BPM 2014
Questions for a Learning Organization

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http://www.slideshare.net/kswenson/bpm2014
The working world is changing.

From making things ...
... to knowing things.
Knowledge workers

... high degree of expertise, ... involves the creation, distribution, or application of knowledge.

- Thomas Davenport
Knowledge worker productivity is the biggest of the 21st century management challenges.

In the developed countries it is their first survival requirement.

- Peter F Drucker
By a number of estimates,• intellectual property,
• brand value,
• process know-how, and
• other manifestations of brain power
generated more than 70% of all US
market value created over the past three decades.

- “The Productivity Imperative”, McKinsey and Company
20% Knowledge Work

80% Routine Work

http://social-biz.org/2013/10/26/automation-elevating-workers-not-eliminating/
50% Knowledge Work

50% Routine Work

http://social-biz.org/2013/10/26/automation-elevating-workers-not-eliminating/
Employment Share

Percent


Note: The bands indicate recessions as defined by the National Bureau of Economic Research.
85% of the new jobs created in the past decade required complex knowledge skills:

- analyzing information,
- problem solving,
- rendering judgment and
- thinking creatively.

- “The Productivity Imperative”, McKinsey and Company
First … some definitions
Definition of BPM

Business Process Management (BPM) is a discipline involving any combination of modeling, automation, execution, control, measurement and optimization of business activity flows, in support of enterprise goals, spanning systems, employees, customers and partners within and beyond the enterprise boundaries.
“The System”

Desire to optimize the entire system

Your Organization

IT System

- Hardware
- Software
- Data

- Skills
- Relationships
- Agreements
- Offices
- People

Customers & Partners
Let’s talk about … lying
The diagram is pure fiction!
Figure 7.3 - An example of a Collaborative Process
why do we use examples that are false on every level false?

- partially enlightenment bias
- partially focus on routine processes
- partially thinking people are like robots
Example of Knowledge Work

EasyChair is a conference management system that is flexible, easy to use, and has many features to make it suitable for various conference models. It is currently probably the most commonly used conference management system.

If you would like to know why you should use EasyChair for your conference, look at this image!

Dear Andrei,

... I appreciated much PC-expert, that works better than the other systems I used so far as a PC member. Javier Esparza, member.
Example of Knowledge Work

Current Status of Papers

To change a decision on a submission, click on the decision column for this submission. You can change decisions for several submissions simultaneously by selecting them. To select or unselect a set of submissions, either click on the corresponding rows, or press the mouse button and move the mouse over table rows.

To see reviews on a paper click on the paper title. The scores are followed by the confidence (in parentheses). Papers assigned to you are shown using a grey background.

For more information about this page, click on Help.

Shortcuts to papers: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14

Unlock this box to hide shortcuts to papers

Show paper authors.

When computing the average score, weight reviews by reviewer's confidence.

<table>
<thead>
<tr>
<th>#</th>
<th>title</th>
<th>scores</th>
<th>average</th>
<th>decision</th>
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<tbody>
<tr>
<td>12</td>
<td>Subactive case management as a process of construction of and movement in a care space</td>
<td>0(4), 2(3), 2(4), 2(4)</td>
<td>1.5</td>
<td>ACCEPT</td>
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<td>13</td>
<td>Dynamic Contract Modelling for Agile Case Management</td>
<td>-3(5), 2(3), 3(4)</td>
<td>0.7</td>
<td>ACCEPT</td>
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<tr>
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<td>Open and Federated Emergency Care for the Developing Adaptable Case Management</td>
<td>0(3), 2(3), -1(4)</td>
<td>0.3</td>
<td>POSITION</td>
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<td>8</td>
<td>Resilience planning: adaptivity in SCI</td>
<td>-1(4), 2(3), 0(4)</td>
<td>0.3</td>
<td>ACCEPT</td>
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<td>3</td>
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<td>1</td>
<td>The process of change and its implementation in clinical and educational settings</td>
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<td>-0.3</td>
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<tr>
<td>4</td>
<td>Process analysis and collective review in organizations: a practitioner experience.</td>
<td>0(4), 0(5), -1(3)</td>
<td>-0.3</td>
<td>ACCEPT</td>
</tr>
<tr>
<td>5</td>
<td>Dependence of outcomes and process: a declarative perspective</td>
<td>-1(3), 1(4), -1(4)</td>
<td>-0.3</td>
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<tr>
<td>6</td>
<td>A Multi-Step Emergency Management System for New-Birth House Protocol</td>
<td>-1(4), -1(4), 0(4)</td>
<td>-0.7</td>
<td>REJECT</td>
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<tr>
<td>9</td>
<td>Developing adaptive case management solutions from emergency and trauma teams in long-term care centers</td>
<td>0(3), -2(3), 0(3)</td>
<td>-0.7</td>
<td>REJECT</td>
</tr>
<tr>
<td>11</td>
<td>Knowledge Brooks and the Human Experience: the Long-Care Case for SCI</td>
<td>-1(4), -2(3), 1(5)</td>
<td>-0.7</td>
<td>REJECT</td>
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<td>7</td>
<td>A Multi-Step Emergency Management System for New-Birth House Protocol</td>
<td>2(4), 0(3), 0(3)</td>
<td>1.6</td>
<td>REJECT</td>
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<tr>
<td>GOALS</td>
<td>STORY</td>
<td>ELABORATION</td>
<td>ACCEPTANCE</td>
<td>DEVELOPMENT</td>
</tr>
<tr>
<td>-------</td>
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</tbody>
</table>

- **Expedites**: Red card indicates tasks that need immediate attention due to urgency.
- **Goals**: The current goal is represented by a colored box.
- **Story Queue**: The story queue shows the order of tasks.
- **Elaboration**: Tasks in this stage are being planned.
- **Acceptance**: Tasks are being verified for correctness.
- **Development**: Tasks are being developed.
- **Test**: Tasks are being tested.
- **Deployment**: Tasks are being deployed.
- **Done!**: Tasks that have been completed are moved to this column.

**Time Estimates**:
- The time from here to complete a task is about 14 days.
- The time from here to complete a task is about 18 days.

**Numbers**:
- Task 5 is in the Development stage.
- Task 3 is in the Test stage.
- Task 5 is in the Deployment stage.
- Task 3 is in the Done! stage.
- Task 1 is in the Done! stage.
What do Management Gurus say?

http://www.slideshare.net/kswenson/bpm2014
Eliminate sources of variation. Find the one true way, and get everyone to master it. If possible, automate those practices to increase repeatability. Mastery requires control of the situation.

Mastery without originality becomes rote. The master who never tries to think in novel ways ... will produce the same kind of resolution even if the context demands something different. Mastery without originality becomes a cul-de-sac.
Get a business analyst to find your best business process and then institute it across the company. Thorough planning helps you avoid needless changes.

Companies have to be very schizophrenic. On one hand, they have to maintain continuity of strategy. But they also have to be good at continuously improving. Change brings Opportunities.
Try to anticipate and plan for success. Based on the history of potential members, teams should be crafted with a well known and predictable ability to work together.

If a majority of the people on a team already know each other, the team can become stale and predictable. It’s often through the unexpected insights of new colleagues that innovation is sparked.
A manager should find the best expert on the subject, and devise the most comprehensive and detailed plan. Design once, execute many times. Train people and measure them against these consistent goals.

The true genius of a great manager is his or her ability to individualize.

A great manager is one who understands how to trip each person's trigger.

Your strongest life is built through a continuous practice of designing moment by moment.
Jim Collins

Author of “Built to Last”, and “Good to Great”

Make a clear plan, consider carefully all of the situations that your workers will face, come up with the best responses, and teach your employees to use those best responses every time.

I don't know where we should take this company, but I do know that if I start with the right people, ask them the right questions, and engage them in vigorous debate, we will find a way to make this company great.
For a single process to work across an organization, you have to assume that all the players of a role are identical.

What if they are not?
Goal: eliminate variability and find the one best shoe size.
If you are going to monotonically improve a business process, you have to assume that there is a single process that is optimal.

What if there no single model is optimal? What if optimal is a variety of models?
Enlightenment Bias:

- Behind every complicated phenomenon is a simple formula driving it
Support for Innovation

http://www.slideshare.net/kswenson/bpm2014
Innovation refers to the introduction of novel ideas or methods.
"I'll be happy to give you innovative thinking. What are the guidelines?"
Medical Emergency

This patient has a combination of symptoms that requires us to do something that has never been tried before!
I’m sorry Dr. House, I can’t allow you to do that. It would make the process invalid.
A knowledge worker is

“... someone who knows more about his or her job than anyone else in the organization.”

- Peter F Drucker
<table>
<thead>
<tr>
<th></th>
<th>Design Time (Analyst)</th>
<th>Run Time (User)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Routine Work</td>
<td>Expert x1</td>
<td>Less Expert x100 or x1000</td>
</tr>
<tr>
<td>Knowledge Work</td>
<td>? x1</td>
<td>Expert x1</td>
</tr>
</tbody>
</table>

What does it mean to “assure the correctness” of the knowledge work process?
**Enforcement:**
Guardrails (on a road) prevent deviation, but also prevent anything not predicted.

**Guidance:**
Guidelines (on a road) show people where to go, but do not prevent deviations if they are necessary.
Emergency Prompt

This violates a rule, are you sure you want to do this?

Yes, Go Ahead
Technology for Unpredictability
Change Horizon vs. Process Duration

time → → →
process variant a  variant b  variant c
Change Horizon vs. Process Duration

Time →→→

Process variant a → variant b → variant c

Process instances:
Change Horizon vs. Process Duration

**time ➔➔➔**

- process variant a
- variant b
- variant c

**process instances:**
Process instances:
<table>
<thead>
<tr>
<th>Predictability</th>
<th>Description</th>
<th>Change Horizon</th>
<th>Work Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very High</td>
<td>Factory Work</td>
<td>Many years</td>
<td>Minutes to days</td>
</tr>
<tr>
<td>Very high</td>
<td>Food Preparation</td>
<td>Many years</td>
<td>minutes</td>
</tr>
<tr>
<td>High</td>
<td>Server Integration</td>
<td>Years</td>
<td>Minutes</td>
</tr>
<tr>
<td>Medium</td>
<td>Order fulfillment</td>
<td>Weeks to months</td>
<td>Minutes to hours</td>
</tr>
<tr>
<td>Low</td>
<td>Social Work</td>
<td>Weeks to years</td>
<td>Weeks to years</td>
</tr>
<tr>
<td>Very low</td>
<td>Medical treatment</td>
<td>Days to weeks</td>
<td>Weeks to years</td>
</tr>
<tr>
<td>Very low</td>
<td>Detective</td>
<td>Hours to weeks</td>
<td>Weeks to years</td>
</tr>
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</table>
Process Technology

Predictable, Repeatable

Variable, Unique

Application Dev

Databases & Structured Data

Documents & Unstructured Data

Email, Texting, Twitter, Telephone

Notes
Predictable, Repeatable

Application Dev

PDS Integration

Human PM

Production CM

Adaptive CM

Social Biz

Email, Texting, Twitter, Telephone

Variable, Unique

Databases & Structured Data

Documents & Unstructured Data

Notes
State of the Art in Case Management

Developed originally for AIIM case management series.

Send request to: casemgmt@kswenson.oib.com
To receive a PDF
Examples from the ACM Awards
Workflow Management Coalition

Four years running.  
Real-life use cases.  
Experience with ACM.

Four books

http://AdaptiveCaseManagement.org/
The Norwegian Food Safety Authority’s (NFSA) overall objective is to ensure safe food and animal welfare. NFSA's area of responsibility comprises plant health, food and fodder production and handling, water supply plants, cosmetics, animal health and welfare for production animals and pets. Since 2009, about 1000 of NFSA's knowledge workers (veterinarians, biologists, engineers, other professionals) use MATS actively as a decision support system for the main bulk of their professional work; to plan, conduct and register audits. The public (farmers, restaurants, food production plants, food shops, fish exporters, plants importers, butcheries, pet owners) use MATS to register, apply, and view their own case information, resulting in 150,000 communications per year. Each establishment or person, NFSA client, is viewed as a case, having a corresponding work folder in MATS. Each case is followed by NFSA over a possible time span of many years, subjected to both planned and event driven control activities (inspection, audit, sampling and document control). MATS provides focus on task support rather than workflow support.
Task Composition

**Complete task template**
General “recipe”, containing all steps relevant for this task type

- Execute <inspection>
  - Dispatch/postpone task
  - Review documentation
  - Acquire samples
  - Register observations
  - Register note/contact
  - <Numerous other steps>
  - Write inspection report
  - Approve certificate
  - Register fees
  - Terminate task

**Derived task template**
Specific recipe for the case, depending on control object, process state, task data...

- Review documentation
- Acquire samples
- Register observations
- Register note/contact
- Write inspection report
- Terminate task

**Actually executed work**
Sequence as performed by inspector, making decisions while working

- Initial new contact identified
- Information scan done
- First sampling executed
- Focused information lookup
- Second sampling executed
- Observations registered
- Not deemed necessary
- Done
Example of UI
Situation

- Case handling and court management for all 1st and 2nd instance courts
- High-quality uniform case handling in accordance with procedural law
- Improve service-level for parties / actors / public
- Improve efficiency and effectiveness of the Norwegian courts
- Improve integration with other judicial actors
Antifragility
We know what fragility is.

But what is the opposite?
Muscles are Adaptive

The Body is Antifragile
Forests are Adaptive
IT System Perfection
Craving Stress (Exercise)
Antifragile systems crave stress, and if you withhold stress, they wither or become dangerously unstable.
From an efficiency perspective, running without getting anywhere is a waste!
The character Lintilla had a “Crisis Inducer” which was a watch-like device that would create an artificial crisis of selectable severity in order to keep the wits of the wearer sharp.
Maybe our BPM systems should be occasionally throwing ‘curve balls’ at the users: unexpected, and incorrect tasks to keep the worker intellectually healthy?
Enforcing a single best practice on the organization, can make it ... fragile
A way forward

http://www.slideshare.net/kswenson/bpm2014
Starling Murmuration

(Video)
1. Avoid hitting each other,
2. Stay near the flock,
3. Match velocity of neighbors.
Deriving Rules is Difficult or Impossible

1. Avoid hitting each other,
2. Stay near the flock,
3. Match velocity of neighbors.

1. Bunch
2. Swoop
3. Swirl
Roles, and Etiquette

Purchasing Agent  Product Development
Business Etiquette Modeling

- For each role in an organization, determine:
  - each of the services that role might perform
  - what must be provided
  - what will be produced
  - what conditions will decide whether the task is accepted or not
  - what contexts all this is valid in

- Use simulation across many roles in the organization to see if the process is ‘optimal’
  - tweak the etiquette rules as necessary

- Record history and track KPIs like normal
  - Respond if necessary by tweaking the etiquette rules
Cross Company Emergent Processes

Manufacturing Company

Consulting Firm
Summary

- Knowledge workers are important, and increasing
- Current process models are very limited with respect to knowledge work
- Which assumptions are valid?
- Spectrum of different types of process support
- Examples from the ACM awards
- Organizations need exercise, not protection
- Should we treat business as an emergent epiphenomenon?
- Business Etiquette Modeling
“The future is uncertain – but this uncertainty is at the very heart of human creativity”

- Ilya Prigogine
“Nature loves small error, humans don’t — hence when you rely on human judgment you are at the mercy of a mental bias that disfavors antifragility.”

- Nassim Nicholas Taleb, Antifragile

“Stability is a Time Bomb”

- Nassim Nicholas Taleb, Antifragile
In an unpredictable world, the best investments are those that minimize the importance of predictions.

- Sargut & McGrath
“The only sustainable competitive advantage is an organization’s ability to learn faster than the competition.”

- Peter M. Senge,
The Fifth Discipline: The Art & Practice of The Learning Organization
”A military force has no constant formation, water has no constant shape:

the ability to gain victory by changing and adapting according to the opponent is called genius”

- Sun Tzu, *The Art of War*
Adaptive Case Management is for Knowledge Workers with Unpredictable Process to Adapt & Innovate with Teams of Experts to Accomplish Goals.

http://www.slideshare.net/kswenson/bpm2014
Workflow Management Coalition

20 Years Of Process Thought Leadership

- Standards
- Books
- Awards
- Information

XPDL

BPSim

Social BPM

iBPMS

Mastering the Unpredictable

BPM 2010

Spotlight on Business Intelligence

2009 BPM & Workflow Handbook

Spotlight on Government
FUJITSU

shaping tomorrow with you