

# BPM 2014

## Questions for a Learning Organization

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Sept 2014

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[http:// www.slideshare.net / kswenson / bpm2014](http://www.slideshare.net/kswenson/bpm2014)

**The working world is  
changing.**



**From making  
things ...**

**... to knowing things.**



An illustration of four people sitting around a table in a meeting. Above them are four thought bubbles containing a glowing lightbulb, a glowing lightbulb with a filament, a glowing lightbulb with a filament, and a lit match. The background is a light green gradient.

# **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**



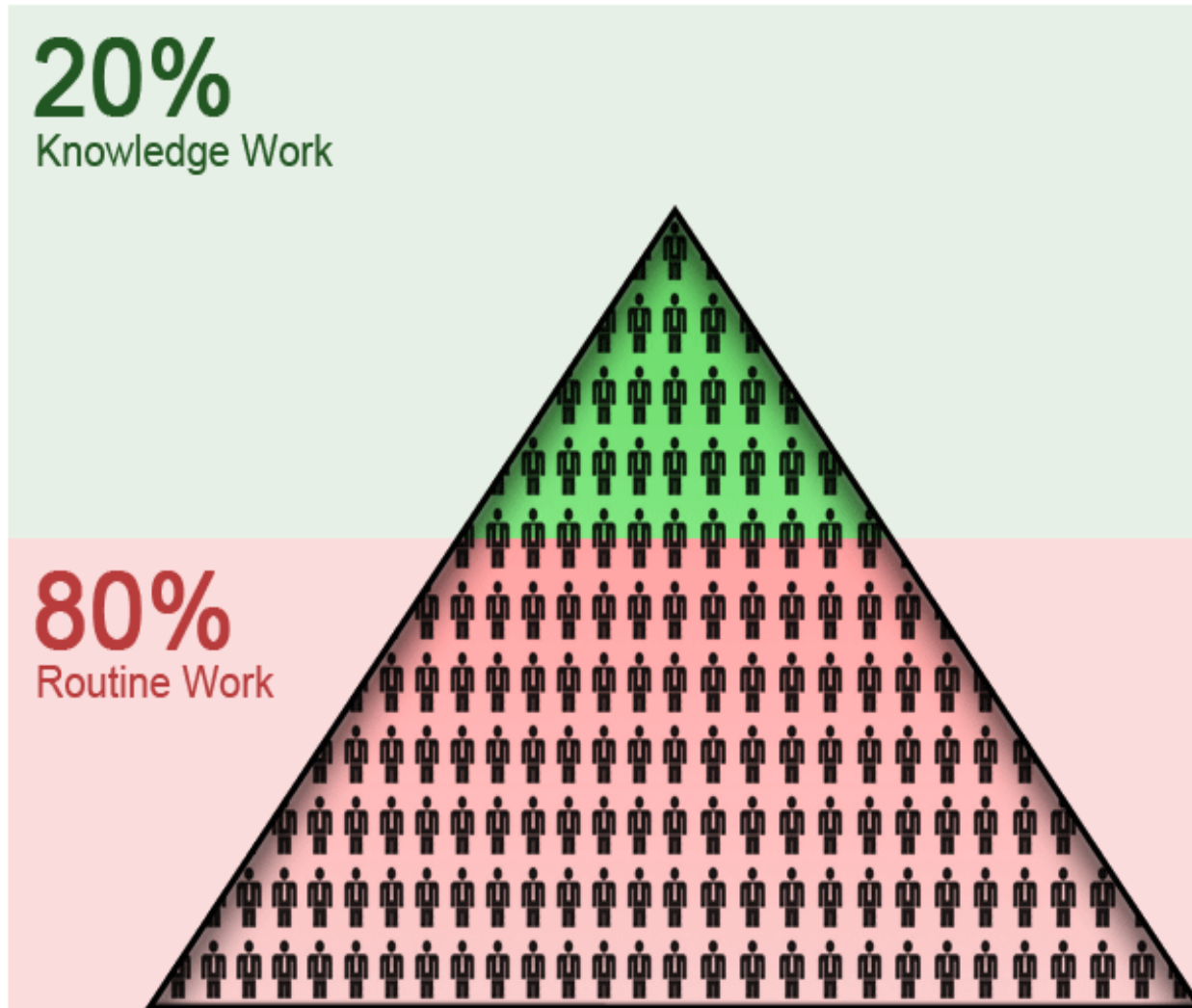
**By a number of estimates,**

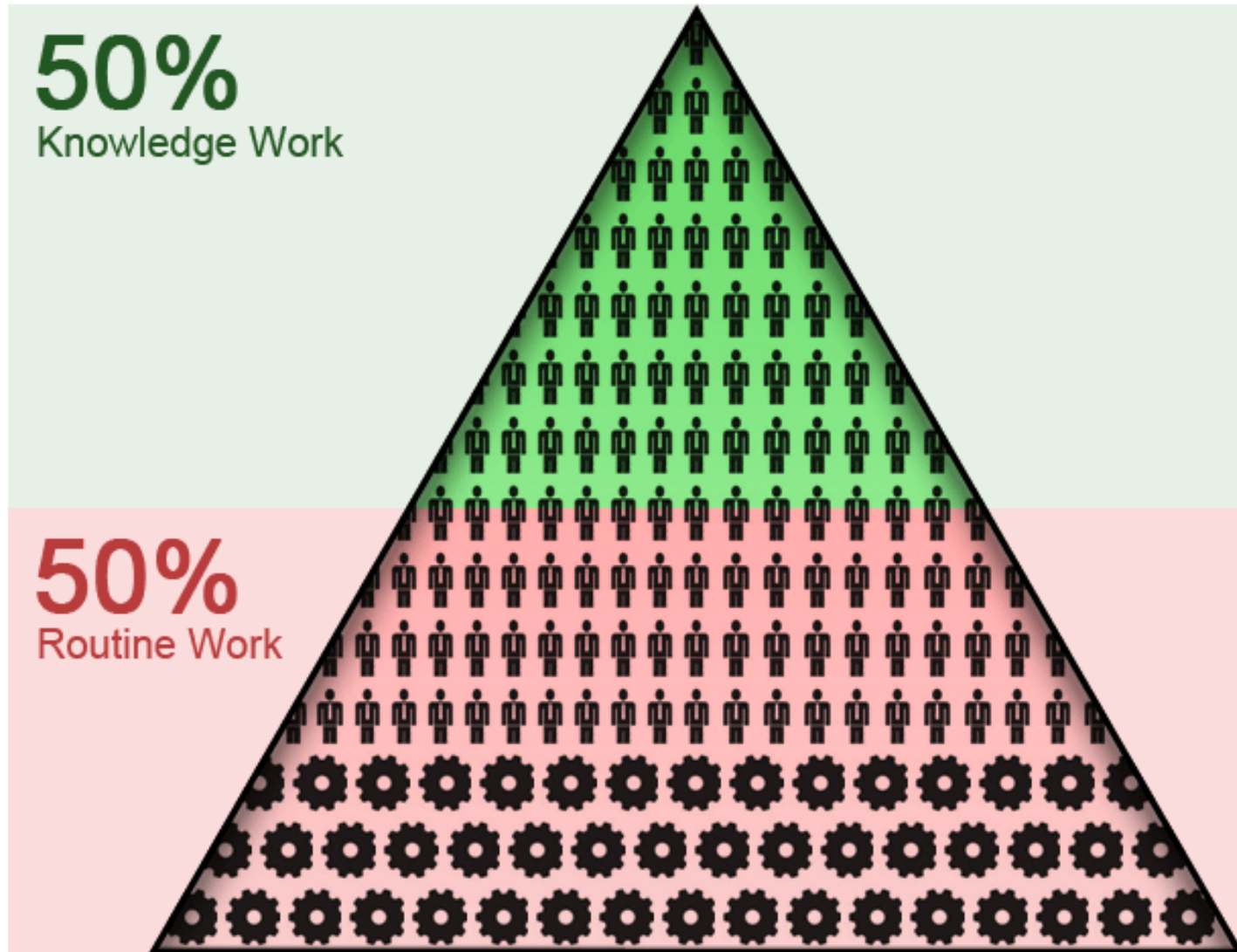
- **intellectual property,**
- **brand value,**
- **process know-how, and**
- **other manifestations of brain power**

**generated more than 70% of all US market value created over the past three decades.**

- "The Productivity Imperative", McKinsey and Company

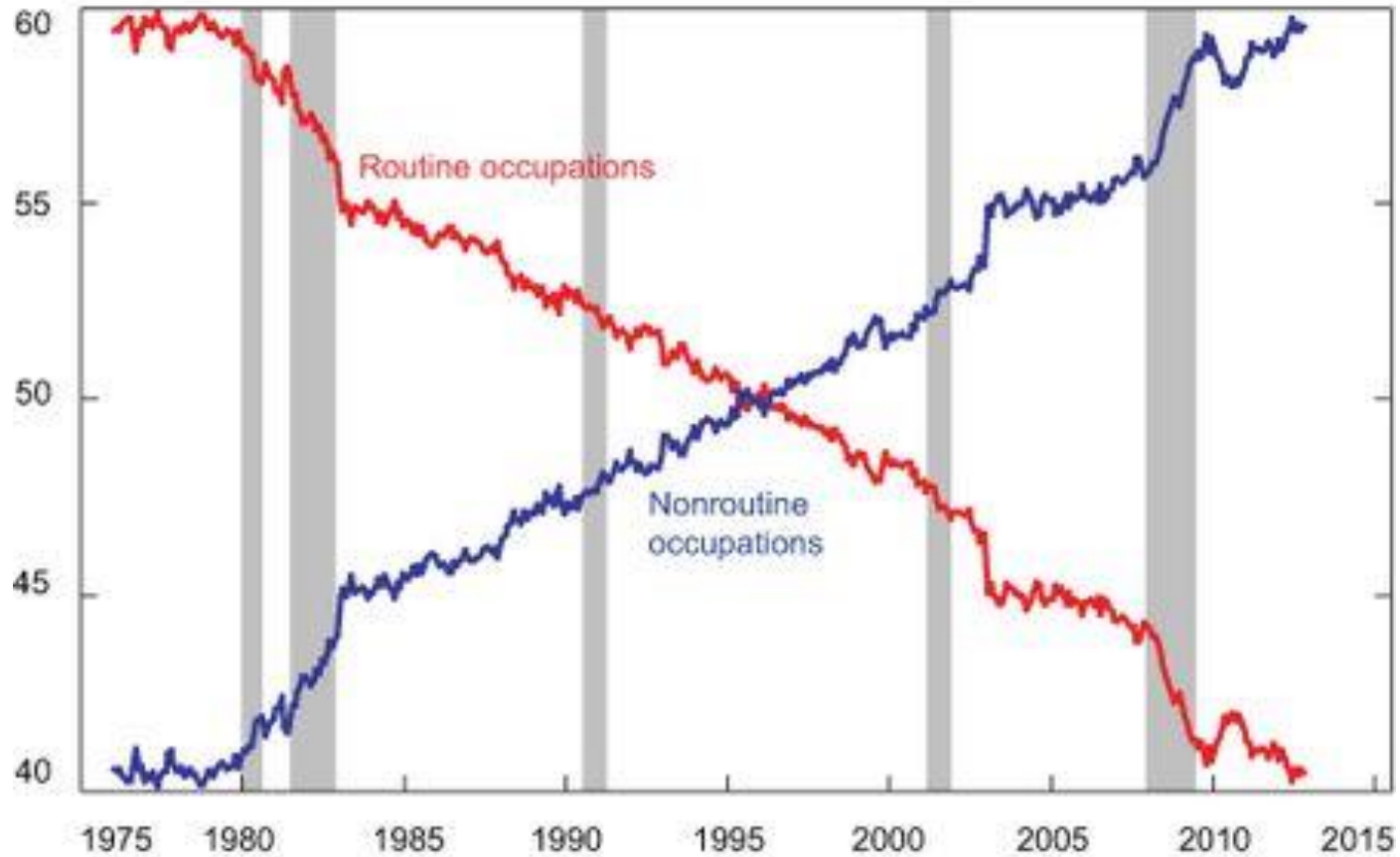
~ 1995





## Employment Share

Percent



Source: U.S. Census Bureau, Current Population Survey.

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.**

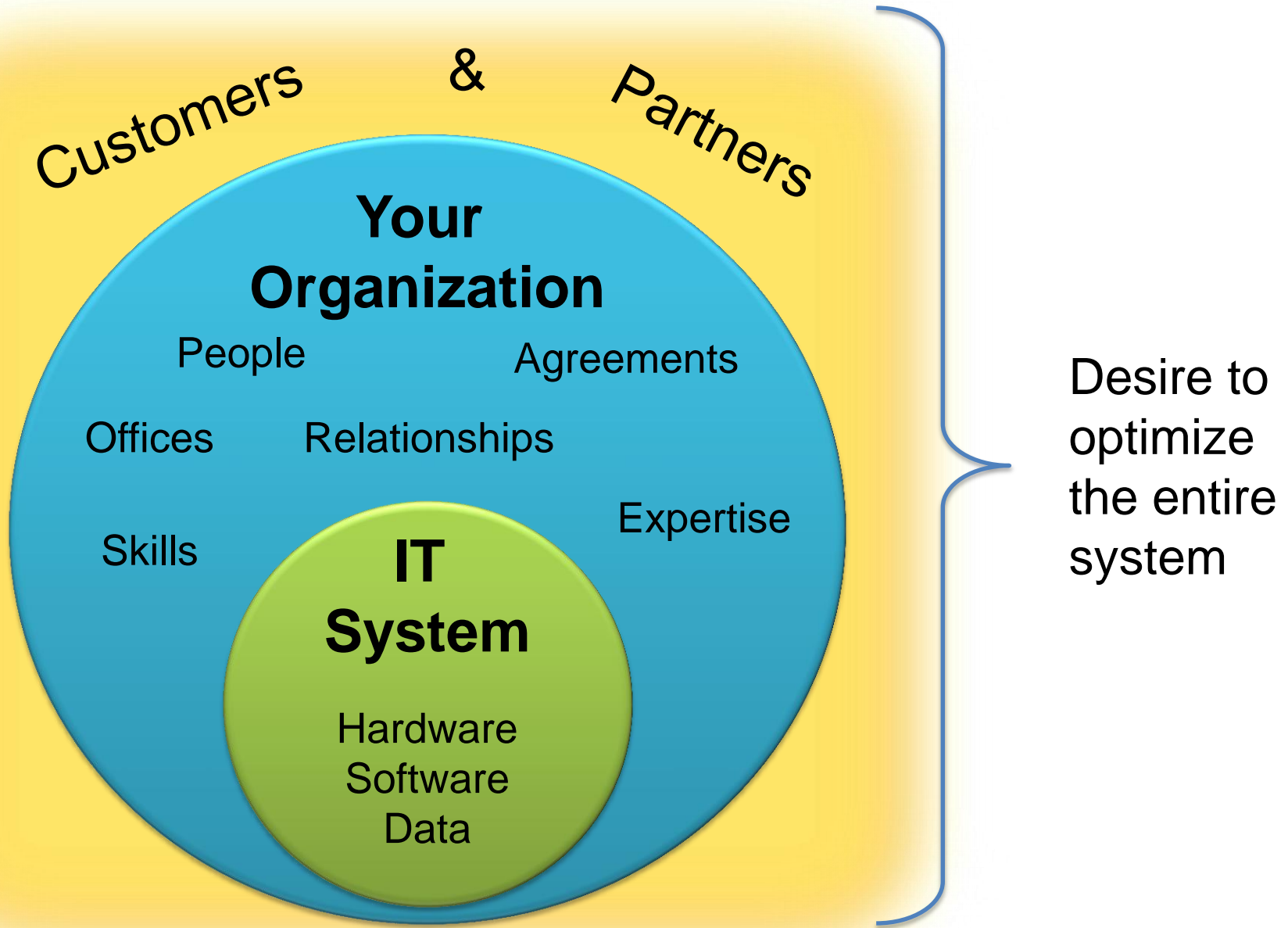
- **"The Productivity Imperative", McKinsey and Company**



# First ... some definitions

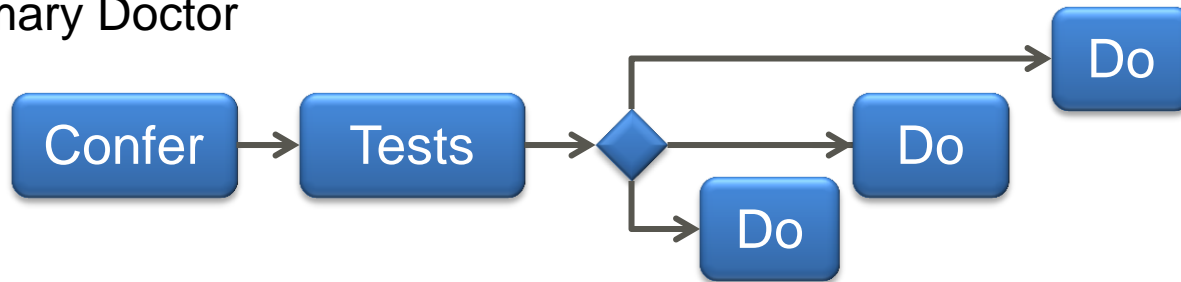
Business Process Management (BPM) is a **discipline** involving any combination of **modeling**, **automation**, **execution**, **control**, **measurement** and **optimization** of **business activity flows**, in support of **enterprise goals**, **spanning** systems, employees, customers and partners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

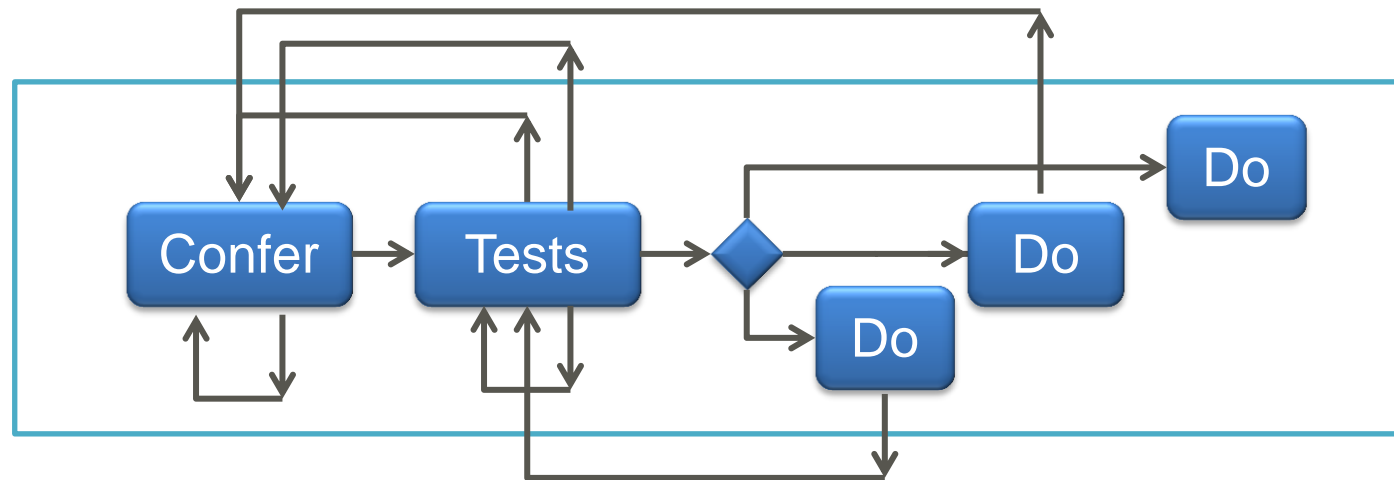
# “The System”



# Let's talk about ... lying

Primary Doctor





**The diagram is pure fiction!**

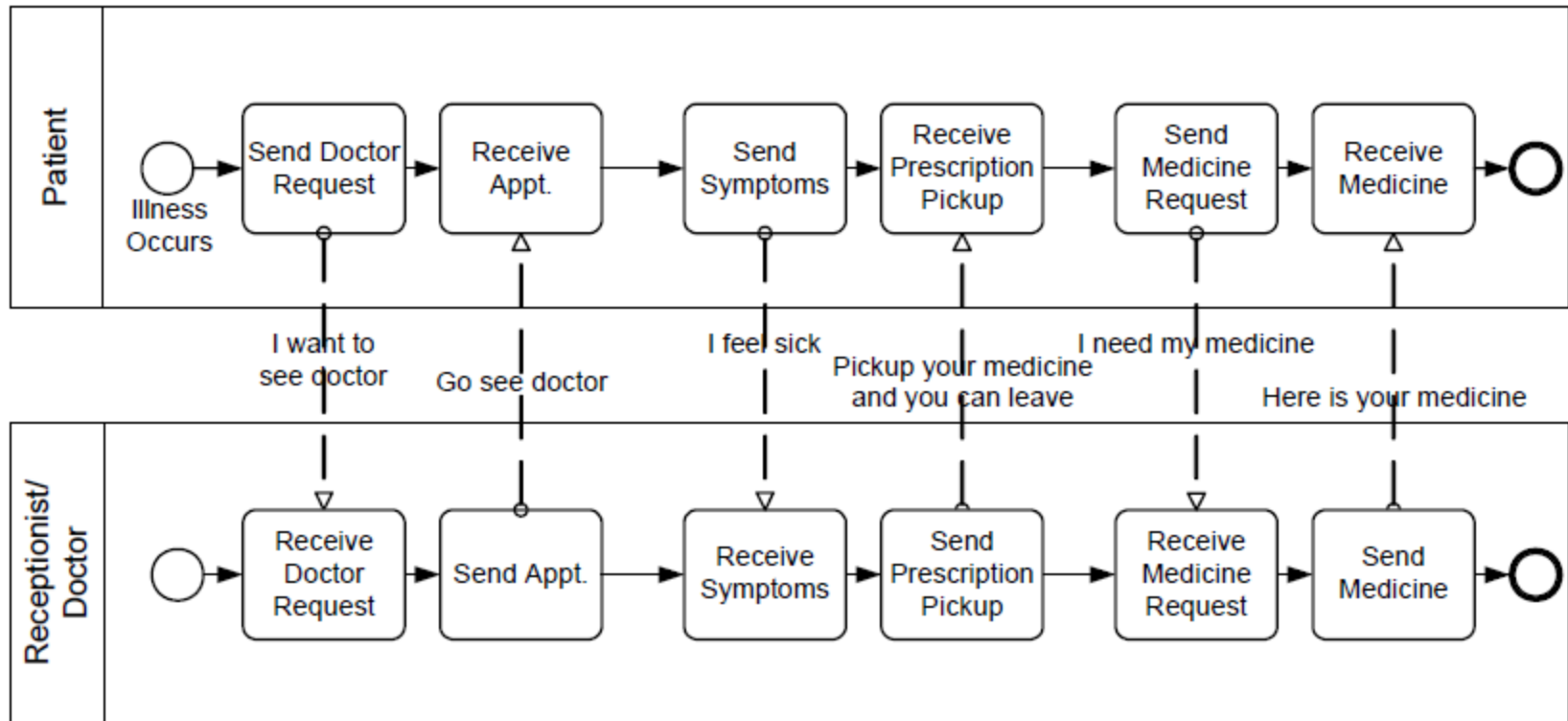


Figure 7.3 - An example of a Collaborative Process




# **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

<http://www.easychair.org> [Click here to log in](#)



**WELCOME**  
to the EasyChair Web site  
▶ [sitemap](#)



[overview <](#) | [installation](#) | [news](#) | [users](#) | [licenses](#) | [testimonials](#) | [FAQ](#) | [Ack](#)  
[Thanks](#)  
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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,

EasyChair LaTeX document class bar

# 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](#)

Untick this box to hide shortcuts to papers

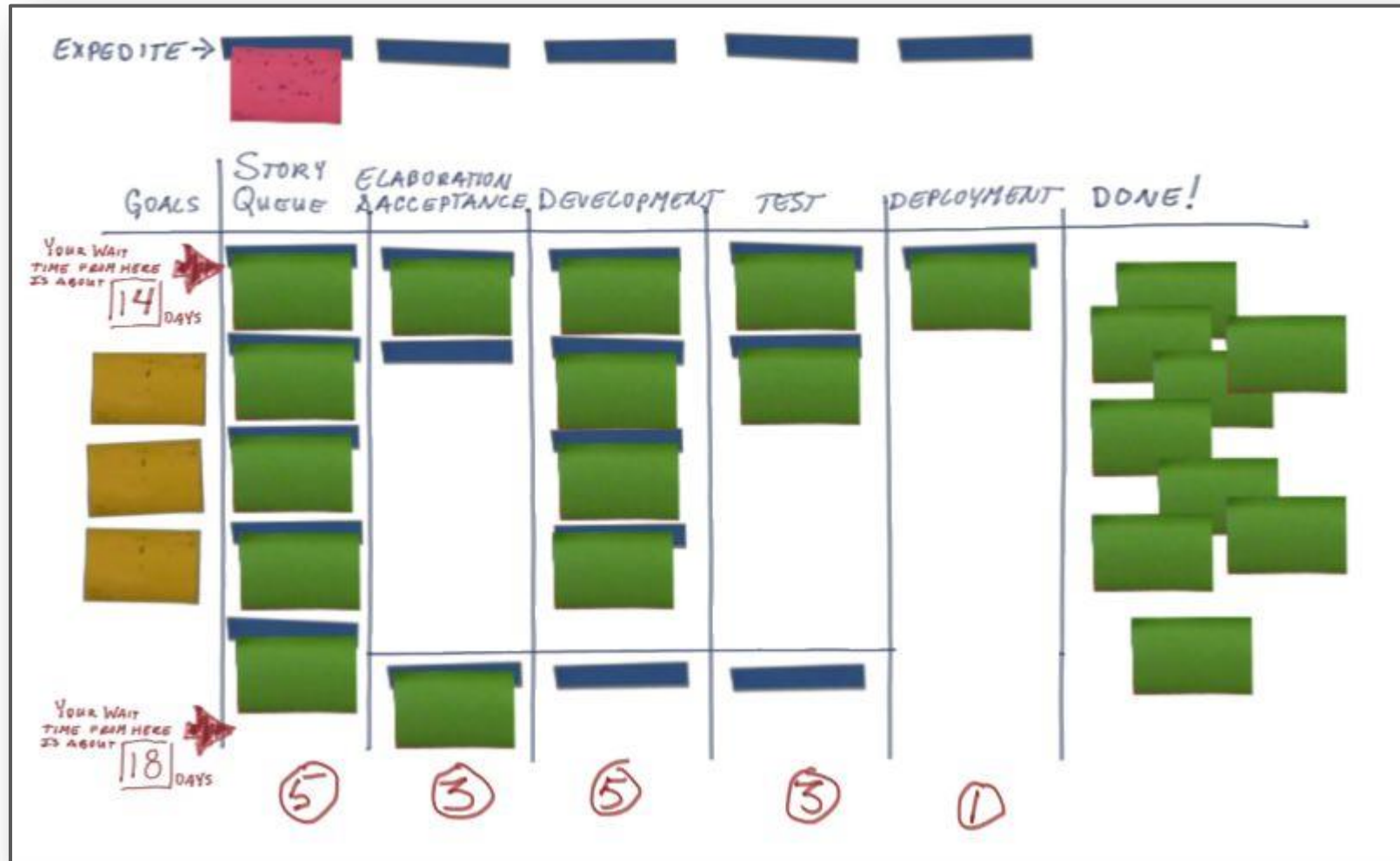
Show paper authors.

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

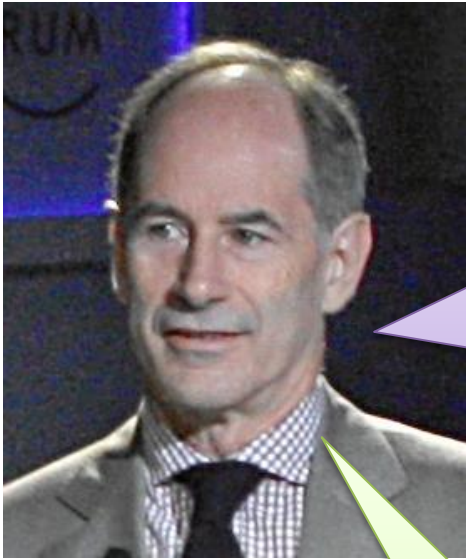
#	title	scores	average	decision
12	<a href="#">adaptive case management as a process of construction of and movement in a state space</a>	0(4),2(3),2(4),2(4)	1.5	ACCEPT
13	<a href="#">Dynamic Umbell Modeling for Agile Case Management</a>	-3(5),2(3),3(4)	0.7	ACCEPT
2	<a href="#">Dynamic Flexible Business Models for Transforming Adaptive Case Management</a>	0(3),2(3),-1(4)	0.3	POSITION
8	<a href="#">Process modeling adaptivity in case</a>	-1(4),2(3),0(4)	0.3	ACCEPT
3	<a href="#">Behavioral maintenance factors of ACSI systems</a>	-1(5),-1(4),2(3)	0.0	POSITION
1	<a href="#">CMR's empirical effects on organizational models of learning: lessons of intra-functional feedback on groups</a>	1(4),1(3),-3(3)	-0.3	ACCEPT
4	<a href="#">Process analysis and collective behaviour in organizations: a practitioner experience</a>	0(4),0(5),-1(3)	-0.3	ACCEPT
5	<a href="#">Separation of constraint-based processes: a declarative perspective</a>	-1(3),1(4),-1(4)	-0.3	ACCEPT
6	<a href="#">A Groupware-Based Project Management System for Non-Structured Processes</a>	-1(4),-1(4),0(4)	-0.7	REJECT
9	<a href="#">Developing adaptive case management solutions from dynamically annotated task definitions</a>	0(3),-2(3),0(3)	-0.7	REJECT
11	<a href="#">Knowledge Brokers and the Museum Concept: Another Use Case for MML</a>	-1(4),-2(3),1(5)	-0.7	REJECT
7	<a href="#">Collaborative Information Systems for Adaptive Business Processes</a>	1(2),-2(4),-2(3)	1.0	REJECT

Explanations for the decisions		
decision	explanation	papers
ACCEPT	accept	6
POSITION	accept as a position paper	2
accept?	probably accept	0
position?	probably accept as a position paper	0
	no decision	0
reject?	probably reject	0
REJECT	reject	6

# Kanban



# What do Management Gurus say?



Dean of the  
Rotman  
School of  
Management,  
University of  
Toronto

~~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.



Author of  
“First, Break  
all the Rules:  
What the  
World's  
Greatest  
Managers Do  
Differently”

~~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.



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.

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

# Innovation

refers to the  
introduction of  
novel ideas or  
methods.



*"I'll be happy to give you innovative thinking. What are the guidelines?"*

tions, state  
offend  
in·no·va  
-vat  
in·no·v  
tion  
during  
vention: recent inno



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.**

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

**- Peter F Drucker**



	Design Time (Analyst)	Run Time (User)
Routine Work	Expert x1 	Less Expert x100 or x1000 
Knowledge Work		Expert x1 

What does it mean to “assure the correctness” of the knowledge work process?

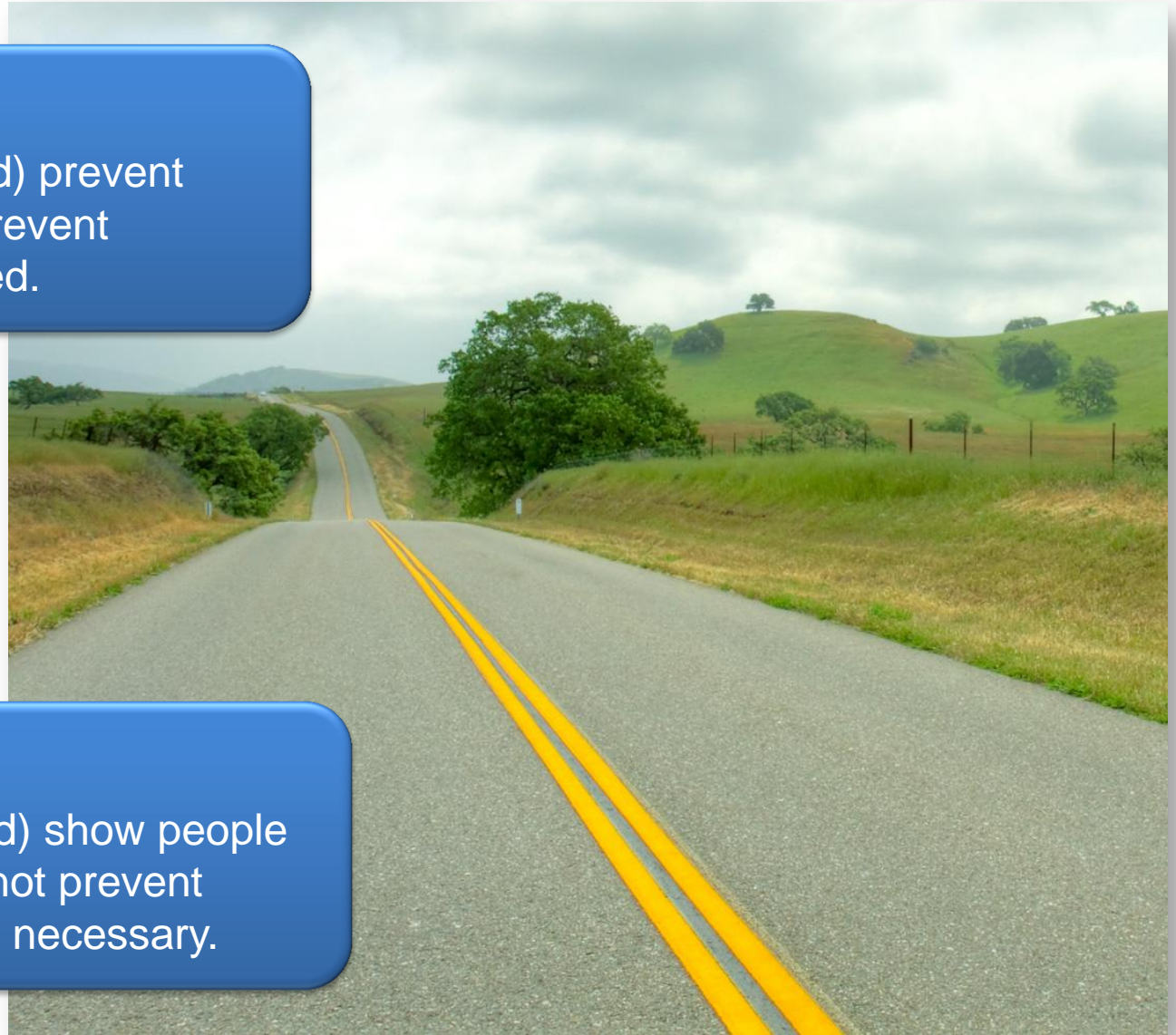
# Enforcement vs. Guidance

## 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.



**BREAK GLASS IN EMERGENCY**

Emergency Prompt

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

Yes, Go Ahead



# Technology for Unpredictability

40:00

[http:// www.slideshare.net / kswenson / bpm2014](http://www.slideshare.net/kswenson/bpm2014)

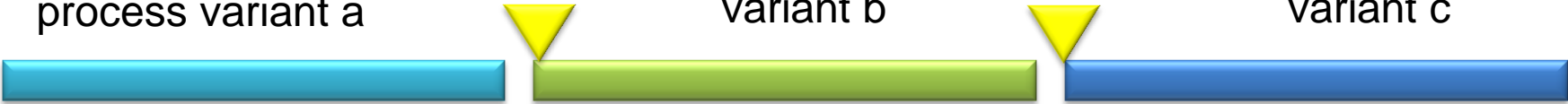
# Change Horizon vs. Process Duration

time →→→

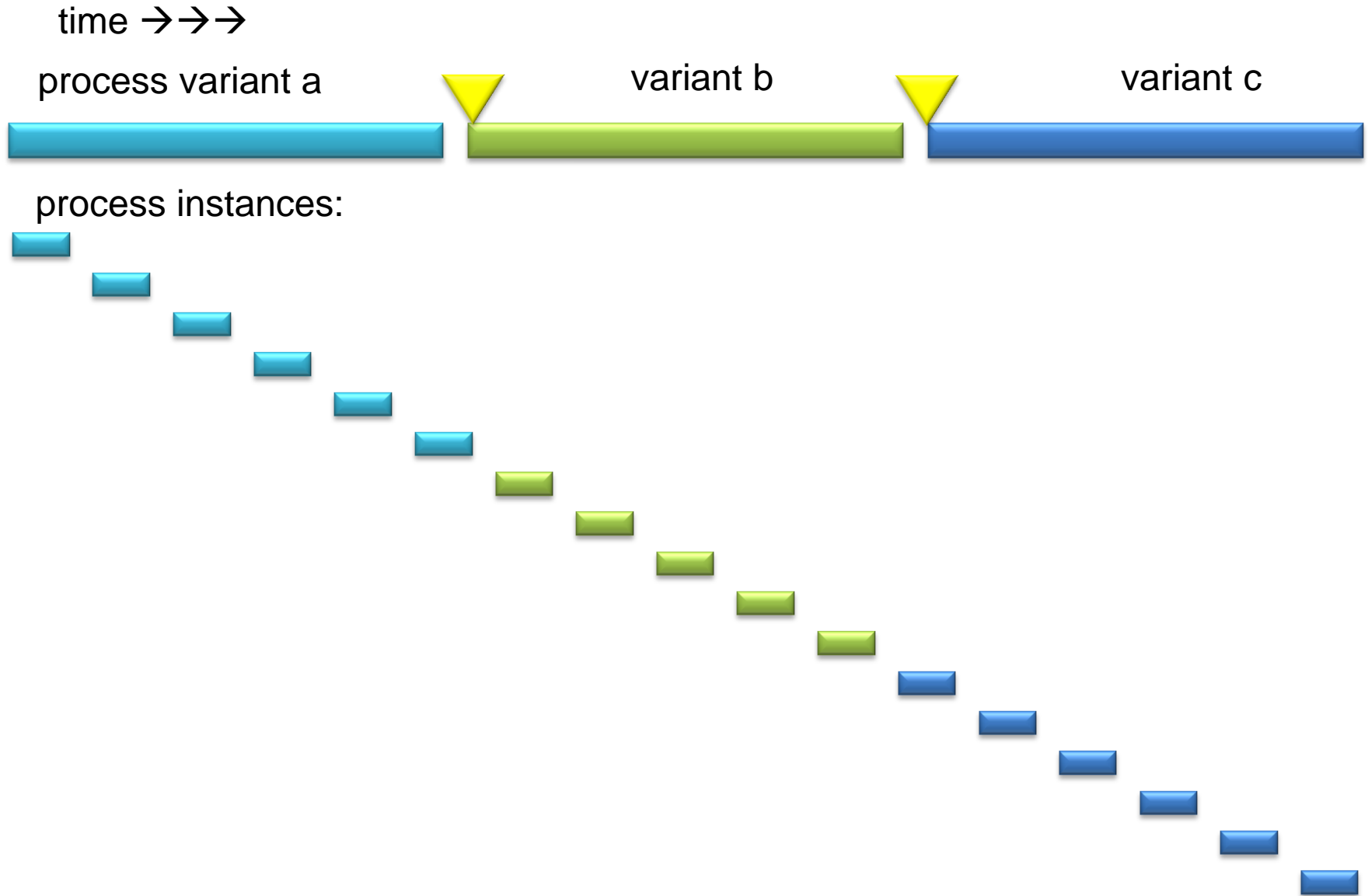
process variant a

variant b

variant c



# Change Horizon vs. Process Duration



# Change Horizon vs. Process Duration

time →→→

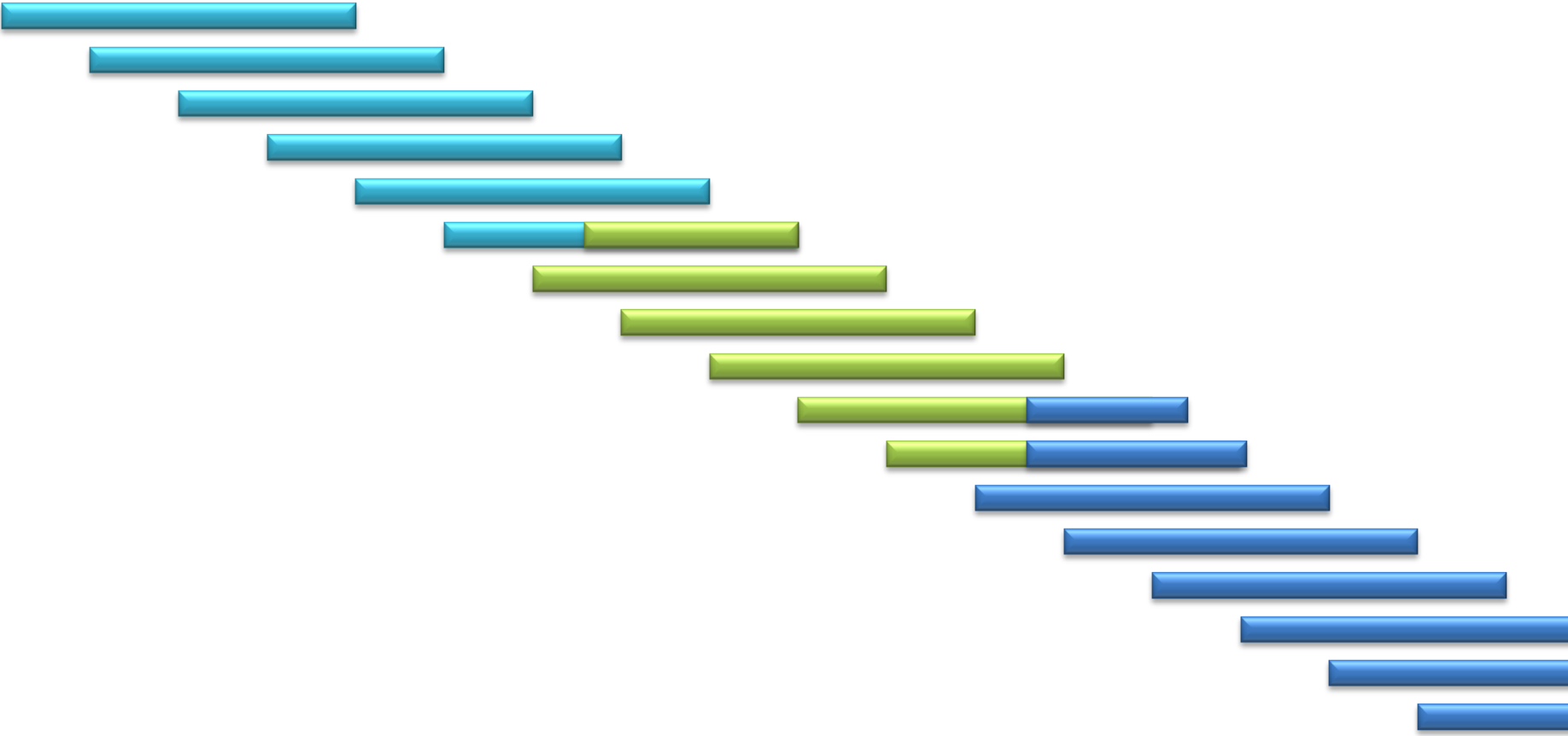
process variant a

variant b

variant c



process instances:



# Change Horizon vs. Process Duration

time →→→

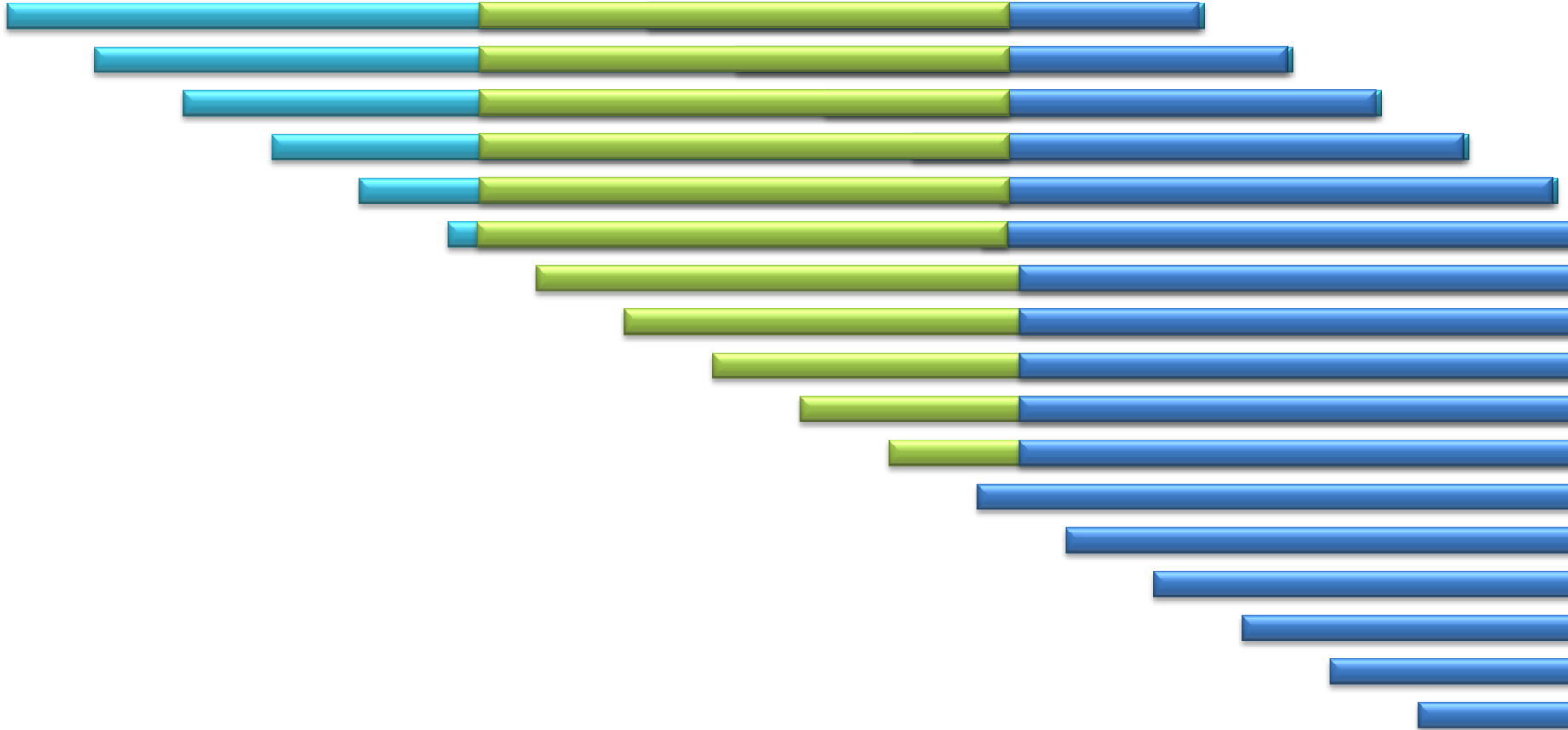
process variant a

variant b

variant c



process instances:





# Examples of Predictability Types

Predictability	Description	Change Horizon	Work Duration
Very High	Factory Work	Many years	Minutes to days
Very high	Food Preparation	Many years	minutes
High	Server Integration	Years	Minutes
Medium	Order fulfillment	Weeks to months	Minutes to hours
Low	Social Work	Weeks to years	Weeks to years
Very low	Medical treatment	Days to weeks	Weeks to years
Very low	Detective	Hours to weeks	Weeks to years

Predictable, Repeatable

Variable, Unique

**Application Dev**

**Process  
Technology**

**Email, Texting,  
Twitter, Telephone**

**Databases &  
Structured  
Data**

**Documents  
& Unstructured  
Data**

**Notes**

Predictable, Repeatable

Variable, Unique

**Application Dev**

**PDS Integration**

**Human PM**

**Production CM**

**Adaptive CM**

**Social Biz**

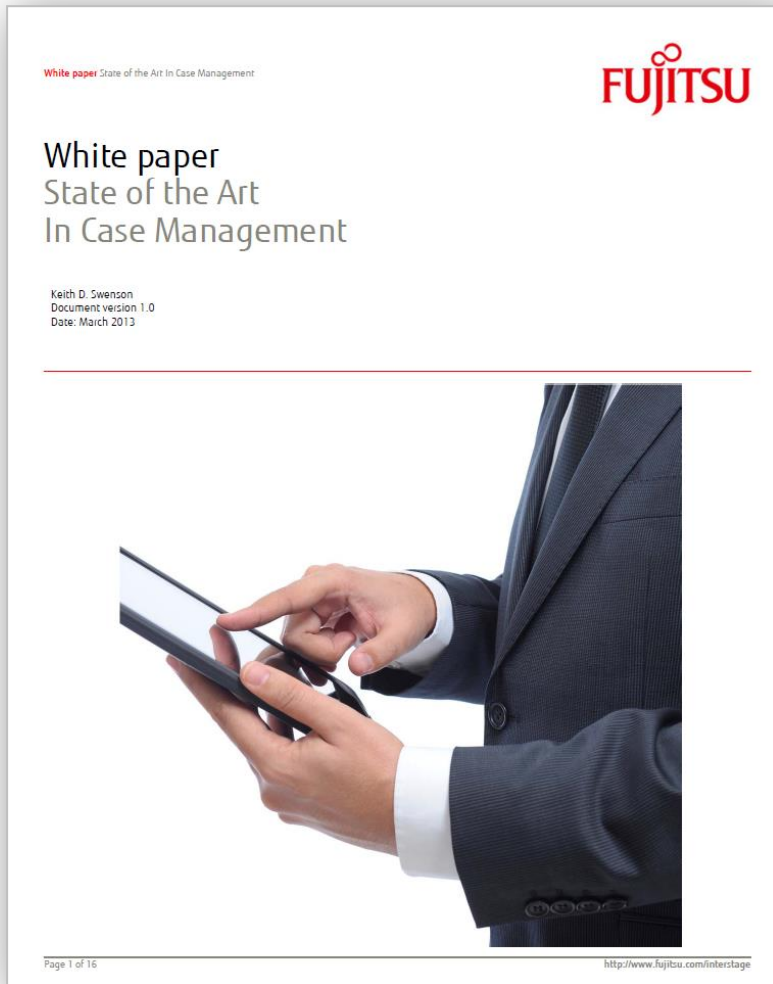
**Email, Texting,  
Twitter, Telephone**

**Databases &  
Structured  
Data**

**Documents  
& Unstructured  
Data**

**Notes**

# State of the Art in Case Management



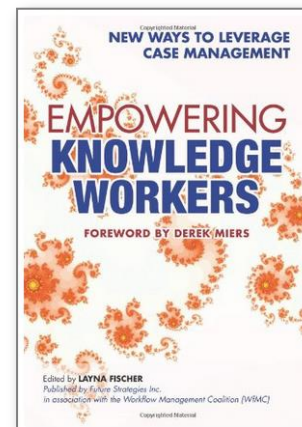
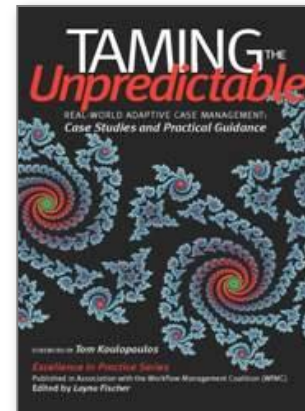
**Developed originally for AIIM  
case management series.**

**Send request to:  
[casemgmt@kswenson.oib.com](mailto:casemgmt@kswenson.oib.com)  
To receive a PDF**

# Examples from the ACM Awards

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

*Four books*



2014:  
Thriving on  
Adaptability:  
Best  
practices  
for knowledge  
workers

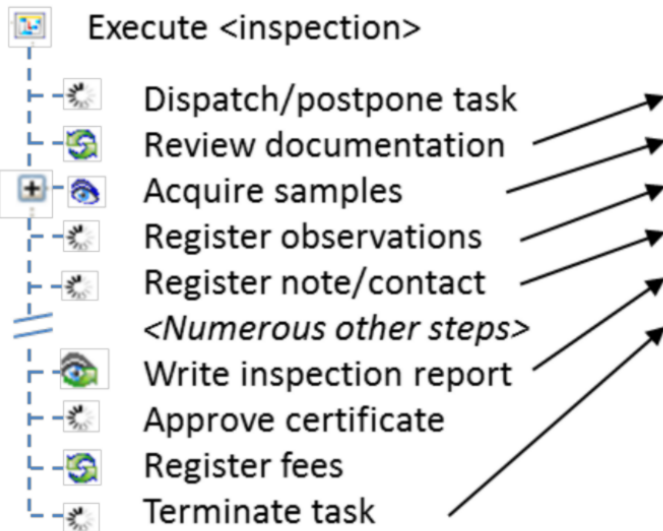
## ■ Norwegian Food Safety Authority submitted by Computas AS

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

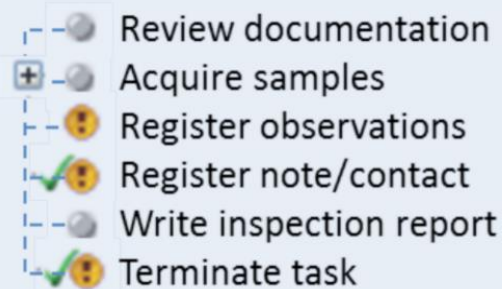
## Complete task template

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



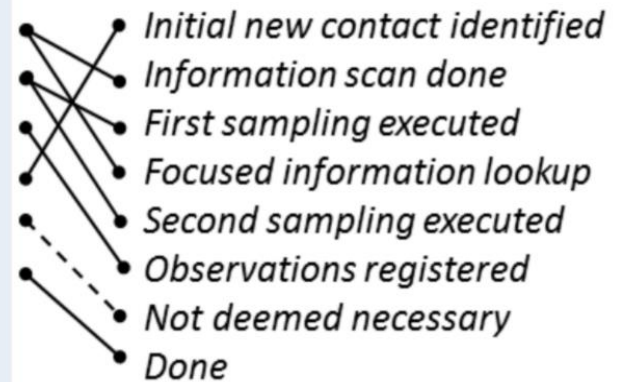
## Derived task template

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



## Actually executed work

Sequence as performed by inspector, making decisions while working





# Example of UI

**Create new task**

Oppgavefilter

Oppgave

- MATS prosessbibliotek
  - Dispensasjon
  - Dokumentbehandling
  - Eksport
  - Godkjenning
  - Hendelsesmelding
  - Import
  - Inspeksjon
    - Forbered inspeksjon**
    - Gjennomfør inspeksjon
    - Gjennomfør saksbehandling
  - Kjøttkontroll
  - Klagebehandling
  - Nytt sykdomstilfelle/skadegjører
  - Planteeksport
  - Prøver
  - Restriksjon
  - Revisjon
  - Vedtak
  - Virksomhet

Ansvarlig: Helle Frisak Sem (Ansatt)

Frist: 28.08.2012    Prioritet: Normal

Notat

Vis aktiviteter for valgt oppgave

**Task template preview**

- Velg virksomhet
- Registrer tilsynsromfang, sak og besøk
- Registrer tilsynsgrunnlag
- Registrer aktører
- Skriv melding om inspeksjon
- Sett sluttstatus for melding
- Registrer notat/kontakt

Ok

## ■ National Courts Administration of Norway *nominated by Computas AS*



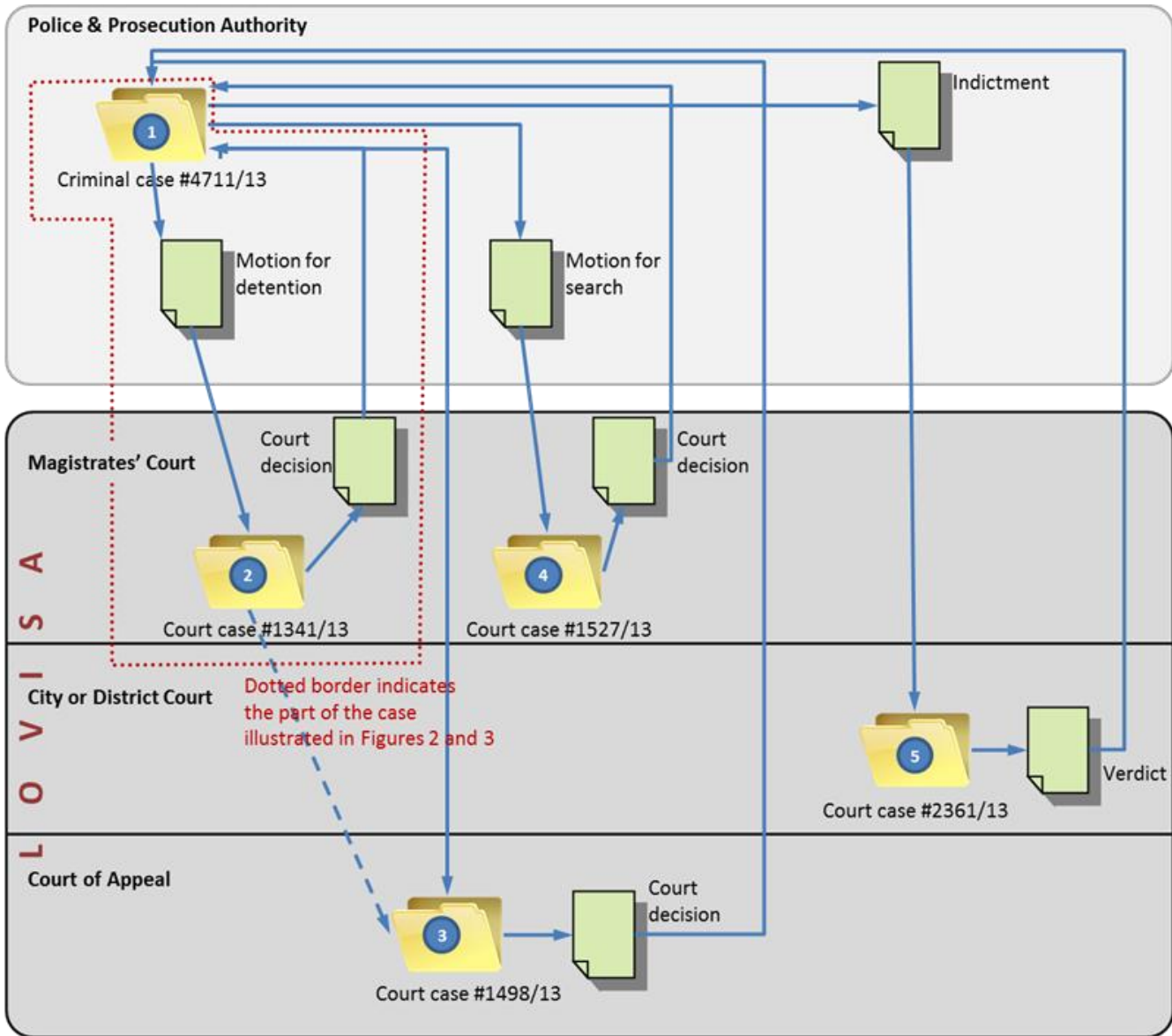
Olav Berg Aasen – Deputy Director General  
Astrid Irene Eggen – Senior Advisor  
Endre Helgesen Skjetne – Senior Advisor

The logo for 'lovisa' is displayed in a white box on a blue background. The word 'lovisa' is written in a lowercase, sans-serif font. The 'o' is stylized with a red and white circular graphic element.

### **Situation**

- Case handling and court management for all 1<sup>st</sup> and 2<sup>nd</sup> 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

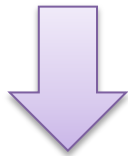
# LOVISA Case Study



L  
O  
V  
I  
S  
A

# Antifragility

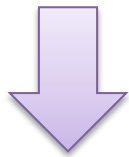
Fragile



**We know what  
fragility is.**

**But what is  
the opposite?**

Fragile



Robust



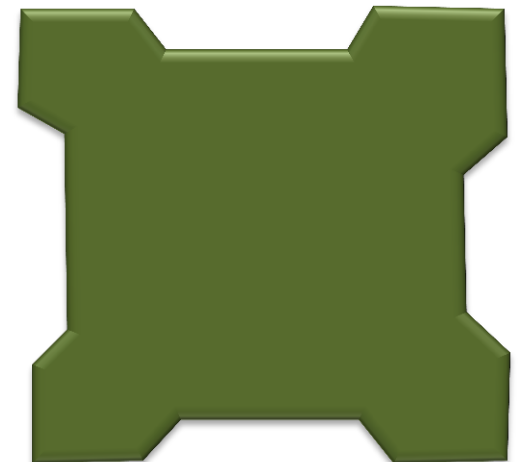
Fragile



Robust



Antifragile





**Muscles  
are  
Adaptive**

**The Body is  
Antifragile**

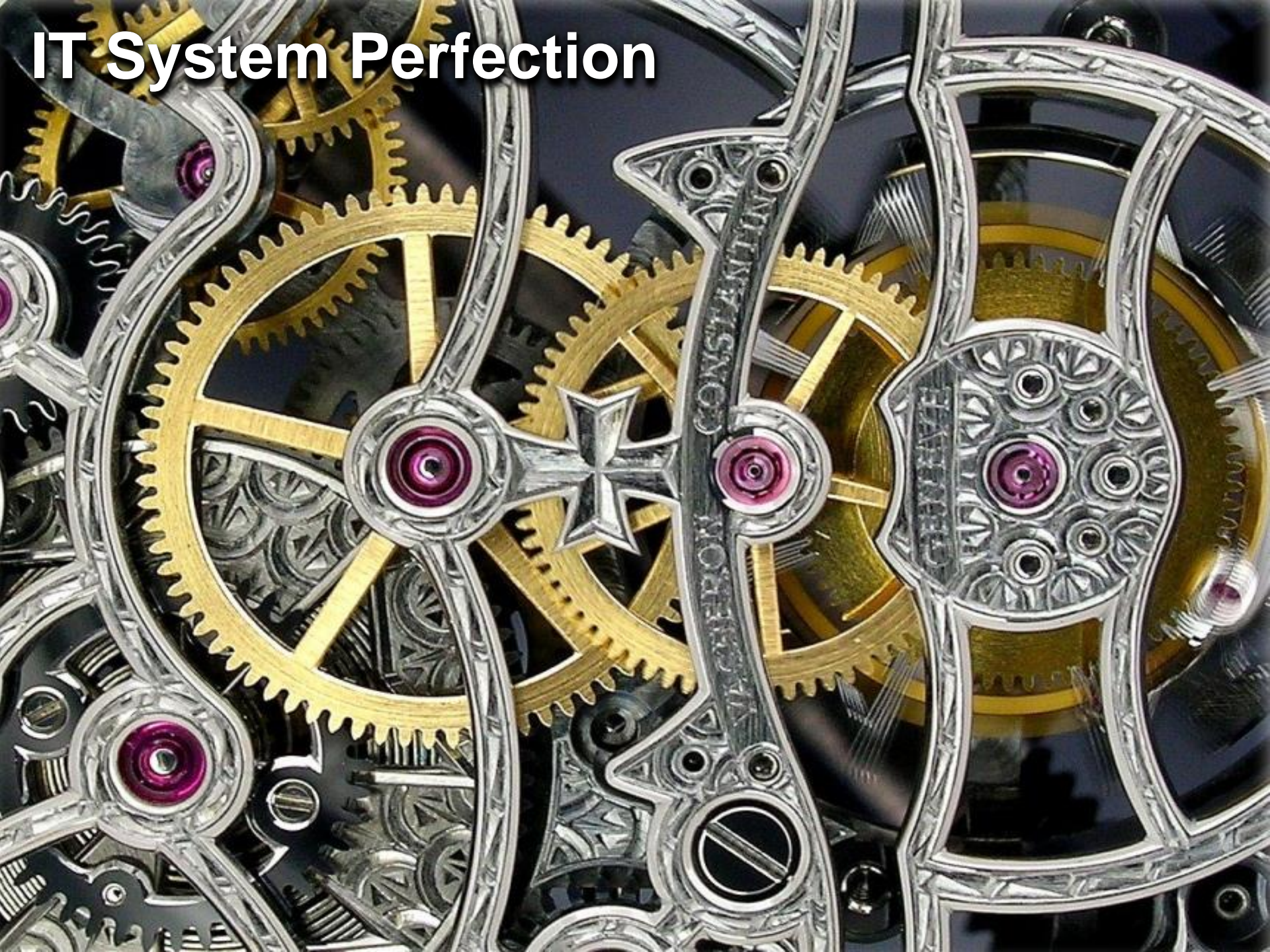


# Forests are Adaptive





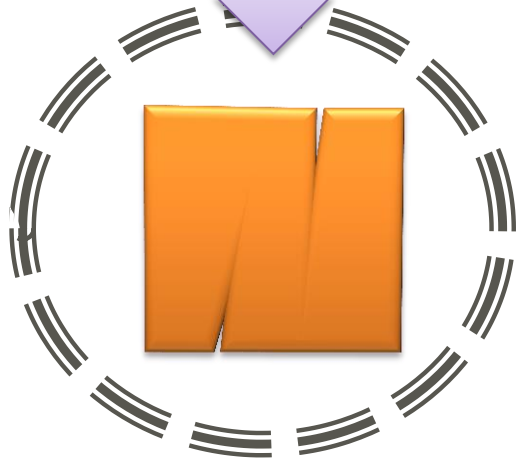
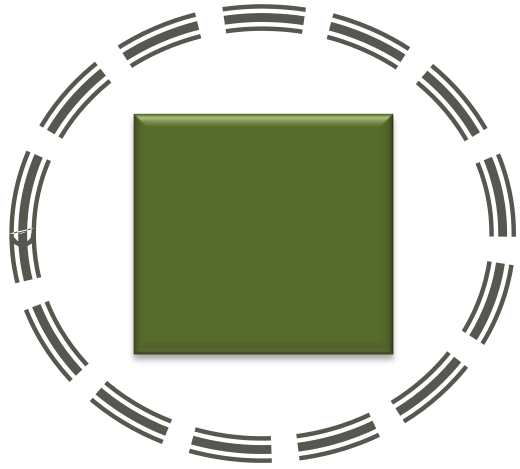
# IT System Perfection



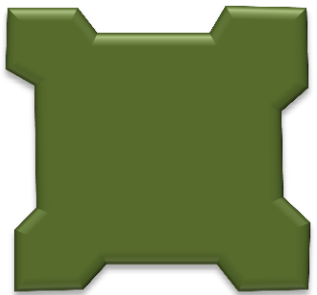
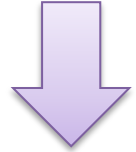


# Craving Stress (Exercise)

Protected



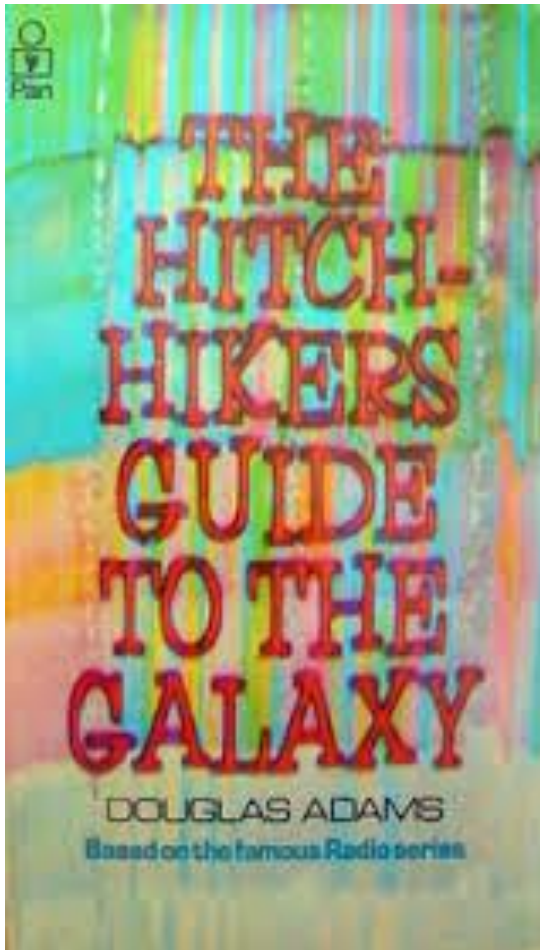
Exposed



**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?**

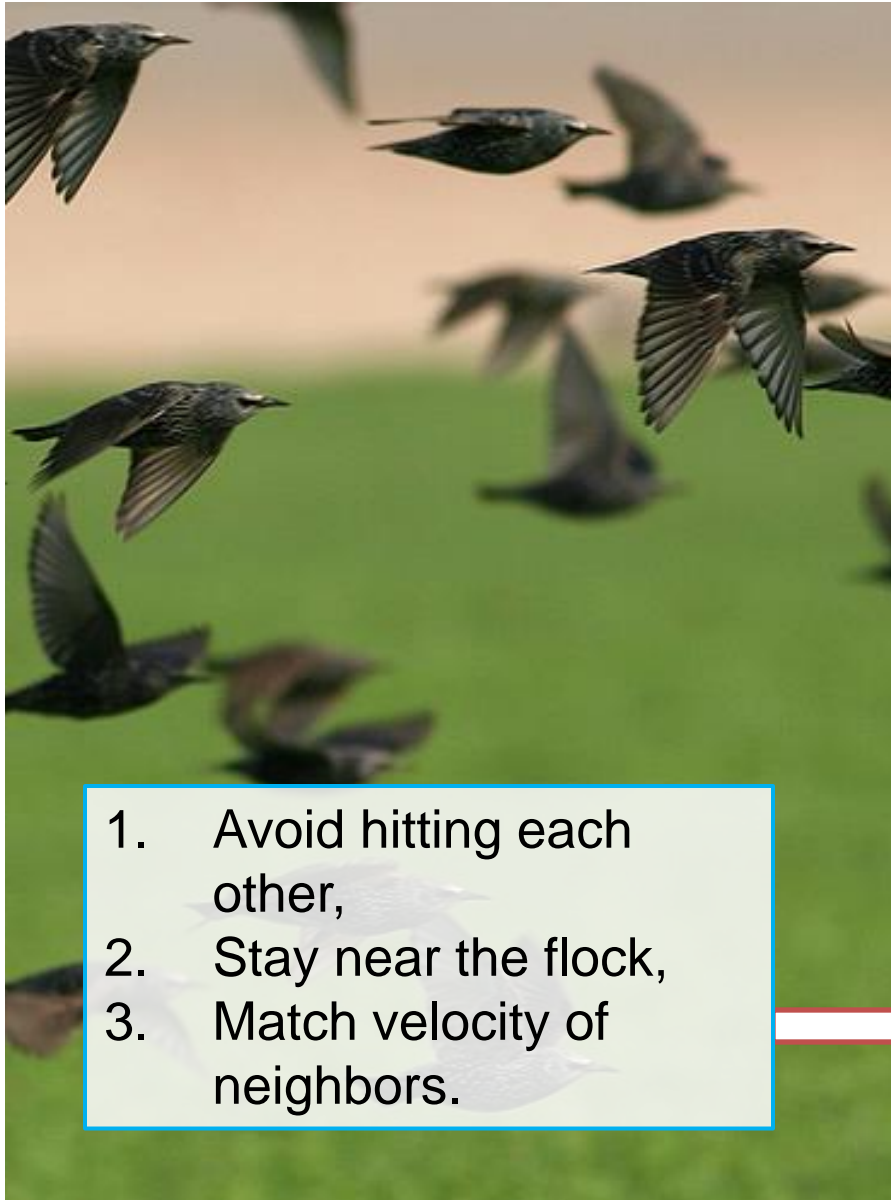
**Enforcing a single best  
practice on the organization,  
can make it ... fragile**



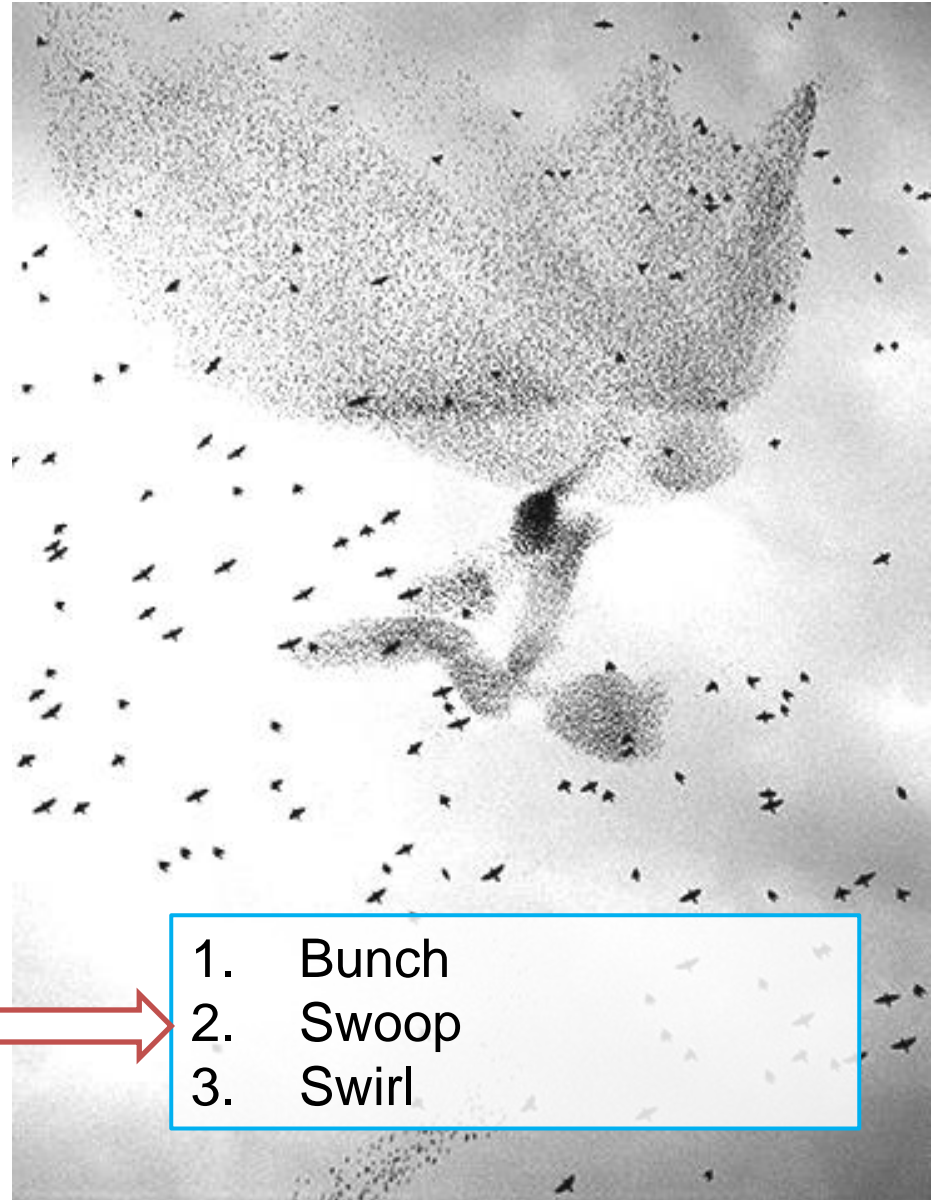
# A way forward

[Video]

# Simple Rules to Emergent Behavior

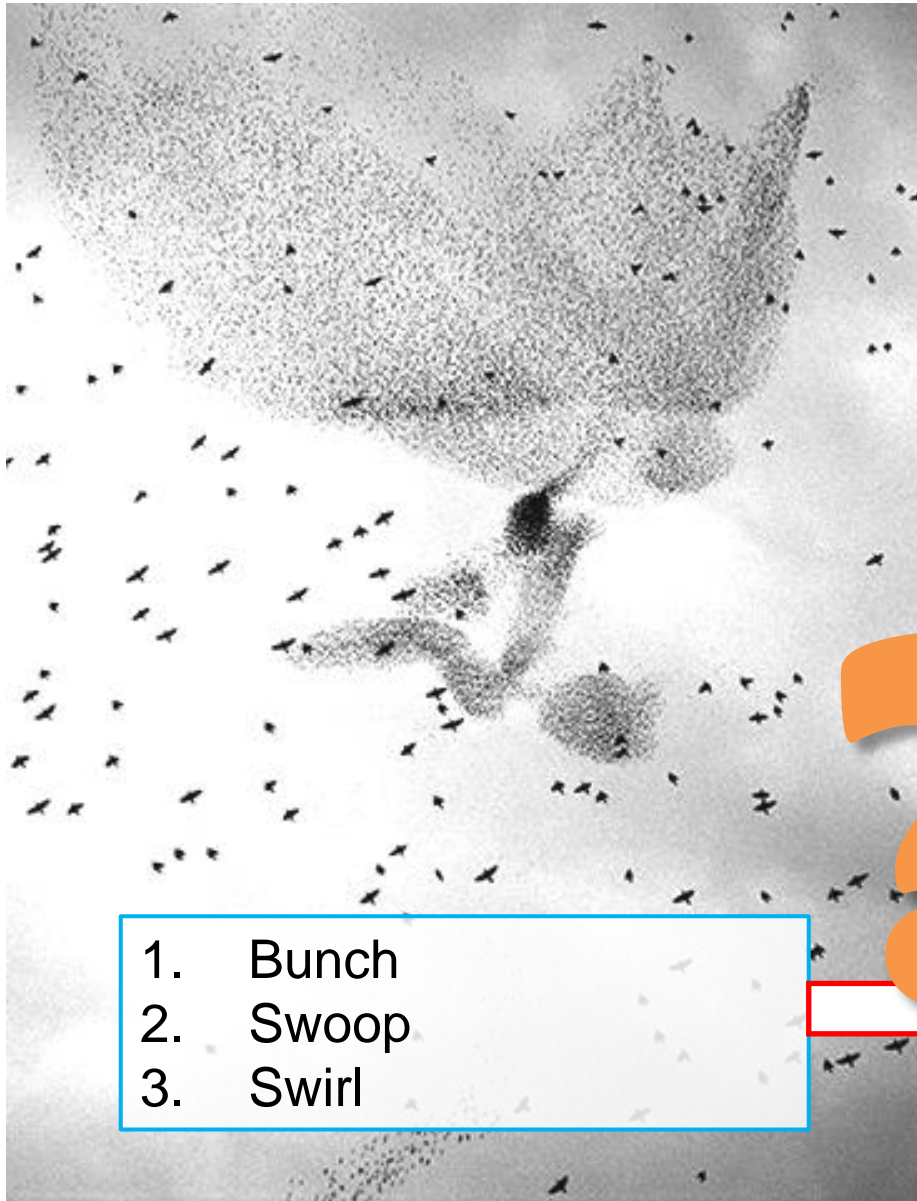


1. Avoid hitting each other,
2. Stay near the flock,
3. Match velocity of neighbors.



1. Bunch
2. Swoop
3. Swirl

# Deriving Rules is Difficult or Impossible

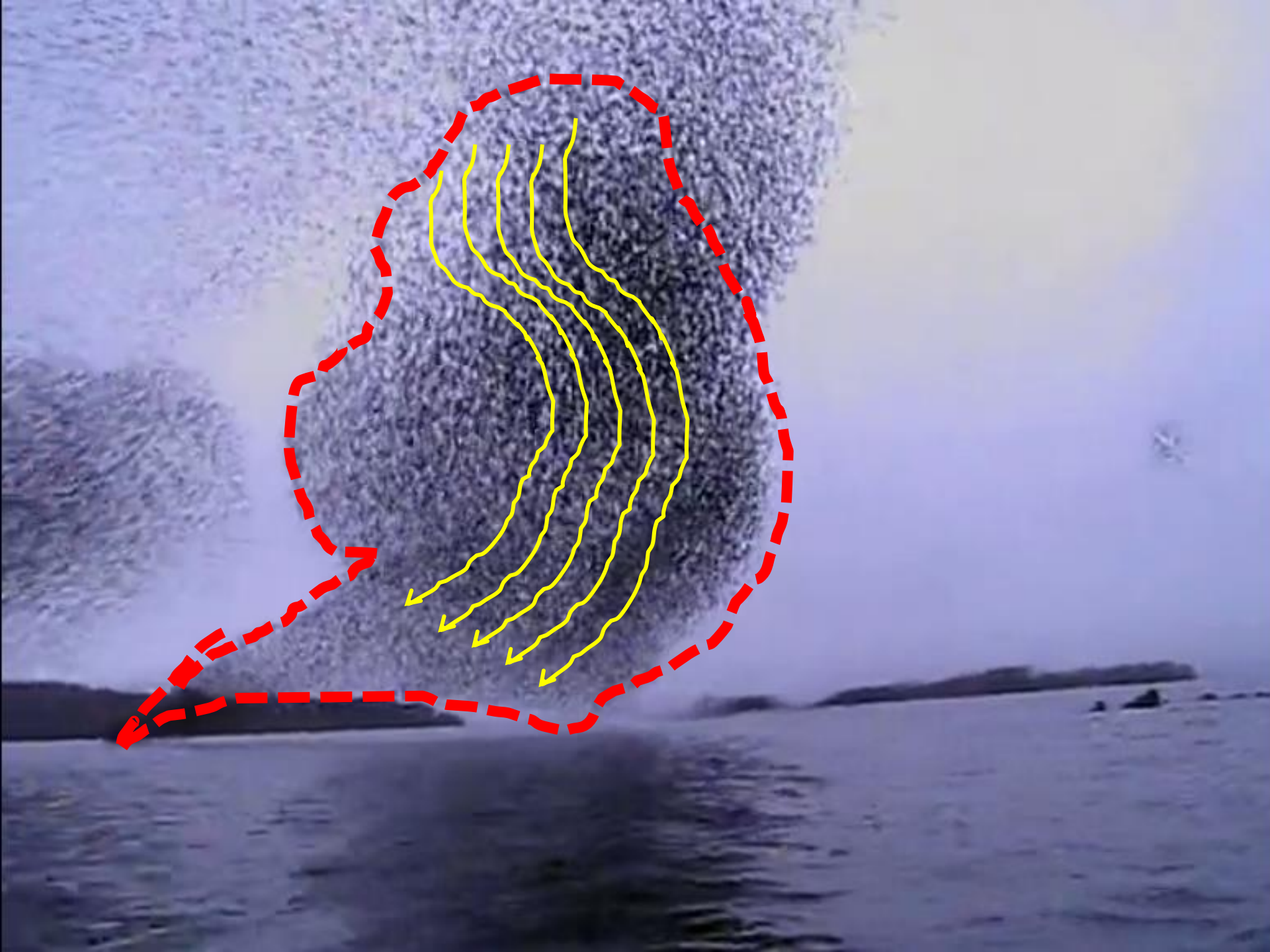


1. Bunch
2. Swoop
3. Swirl



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



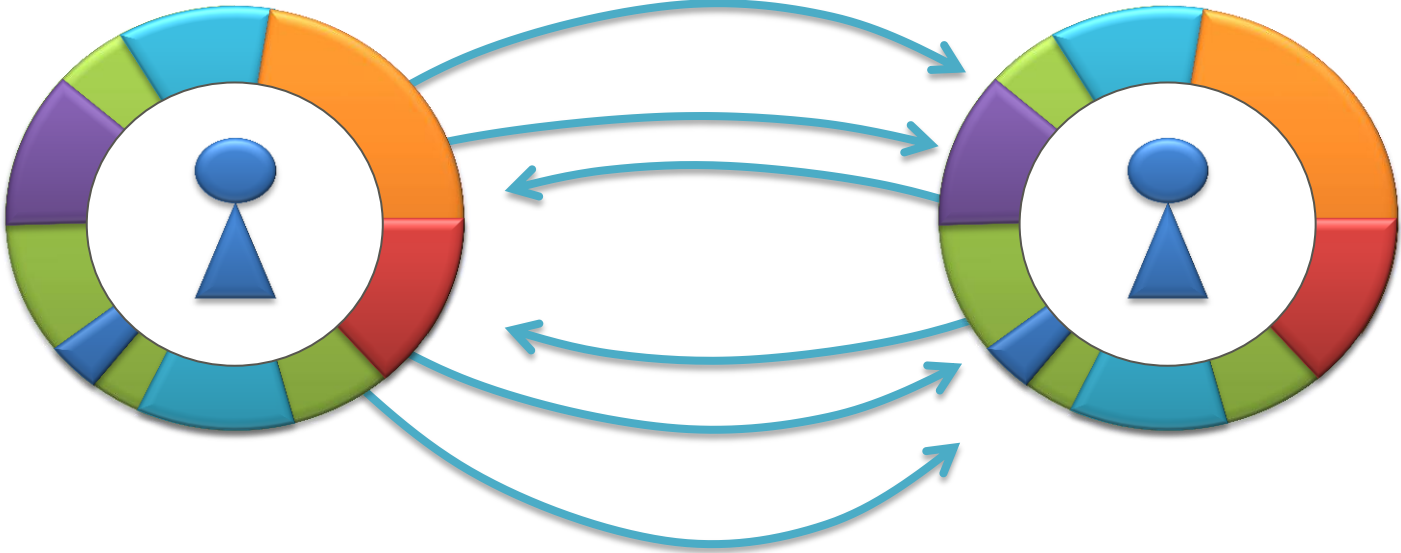


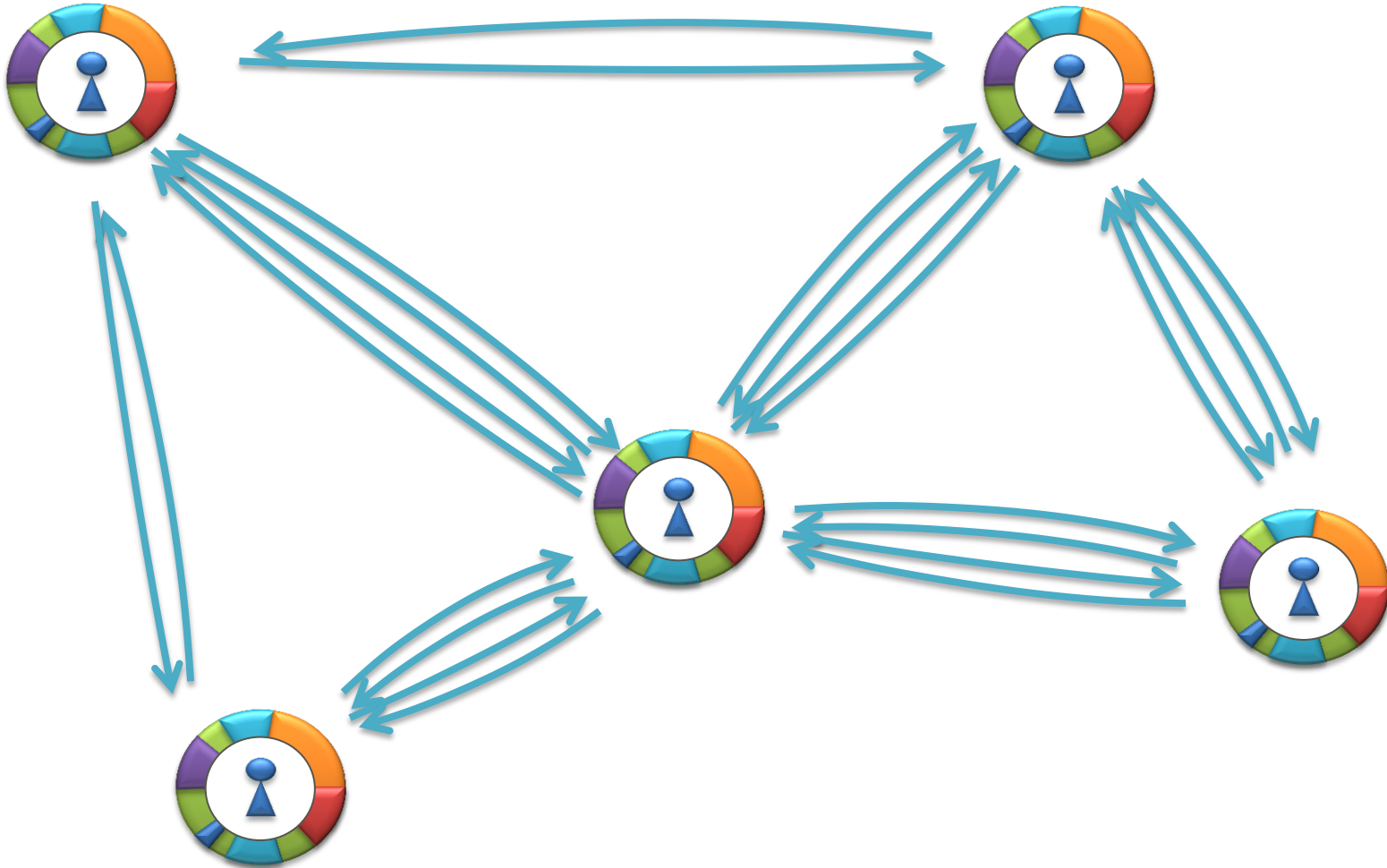


# Roles, and Etiquette

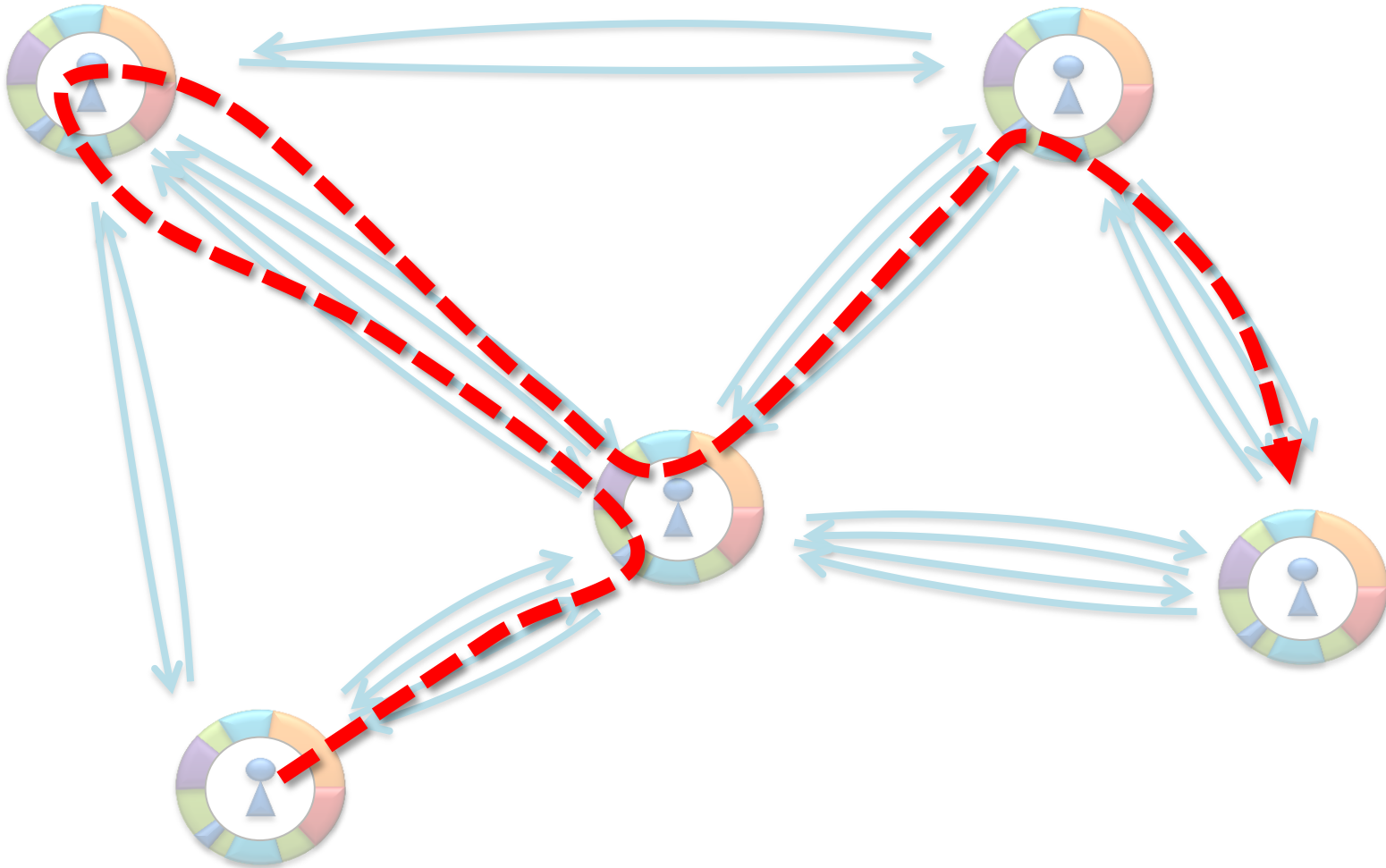
Purchasing Agent

Product Development









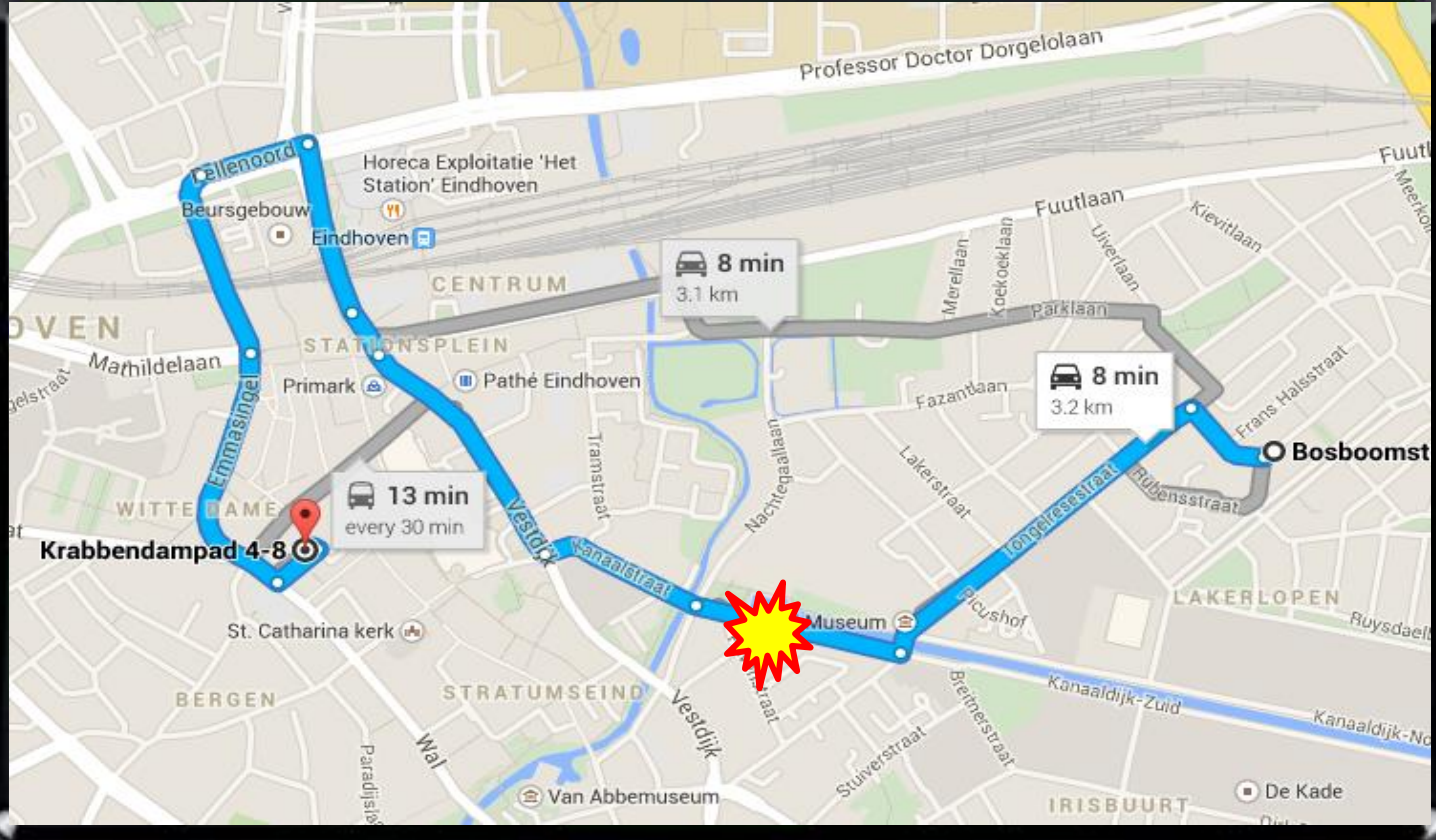
- For each role in an organization, determine:
  - each of the services that role might perform
  - what must be provided
  - what will be produced
  - what conditions will decide whether the task is accepted or not
  - what contexts all this is valid in
  
- Use simulation across many roles in the organization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



GARMIN



GARMIN



GARMIN

# Cross Company Emergent Processes

Manufacturing Company

Consulting Firm





- **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*



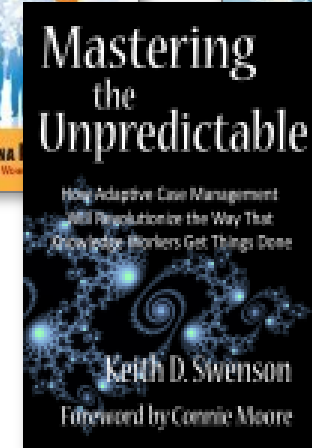
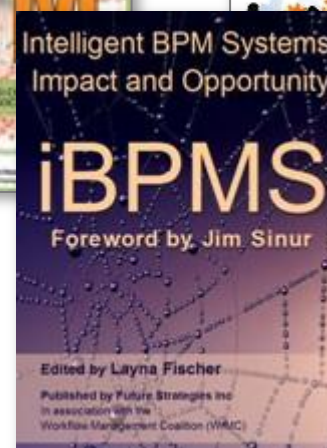
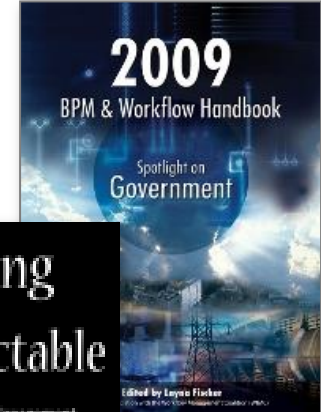
Adaptive Case  
Management is


for **Knowledge Workers**  
with **Unpredictable Process**  
to **Adapt & Innovate**  
with **Teams of Experts**  
to **Accomplish Goals.**



20 YEARS OF  
PROCESS THOUGHT  
LEADERSHIP

- **Standards**
- **Books**
- **Awards**
- **Information**





**FUJITSU**

shaping tomorrow with you