab experience; 1 hour + in duration
- Complimentary to and incorporated within existing IBM and institutional curricula. (Most effective in conjunction with face-to-face class room debriefs)
- Initial target audience: MBA, Exec MBA, undergraduate business, and information systems program students



➤ Our bigger vision... serve wider range of audiences



# Innov8 Development

## ➤ Game engine:

- Vicious Engine: <http://www.viciousengine.com/>
- Rapid prototyping, cross-game-platform support

## ➤ Game development:

- Center Line Productions: <http://www.centerline.net/>

## ➤ Content providers:

- Extended team: IBM SWG BPM product marketing, product mgmt, development; selected professors from pilot schools

# Accessing Innov8

- Available to qualified faculty staff through the IBM Academic Initiative program
- Step 1: Register at Academic Initiative site (no charge!)
  - <http://www.ibm.com/university/academicinitiative/>
  - Restricted to academic faculty members for teaching and non-commercial research purposes
- Step 2: Download Innov8 .zip file (171MB)
  - <http://www-306.ibm.com/software/solutions/soa/innov8.html>
  - Faculty members can also distribute Innov8 to their students freely

## Hardware Requirements

- OS: Microsoft Windows Vista/XP/2000/98/Me
- RAM: 128 MB RAM
- Disk space: Approx. 750MB
- Processor: Pentium III or Athlon 800 MHz or greater
- Sound: 16-bit DirectX 9.0c-compatible sound card and drivers
- CD-ROM: 4x CD-ROM drive and drivers
- Video card: 3D hardware accelerator card required:
  - nVidia GeForce 2 or equivalent ATI card or higher;
  - Direct X 9.0c (compliant 32 MB Video card and drivers)

➤ Innov8 “should” run on most  
DirectX 9.03 compliant  
PCs

# Innov8 Launch and Early Adoption

## Launch & Press

- Launched at 'Skills Event' hosted by Brandeis University International Business School – Nov 2007
  - 20+ Articles & TV Coverage
- Newsletters to SOA & Academic Community
- DATAMATION 2008 Product of the Year in 'Business/IT Alignment' category



## Academic Recruitment

- 38 Universities signed up to participate in academic 'pilot' program (vs. target of 15)
- Many more schools have installed since launch
- Professors represent a mix of MBA, I.T., and undergraduate business programs

- |                         |                             |  |
|-------------------------|-----------------------------|--|
| • Arizona State Univ.   | • N.C. State University     | • Univ. of NC – Chapel Hill                    |
| • Brandeis University   | • Pace University           | • Univ. So. California                         |
| • Carnegie Mellon Univ. | • Penn State University     | • University of Technology, Sydney (Australia) |
| • Davidson College      | • Université du Québec      | • Univ. of Virginia                            |
| • Duke University       | • U of California -Berkeley | • Université du Québec en Outaouais (Canada)   |
| • Fordham University    | • U of California -Irvine   | • SDA Bocconi (Italy)                          |
| • Georgia State Univ.   | • University of Georgia     | • Singapore Mgmt University                    |
| • Harvard University    | • Univ. of Manchester – UK  | • China and Japan (10)                         |
| • Indiana University    | • Univ. of MD - Baltimore   |  |
| • N.C. Central Univ.    | • Univ. of Massachusetts    |  |

## Partner Recruitment

- 5 IBM Business Partners recruited to participate in early partner 'pilot' program (vs. target 5)
- Closed pilot due to resource



# Anatomy of the Innov8 BPM Simulator

## Opening Cinematic: Set the Stage and Impart Mission



## Levels 1-3: Experience a Virtual BPM Project



Level 1: Visualizing Processes → As-is Process Discovery



Level 2: Improving Processes → Global Collaboration & To-Be Process Design



Level 3: Managing Processes → Nerve Center Dashboard Challenge

# Innov8 BPM Simulator - Cast







# Level 1 – Process Discovery



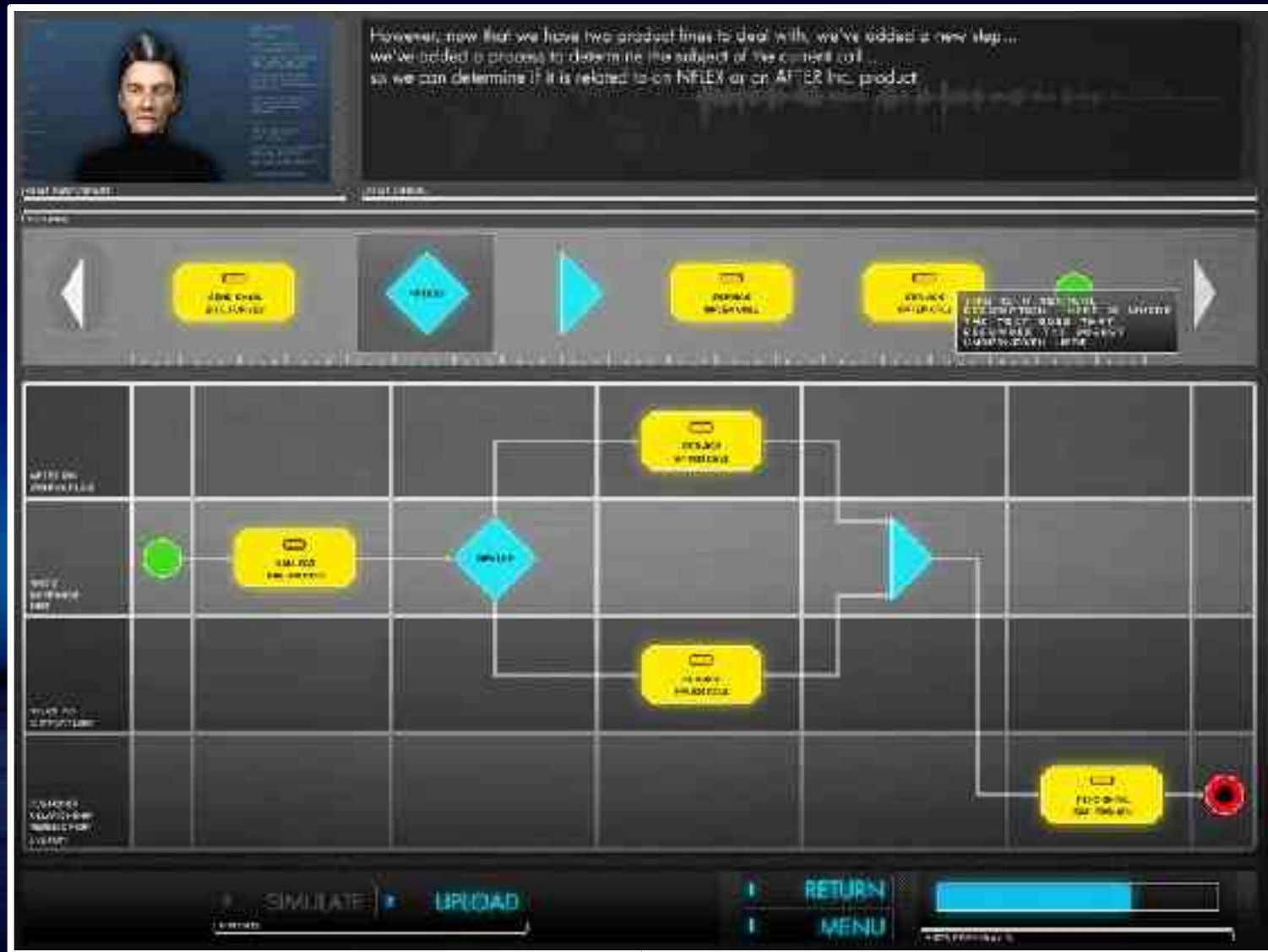
# Level 1 – Process Prioritisation

AFTER Inc	Business Administration	New Business Development	Relationship Management	Sales and Service	Product Fulfillment	Finance & Accounting
Directing	Business Planning	Market Planning	Account Planning	Sales Planning	Fulfillment Planning	Portfolio Planning
Controlling	Business Unit Tracking	Market Management	Relationship Management	Teles Management	Fulfillment Monitoring	Compliance
	Self Appraisals	Product Management	Credit Assessment			Reconciliation
Executing	Account Administration	Product Delivery	Credit Administration	Sales	Product Fulfillment	Customer Accounts
	Trade Administration	Product Campaigns		Customer Service / Call Center		
	Purchasing			Collection	Document Management	General Ledger
	Order Operations					

 Opportunity to gain competitive advantage	 Opportunity to enhance customer satisfaction
 Opportunity to streamline operations	 Opportunity to enhance revenues

# Level 1 – Modelling the As-Is Process





# Level 1 – Populating the Model



# Level 2 – Global Collaboration Room



# Level 2 – Step-wise Improvement

The screenshot shows a video conference interface. In the top left, a video feed shows a man in a suit. Below his name, it says "MIKE - ORIGIN". To the right, a text box contains the following dialogue:

(Toms) Yes. We'll add the partner service to our Services Registry - so the system selects who handles the easy calls dynamically, at run time.  
(Sam) Liang's team can modify a simple business rule online, to revert the flow to internal queues. Or to route in-flight calls to a second partner.  
(Mike) That's flexibility! Logon... Update the model to include business rules and routing 'easy' calls to a partner. **CHOOSE THE CORRECT DESIGN and PUBLISH TO TEAM**

The main area of the interface displays a workflow diagram. The flow starts with a green circle labeled "START". It leads to a yellow rounded rectangle labeled "WHICH CALL ORG" with "BUSINESS RULE" below it. This leads to a blue diamond labeled "EASY CALL?". From this diamond, three paths emerge, each leading to a yellow rounded rectangle labeled "EASY CALL" with "BUSINESS RULE" below it. These three paths converge into a large blue arrow pointing right. This arrow leads to a final yellow rounded rectangle labeled "EASY CALL ORG" with "BUSINESS RULE" below it, which ends at a red circle labeled "END".

At the bottom of the interface, there are several buttons: "PUBLISH TO TEAM", "SIMULATE", and "MENU". There is also a progress bar on the right side of the bottom panel.

# Level 2 – Use Case Analysis

[Mike] Very Good Edger. Now let's assume that the partner is as capable as our low-skill resources. Using the simulator with the call metrics you captured for the Axis model, and ignoring idle time for the moment... If we route 100% of easy calls to our partner, how much could that save us per month in total costs?

MIKE (PH, OFFLINE)

CONTINUE

```
graph LR; A((INBOUND CALLS)) --> B[CALL CENTER]; B --> C[CALL CENTER]; C --> D{CALL CENTER}; D --> E[CALL CENTER]; D --> F[CALL CENTER]; D --> G[CALL CENTER]; E --> H[OUTBOUND CALLS]; F --> H; G --> H;
```

Also in an ENFLEX call queue: ▲ 0 X ▼  
Partner call queue: ▲ 100 X ▼

Cost savings per month: \$965201

PLEASANT TEAM | SIMULATE | MENU

100% | 100%

# Level 3 – Process Monitoring/Mgmt



# Innov8 Directions

## ➤ 2008 Plans

- Tweak existing game per feedback
- Innov8 – “Advanced Edition” (Account Open)
- Innov8 – “Green Edition” (Supply Chain)

## ➤ 2009 Ideas

- Additional Scenarios (CIO, Marketing)?
- Modifiable platform?
- Multi-player?
- Second Life?



POWERUP



Game-based approach for education

Rich 3D User Interface, extensible missions, highly collaborative

Sponsored by IBM and TryScience/New York Hall of Science

Complemented with teacher guide and lesson plans

Focus:

- Motivate students to apply science and maths concepts to real world problems (environmental responsibility)
- Practice team-building, team-based problem resolution
- Learn about environmental responsibilities
- New missions coming soon!

[www.powerupthegame.org](http://www.powerupthegame.org)





# Second Life





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