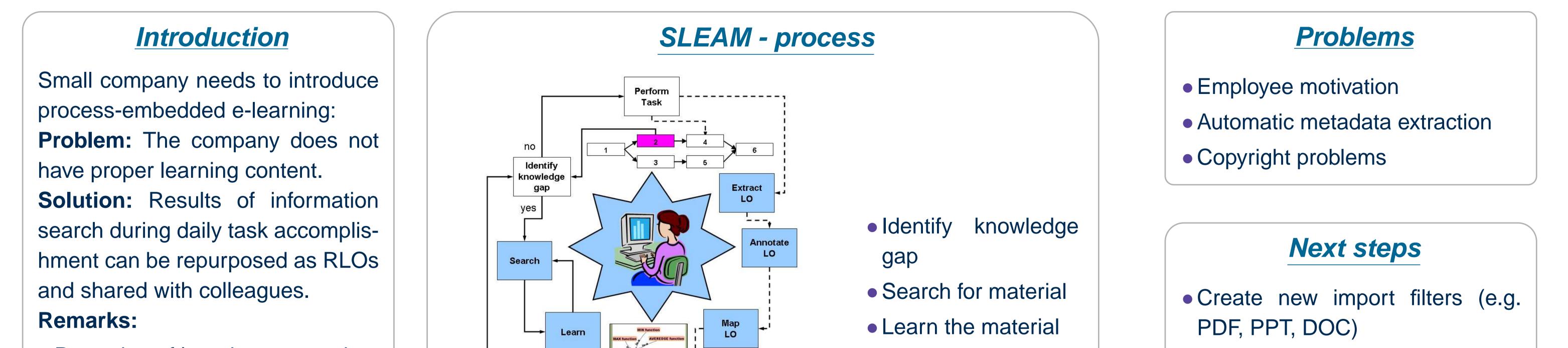
# From Informal Learner to Active Content Provider: SLEAM approach

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- Preparing of learning content has to become a part of the employees' daily job.
- The process of the content creation must take as little time as possible, i.e.:
- Tools for easy conversion of documents into RLOs are needed;
- Authoring process shall be embedded into the process of work.

### **Referenced approaches**

Following authoring methods were analyzed:

Instructional System Design (ADDIE)

#### Rapid instructional design



Extract RLOs from the material
Annotate RLOs with metadata
Map RLOs to concept map (LCO)

#### Fig. 2: SLEAM approach to authoring

## Implementation: LOExtractor tool

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- Embed the tool into working environment (e.g. implement browser plugin that allows to call LO-Extractor to parse the current web page)
- Evaluate approach and tool internally at DFKI Knowledge Management department
- Evaluate approach and tool at industrial partner

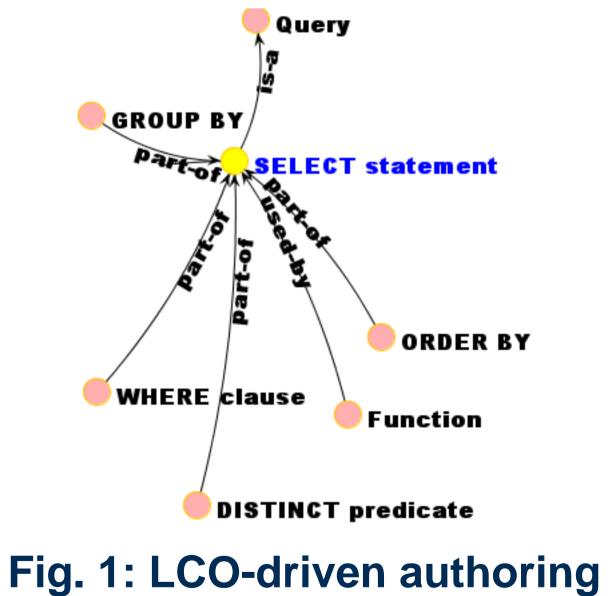
# **Conclusion**

- SLEAM is an approach to workflow-embedded authoring
- Driven by learning concept ontology
- Oriented on creating RLOs instead of courses

- Rapid authoring tools
- Wiki/Blog authoring
- Concept-driven authoring

## Learning concept ontology

Learning concept ontology is the central part of the proposed authoring process:



#### Fig. 3: Authoring projects

LON



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#### Fig. 5: LO extraction, annotation and mapping

- LOXExtractor is a rapid authoring tool supporting the SLEAM approach.
- It allows extracting reusable
   RLOs from existing documents
   and web pages
- It is tuned to extract RLOs from
   Wikimedia web pages (e.g. Wi kipedia, Wikibooks)
- Extracted RLOs are mapped to the learning concept ontology in order to increase the precision of the just-in-time information delivery in workflows
- Several RLOs explaining the same concepts from LCO can be created that allows adaptive delivery of learning content depending on user profile and prefe-



rences

