New Potentials for e-Learning

in the Semantic Age

Organisation

Information

Qualification

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About SSG

- Located in Germany (Vallendar near Koblenz)

- interdisciplinary team

  (Engineers, Business economists, Informatics,

  Paedagogics, Lawyer, ...)

- Main focus on projects in large organisations

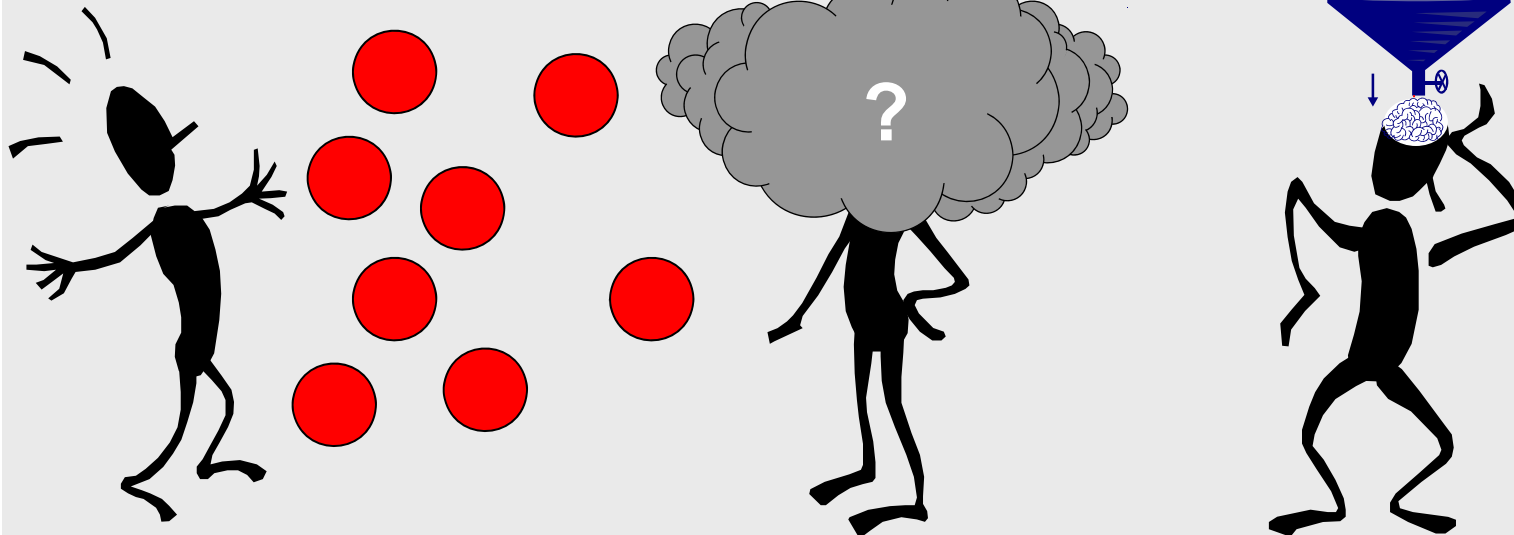- Certified by DIN EN ISO 9001:2000

- Certified by PRINCE2

Hamburg

Berlin

Bonn
Vallendar
Koblenz

Stuttgart

Munich

Agenda

■ **Information and Content- Status quo**

■ **New approach by Semantics**

■ **Current project**

■ **Conclusion**

Information and Content : The most common Problem areas
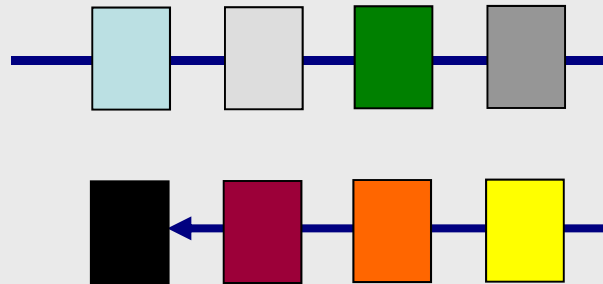
Amount and Selection   Missing Structure   „Stored" Knowledge

Agenda

■ **Information and Content- Status quo**

■ **New approach by Semantics**
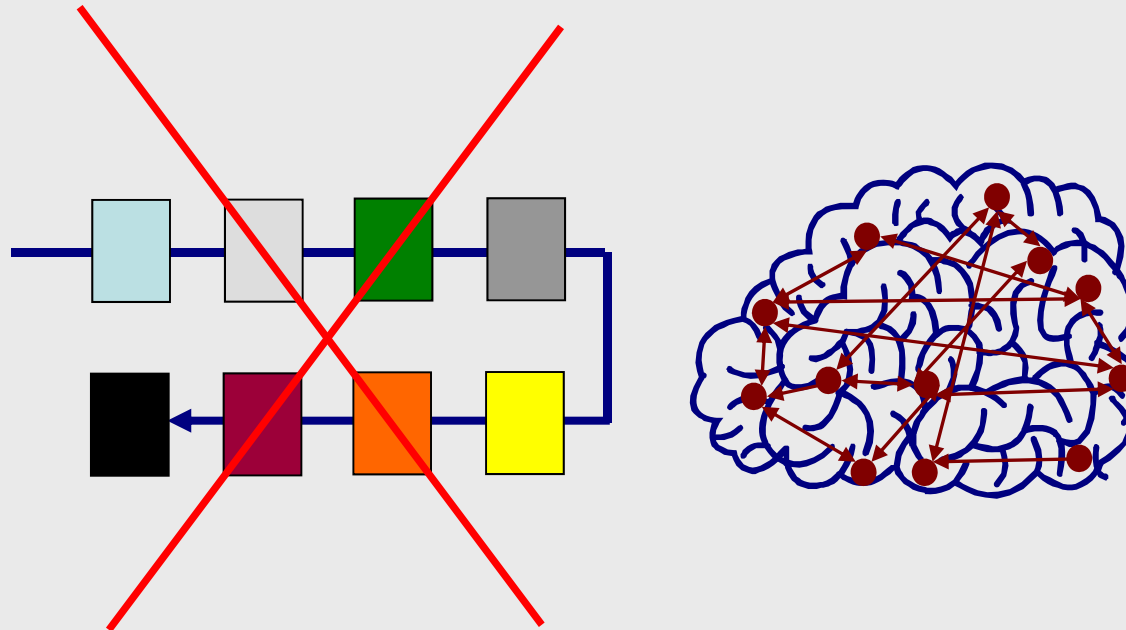
■ **Current project**

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New approach by Semantic: Structuring of Information

Usable for many cases! | me!

■ Which colleague is occupied in which way with topic A?

■ What else do I have to consider concerning topic A?

■ How do I solve this problem?

■ Which relationship exists between method X and method Y?

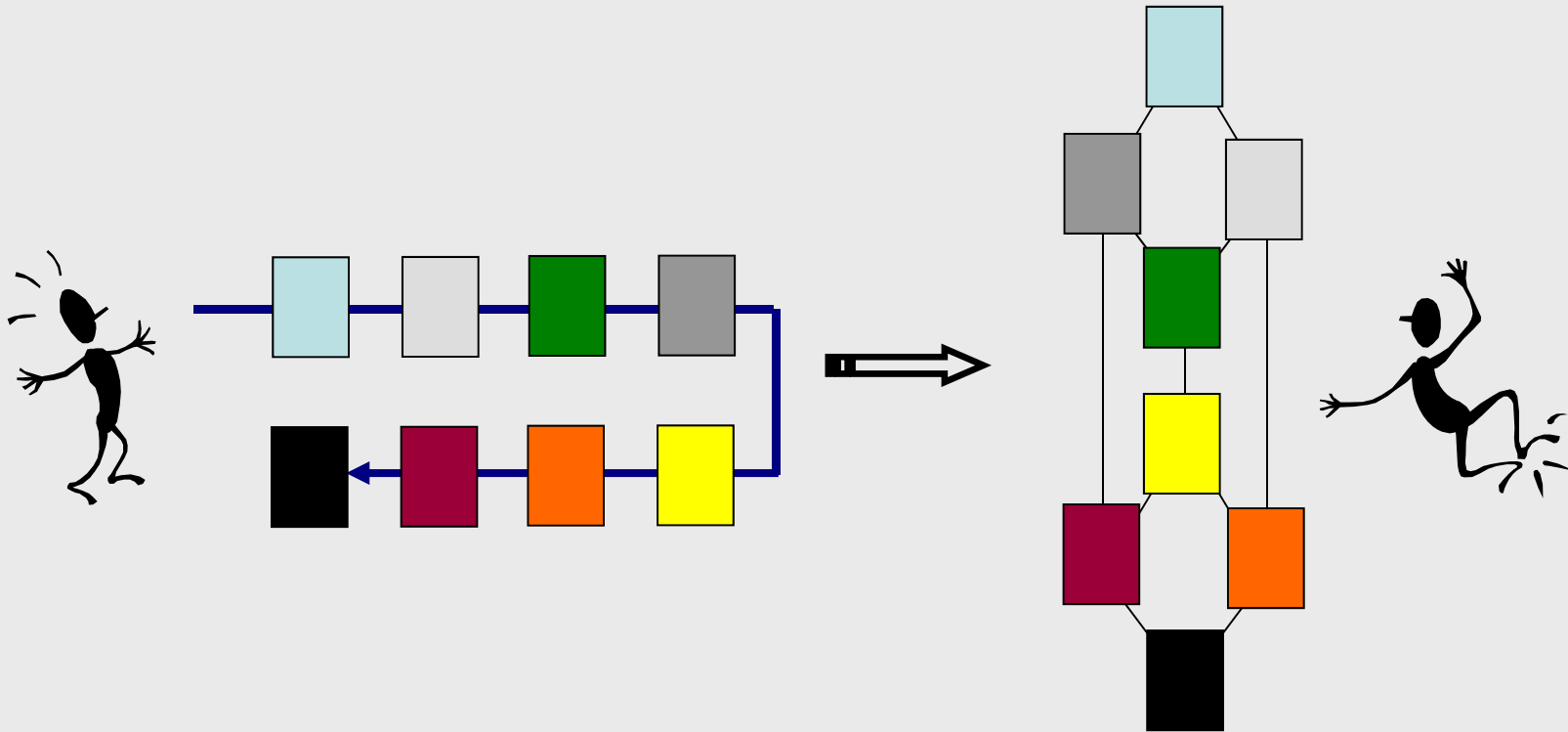# New approach by Semantic: The Human Factor in the focus

■ Learners don´t think in hierarchical but contextual way

■ Information should be offered in context

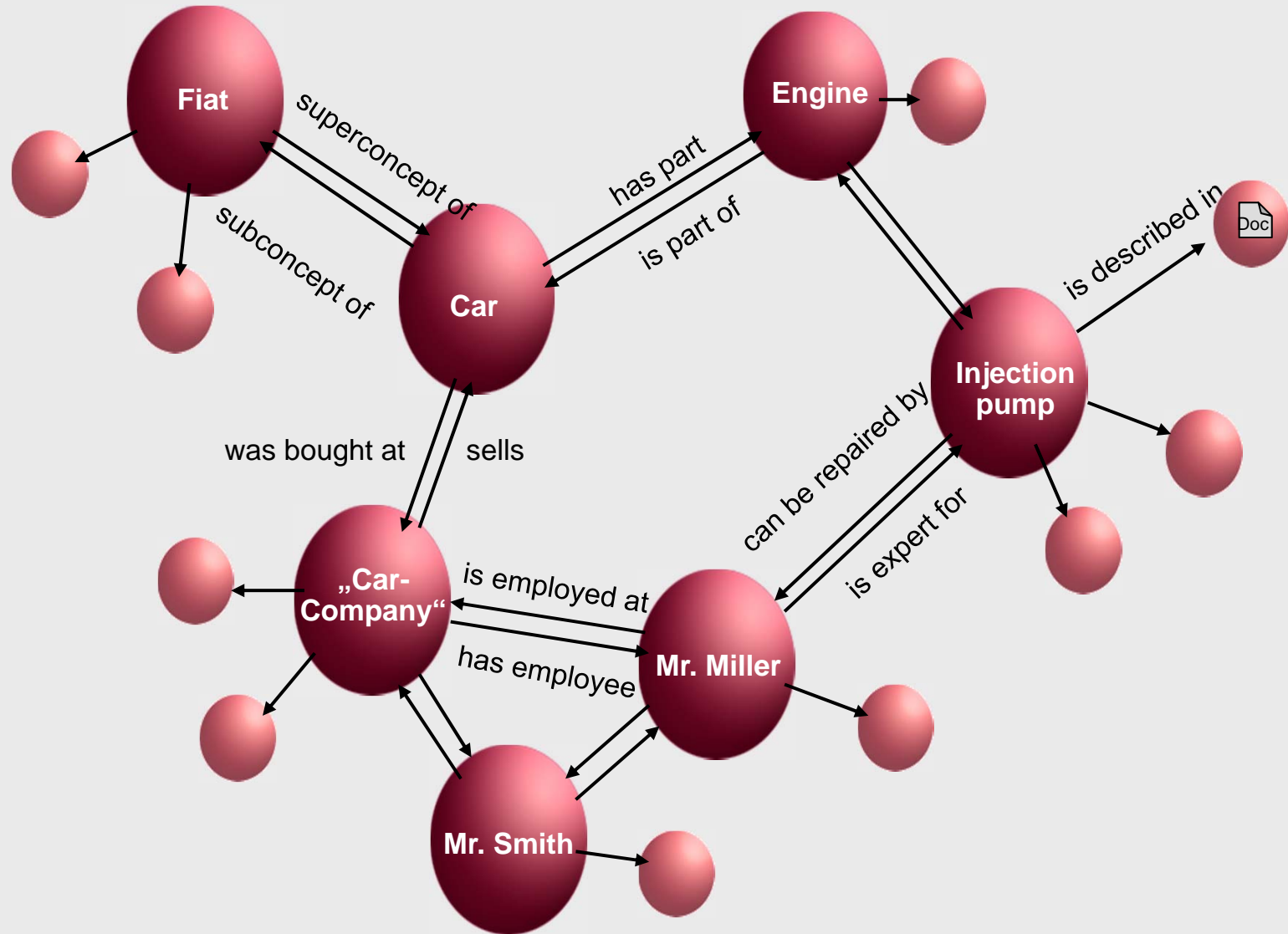➡ No helpful support in Information- and Learning processes by linear structured content

New approach by Semantic: „Content in context"

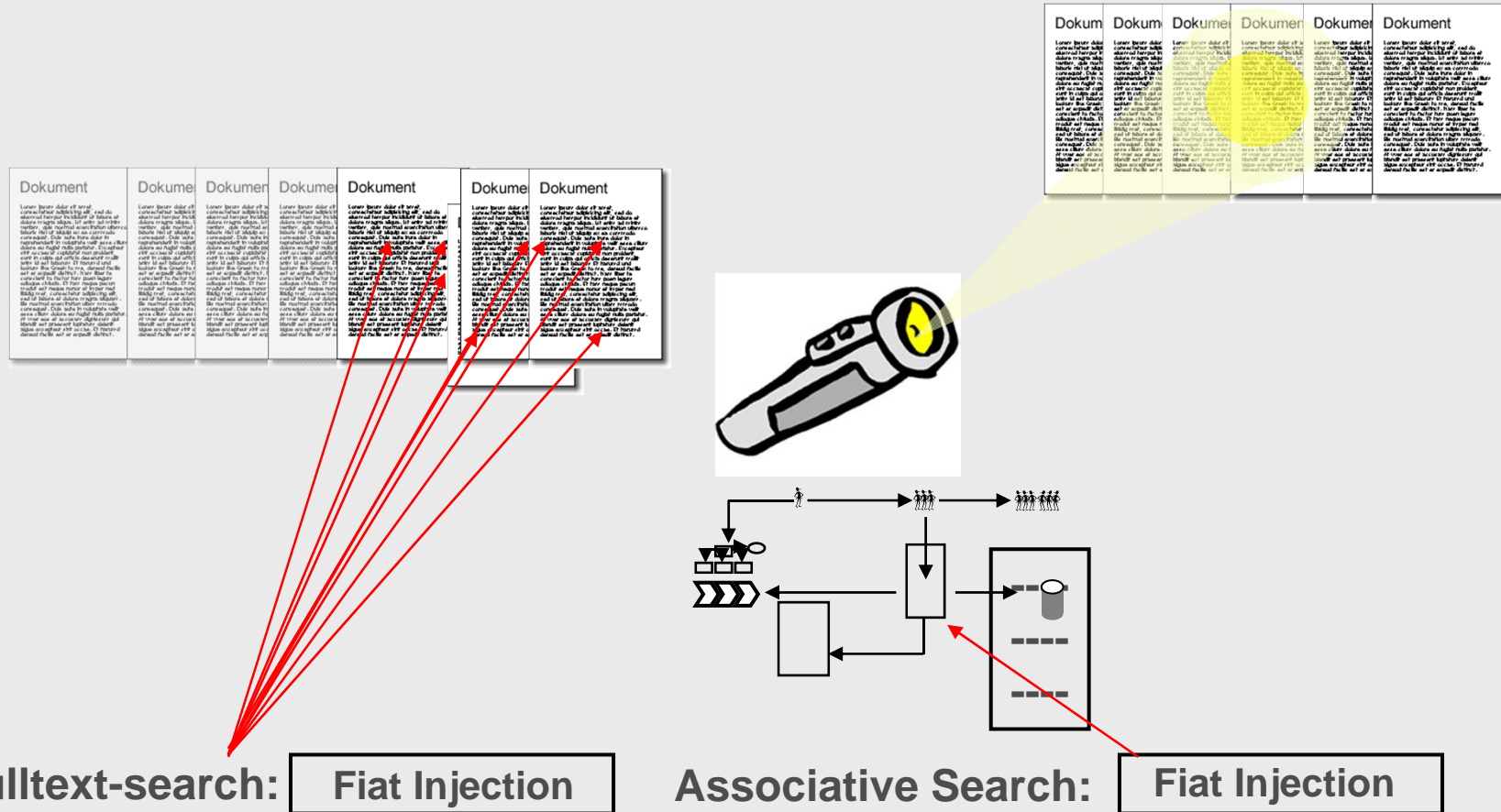Linear-oriented, isolated Structure   Context-oriented Structure

„Semantic Datamodel"
(„Semantic Web")

New approach by Semantics: schematic view

New approach by Semantics: Higher Quality of Search Results (1/3)

Fulltext-search: | Fiat Injection | **Associative Search:** | Fiat Injection |

Google finds 161.000 Entries!

New approach by Semantics: Higher Quality of Search Results (2/3)

Search for „Fiat Injection" delivers als results:

■ **Injection pumps can be repaired at the „CarCompany"**

■ **The „CarCompany" has an expert for injection pumps**

■ **The file „repair.doc" describes the repair of the pump**

■ **…**

No Fulltext-search!

New approach by Semantics: Higher Quality of Search Results (3/3)

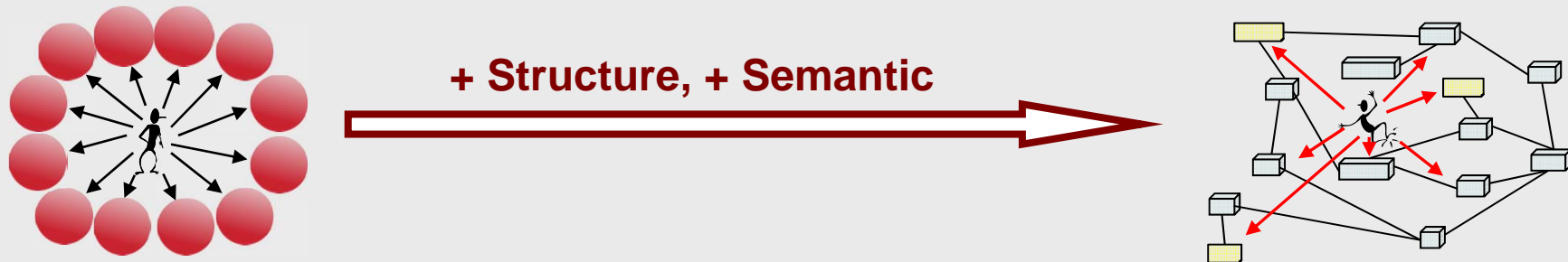| Search by „Google"	Search by Semantik
many Documents	less, but helpful Documents
results by Fulltext-search	results by topic
time-intensively, not exakt	quick and exakt
isolated Information	Information in context

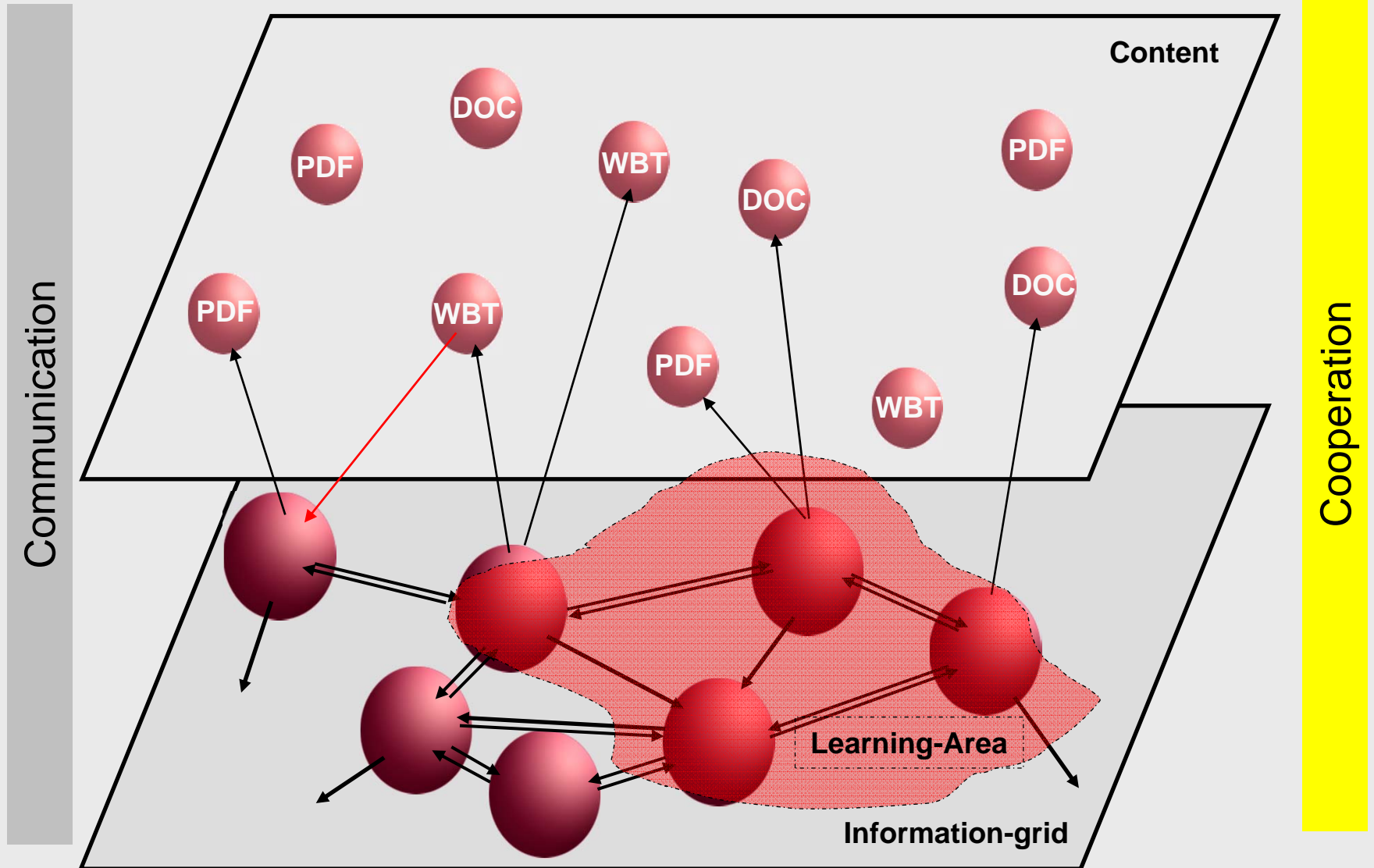**Semantic technology leads to a new quality of search**

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Current project: University of Koblenz-Landau, chair for pedagogics

+ Structure, + Semantic

- Environment for learning and information upon a semantic base

- Inclusion of professors and students

- Using existing content (.doc, .pdf, .html, CBT, WBT, etc.)

- Knowledge-distribution to companies, institutions etc.

- Extern evaluation of benefits

Current project: Schematic view

Current project: Challenges

Often no competence for self-learning

New possibilities to navigate require new concepts to do so

Expenditure of time for describing semantics

Current project: Success stories

■ Independence to browse and to learn

■ Re-use of existing content possible easily

■ Definition of scopes for the learners

■ Enabling interdisciplinary views

■ Promotion of explorating and self-controlled learning

■ Deliverage and usage of practical knowledge

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Conclusion

■ Current CBT and WBT are often usable for learning!!

■ Semantic structures offer new possibilites for

     ■ improving interdisciplinary views
     ■ efficient possibilities to search for information
     ■ improving self-contolled learning
     ■ usage of practical-knowledge

■ Semantic networks can be the answer to some problems of the information age („GPS-System for Information")

■ New possibilities for E-Learning by adding semantic to content

Thank you for your attention!

Contact

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Objective

- Exchange of information and experiences between science, business, armed forces and the public administration sector regarding the use and implementation of technology-based training schemes

- Discussions about innovative training schemes in the public sector

- Presentation of modern training technologies

- Connecting conceptual work, technology developments, services, marketing and users

2nd Distance Training Convention

- September 20th to 22nd, 2005
- At the Helmut-Schmidt-University / Bundeswehr University, Hamburg
- Ticket for 3 days   € 390
- Ticket for 1 day   € 150

The convention tickets entitle visitors to attend all lectures, workshops, company forums as well as the fair. The convention catalogue, lunch and drinks are included in the price.

Tickets are also available at the venue ticket counter.

Further Information / Registration
www.fernausbildung.org