

# **Cooperation and Collaboration: Popular Trend or Tangible Benefits**

Panel @ COLLA 2012

Moderator: Lasse Berntzen, Vestfold University College

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# Panel participants

## **Moderator**

Lasse Berntzen, Vestfold University College - Tønsberg, Norway

## **Panelists**

Abdulrahman Yarali, Murray State University, USA

Julian Szymanski, Gdansk University of Technology, Poland

Sven Rizzotti, University of Basel, Switzerland

Omid Mola, University of Western Ontario, Canada

# Collaboration

- In my keynote this morning, I spoke of collaboration between government and citizens, self-support networks, and how developers can collaborate with users to make better solutions.
- Some examples I did not speak of:
  - Machine-machine collaboration
  - Business collaborating with customers
  - Business collaborating with business
- Collaboration is almost everywhere

# Collaboration

- Hopefully, this panel will give more examples, and show how collaboration creates benefits for the collaborating partners.
- I will start by discussing clusters.

# Clusters

- VUC work on industry clusters show that collaboration can increase value creation **(2+2=5) / Together we are stronger**
  - Compete on larger contracts needing more capacity
  - Compete on contracts where outside expertise is needed
  - Discuss how administrative tasks can be done more effective

# Collaboration and Technology Advancement

Panel : COLLA 2012 Venice, Italy

Abdulrahman Yarali

## Collaboration and Technology Advancement

**Collaborating** – Cooperating and enhancing the capacity of another for mutual benefit to achieve a common purpose. As a learning activity, it should be encouraged at all levels of education and professional life.

**Coordinating** – Networking and altering activities to achieve a common purpose.

**Cooperating** – Coordinating and sharing or pooling resources. working together to accomplish shared goals.

**Competing** – Exchanging some amount of information, but not “proprietary” information; altering activities to meet own needs; sharing resources minimally or with a “hidden agenda.”

## Collaboration and Technology Advancement

**Collaboration** intensifies the human aspect of learning. It increases our learning potential and empowers us with the knowledge of others. It is democratic by nature but require careful organisation of knowledge, monitoring and scaffolding.

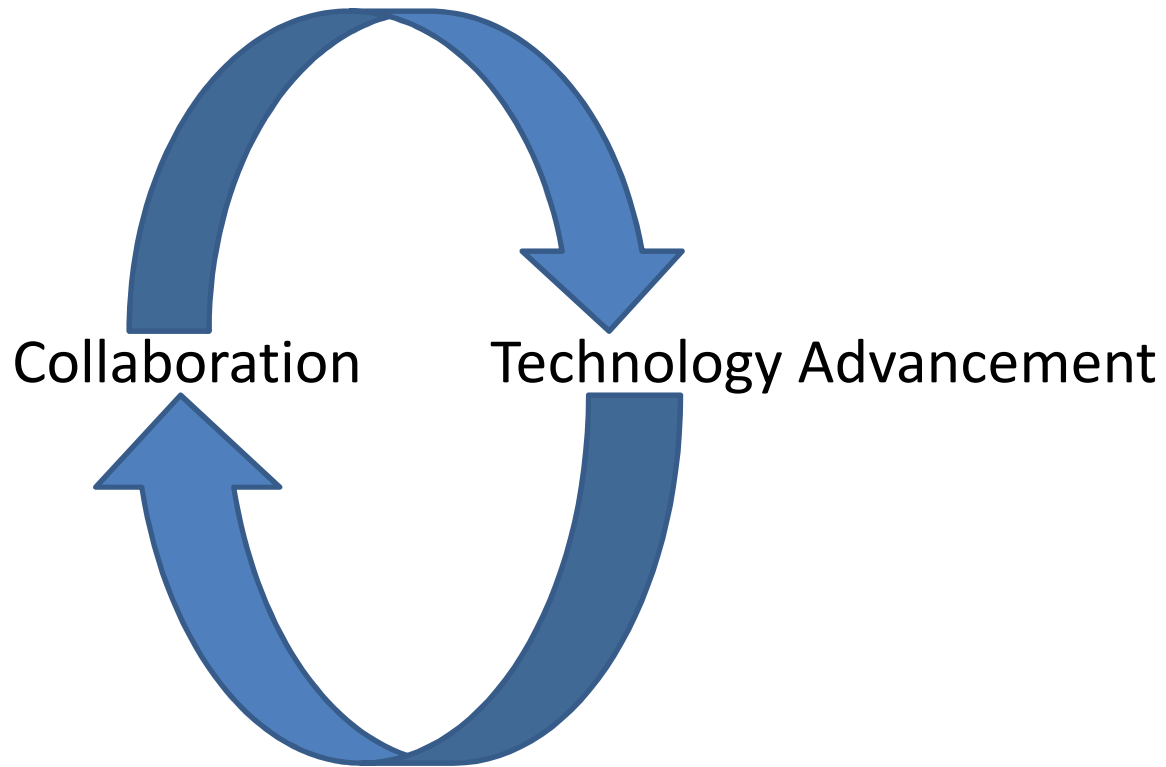
**Collaboration** requires suitable assessment methods that value team work. If individual achievement is valued, group members will compete.

**Personality** of the learner and teacher contribute hugely to the success of collaborative learning.

**Learning areas** allow for different collaborative methods –some knowledge items, skills and abilities require frontal or individualised approaches.



# Closed loop Cycle of Collaboration and Technology Advancement



## Summary

**Collaboration** as a learning activity should be encouraged at all levels of education and professional life. Present educational environment is not supportive.

**shared learning goals** -- desired future state in which people demonstrate as a group and individually a mastery of the subject studied

**goal structure** -- specifies the ways in which people will interact with each other during the instructional session

# Towards Cloud Management by Autonomic Manager Collaboration

**Omid Mola**

PhD Candidate  
University of Western Ontario  
Canada

ICCGI 2012

# Problem = Management

- Millions of machines running at the same time.
- Human can not monitor and manage them all in **real time.**

# Issues

- How they should be organized
- How managers should collaborate?(protocol)
- What information they need to exchange?
- When they need to talk to each other? ...



# Discussion

# Conclusion: Next Steps

- Automate the communication itself.
- Rapid changes, require collaboration.



# Collaborative Language Acquisition with Word Games

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# Motivation

- Large text repositories requires efficient methods for information retrieval
- To improve the retrieval, background linguistic knowledge should be provided
- The problem is to create large linguistic databases that provide knowledge about relations between concepts.
- This knowledge can be stored in many ways: ontologies, semantic networks, controlled vocabularies. They can be created manually WordNet partially automatically eg MindNet, or using crowdsourcing eg. ConceptNet
- Cooperative effort in manual creation of large dictionaries is error prone and causes some issues in reaching consensus.

# Cooperative Wordnet development

<http://wordventure.eti.pg.gda.pl>

## WordNETEDITOR

Search Node Profile Options <Hide

**Gloss**  
[remove synset :: edit]  
someone who is morally reprehensible

**Usage example**

**Part of speech**  
noun

**Words:**

1. [blackguard](#)  
[remove from synset]
2. [bounder](#)  
[remove from synset]
3. [cad](#)  
[remove from synset]
4. [dog](#)  
[remove from synset]
5. [heel](#)  
[remove from synset]
6. [hound](#)  
[remove from synset]

**Semantic relations**

left-side:

- hypernym  
1. [a wicked or evil person; someone who does evil deliberately](#)  
[remove relation]
- hyponym  
1. [bounder](#)  
[remove relation]
- semantically annotated  
1. [a human being](#)  
[remove relation]  
2. [with respect to moral principles](#)  
[remove relation]  
3. [someone who is morally reprehensible](#)  
[remove relation]

right-side:

- hypernym  
1. [bounder](#)  
[remove relation]
- hyponym  
1. [a wicked or evil person; someone who does evil deliberately](#)

# Word Games

- The main problem with lexical repositories created by hand is lack of their external validation that would allow correct the stored knowledge.
- Our idea is to modify the lexical repository as a response to system interaction with human users.
- Interactions can be performed using word games where user play the game and machine complete its knowledge with the human behavior analysis.
- The knowledge is stored in the repository built as cognitive model of human semantic memory.

# 20 question game

- One of the participants think about something the second tries to guess what he or she has in mind.
- In our implementation machine is asking the questions that narrows the search process.
- The algorithm is based on calculating the entropy related to a particular feature.
- At the end machine is asking if it correctly find a concept a human had in mind.
- According to user answers the knowledge stored in semantic memory is modified.

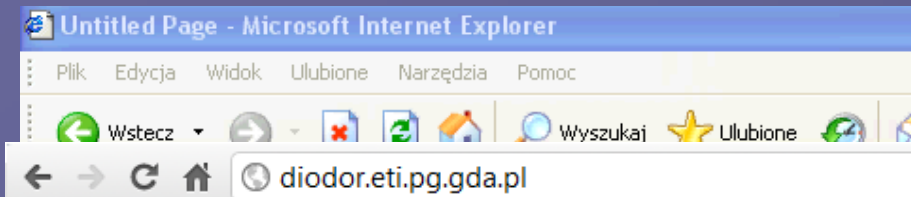
- A consensus reached on a level of commonsense relations between natural language concepts improves a quality of knowledge stored in lexical repository.
- The resultant of human - machine interaction is a normalized (common sense) lexical knowledge base.
- The knowledge base finds many applications, especially in information retrieval where it improves the search precision in text repositories.
- The idea of the game can be used in search engines to precise search results.



# Active learning

- Questions can be generated from atoms of knowledge stored in semantic memory in the form  
concept – relation type - feature
- In the iterative process of interaction with the user asking him or her a questions allows to narrow subspace of the most probable concepts. The process takes 20 questions or it is finished if one concept is left in subspace, than system guess the concept user has in mind.
- Introduction additional dialogues for obtaining new knowledge
  - *I give up. Tell me what did you think of?*
  - *Tell me what is characteristic for <concept> ?*
- The answers given by the user during the game enables correction of the knowledge about particular concept
- The consensus on the concept features is the result of interactions (games) in which this concept was the subject of the game.

# Game Web Page



**20 QUESTIONS GAME**

I say:

Is it vegetarian?

You say:

YES! SOMETIMES DON'T KNOW SELDOM NO

**YOUR ANSWERS**

Q1: Is it small? YES  
Q2: Can it bite? NO  
Q3: Does it lay eggs? SOMETIMES  
Q4: Is it friendly? SELDOM

Login:

Password:

Login

[register](#)

[< restart game](#)

lexical knowledge acquisition.



# Thank for your attention

More details:

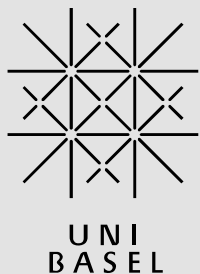
- J. Szymański, W. Duch. *Information retrieval with semantic memory model*. Cognitive Systems Research, 14(1) : 84-100, 2012.
- J. Szymanski: *Wordventure - Cooperative Wordnet Editor - Architecture for Lexical Semantic Acquisition*. Proceedings of the international conference on Knowledge Engineering and ontology developemen, 2009





# Real Shelves and Binders in the Cloud

## Trends in Collaboration



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<http://ProBindr.com>



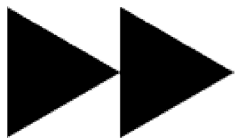
# Collaboration Dreams



Universal



Secure



Efficient



Quality ✓



Intelligent

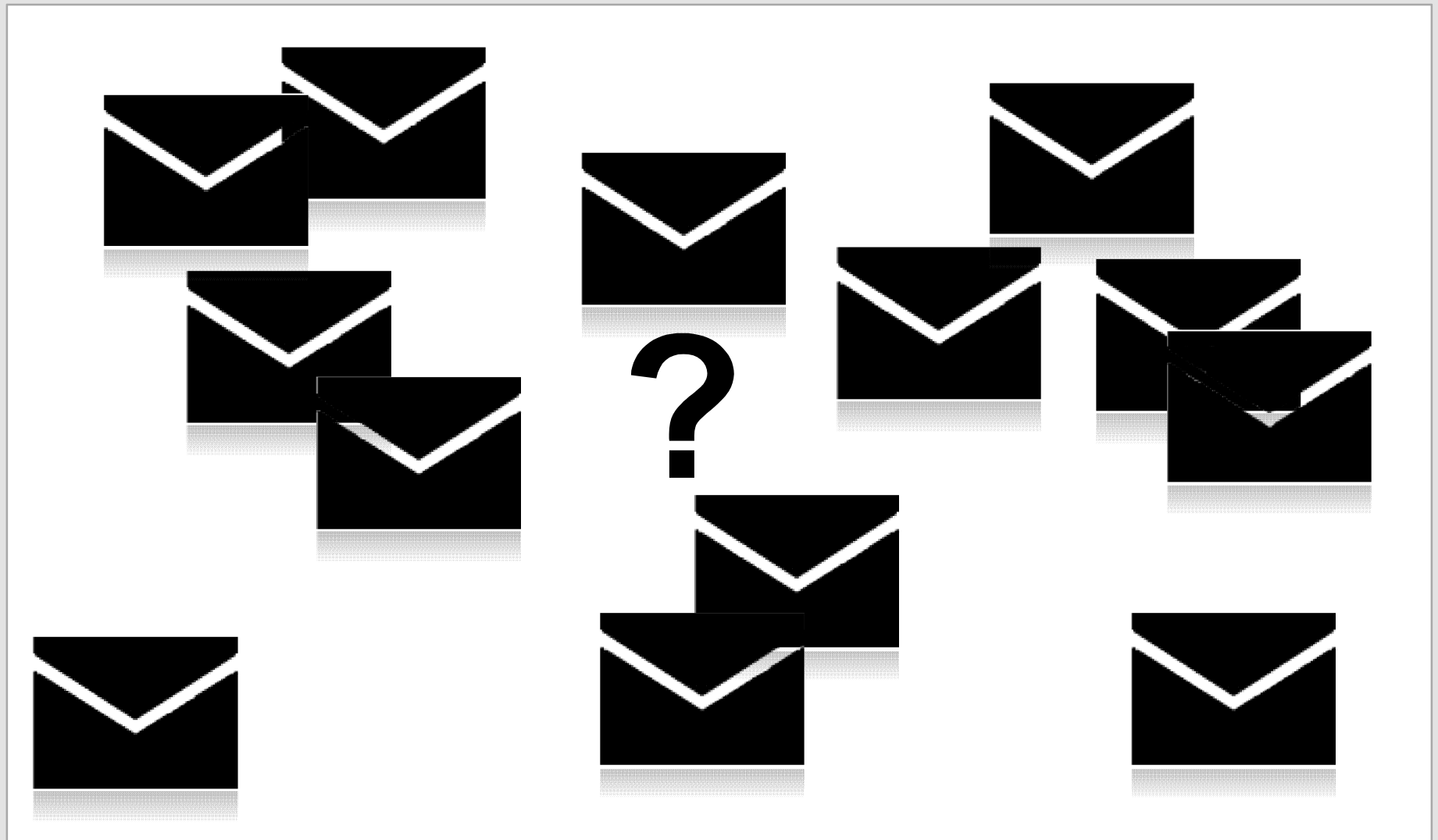


Time 

# Collaboration Reality



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PANEL DISCUSSION





Partners

HR

Plans

Contracts

Reports

Marketing

Management

3

### Monthly Valuation Report



Department	Person	Value
Administration	John Doe	100
	Jane Smith	120
	Bob Johnson	150
	Alice Brown	180
	Charlie Davis	200
	Frank Miller	220
	Grace Wilson	250
	Henry Taylor	280
	Ivy White	300
	Liam Black	320
Marketing	Anna Lee	100
	Ben King	120
	Chris Green	150
	Diana Hall	180
	Eve Young	200
	Frank Adams	220
	Grace Baker	250
	Henry Clark	280
	Ivy Evans	300
	Liam Hill	320
Finance	Mia Scott	100
	Noah Green	120
	Oliver White	150
	Quinn Gray	180
	Rachel Brown	200
	Samuel Black	220
	Tina Gold	250
	Uma Silver	280
	Victor Bronze	300
	Wendy Iron	320

Product	Person	Value
Product A	John Doe	100
	Jane Smith	120
	Bob Johnson	150
	Alice Brown	180
	Charlie Davis	200
	Frank Miller	220
	Grace Wilson	250
	Henry Taylor	280
	Ivy White	300
	Liam Black	320
Product B	Anna Lee	100
	Ben King	120
	Chris Green	150
	Diana Hall	180
	Eve Young	200
	Frank Adams	220
	Grace Baker	250
	Henry Clark	280
	Ivy Evans	300
	Liam Hill	320



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# CTD

Created at: 2011-08-31 14:05:34 by Sean Wells

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Sean Wells, Karl Burgin,

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Module 2: Common Technical Document Summaries

Module 3: Quality

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[Create a new Tab](#)

Module 1: Admi

Module 2: Comi

Module 3: Quali

Module 4: Non-

Module 5: Clinic



# Financial Clinical Study Report

5.16.2011  
Simon Siegenthaler

+ Add



File



Text



Link



Title

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## Clinical Research Regulation

On May 9th, 1997, the US Food and Drug Administration (FDA) published in the FEDERAL REGISTER (vol. 62, No 90), the latest rendition of the International Conference on Harmonization (ICH) Guideline covering the conduct of clinical research studies in the seven member nations. Guidelines represent the agency's current thinking on Good Clinical Practices, but do not bind the FDA or the public. However, most clinical research studies are now being conducted in compliance with this guideline, especially if the results might be used for an international regulatory submission. Here are the major differences.

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### Sample Regulations

Nicolas Ruffin

04.09.2011 00:41

Please check my last e-mail. I think the pricing is wrong in the above PDF, as there should be company accounts with some units included, and additional units can be added.

Regulations



# Mobile



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