Social Business Object Ontology (SoBOOnt):
A formal description of a novel concept for social features
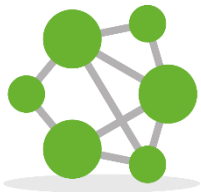
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Ontology-based data
access

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- **Enterprise Social Software** is a form of groupware that supports the **communication and joint (ad hoc) work** of people in organisations
(Koch & Richter, 2009; Richter & Mörl, 2011)

- **Enterprise Resource Planning Systems** support the fundamental business processes in organisations and, as such, contain information on "**business objects**"

- The word "**social**" implies **two aspects** that have great potential to significantly improve end-user collaboration on business-relevant information: **the structural relationships** between people and/or objects and **the user actions** that lead to improved awareness about relevant information.
(Schwade & Schubert, 2017)

- The **Social Network of Business Objects (SoNBO)** is an application for ontology-based information integration and provides the **structural relationships between people and objects** in the form of nodes in a graph
(Wache et al., 2001; Gebel-Sauer 2021; Gebel-Sauer & Schubert, 2019a, 2019b; Gewehr et al., 2017; Götz & Gebel-Sauer, 2018)

- In this paper, we **extend the SoNBO concept** to include **interactive user functionality** that allows to add items to the objects

SoNBO-Explorer

Social Business Object
Herr M.Sc. Simon Meier
Res. assistant

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▼ **Social Concept**

21 All   18 Research group   2 Research   1 Institution

Social Subconcept

21 All   2 Professor   1 University   2 Project   9 Res. assistant   1 Non-scienc. staff   6 Stud. assistant

Sort | Role ⌄   ○ Ascending   ● Descending

Social Business Objects

[Projekt] IndustryConnect 14	Universität Koblenz-Landau (Campus Koblenz)	[Projekt] IndustryConnect 12
Project	University	Project
Start date: 12/10/2021	Street: Universitätsstrasse 1	Start date: 11/20/2020
Planned end date: 12/10/2021	City: Koblenz	Planned end date: 11/20/2020
Project type: project	Website: https://www.uni-koblenz-landau.de/de	Project type: project

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(1) Research problem	(2) Suggestion	(3) Modelling & Evaluation	(4) Technical Implementation
Definition of research objective Literature analysis	Analysis of ColActDOnt Identification of social features	Development of an ontology for the existing SoNBO concept that includes social features	Development of functionality for social features in the existing SoNBO Explorer
↓	↓	↓	↓
Definition of the term "social feature"	Suggested social features	Social Business Object Ontology (SoBOOnt)	Evaluation

Research steps based on Design Science Research (Vaishnavi & Kuechler, 2008)

- Research objective: "**Formalisation** of a novel concept for **social features** that combine the strengths of two fundamentally different kinds of business software: **Enterprise Social Software (ESS) and Enterprise Resource Planning (ERP) Systems**."
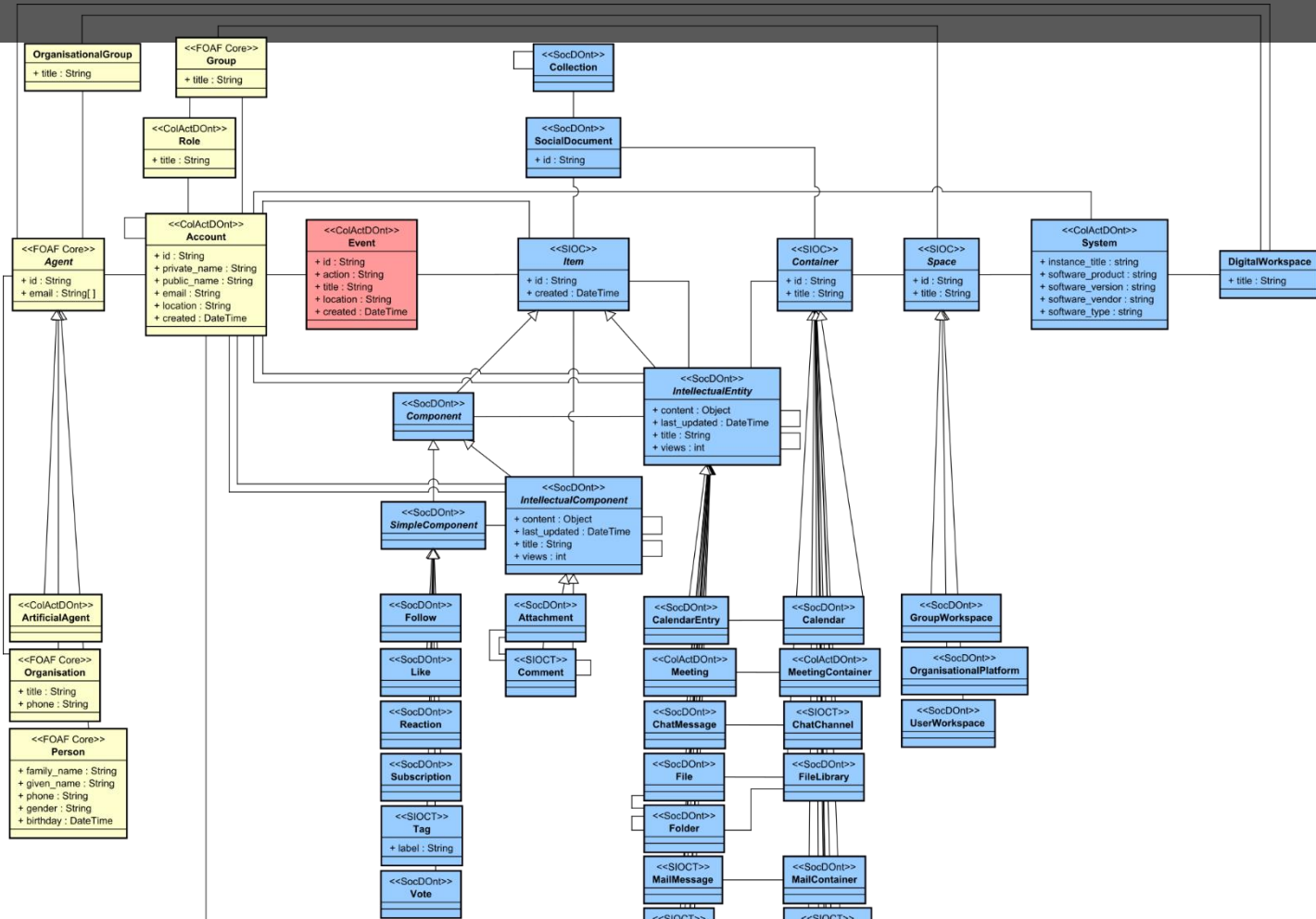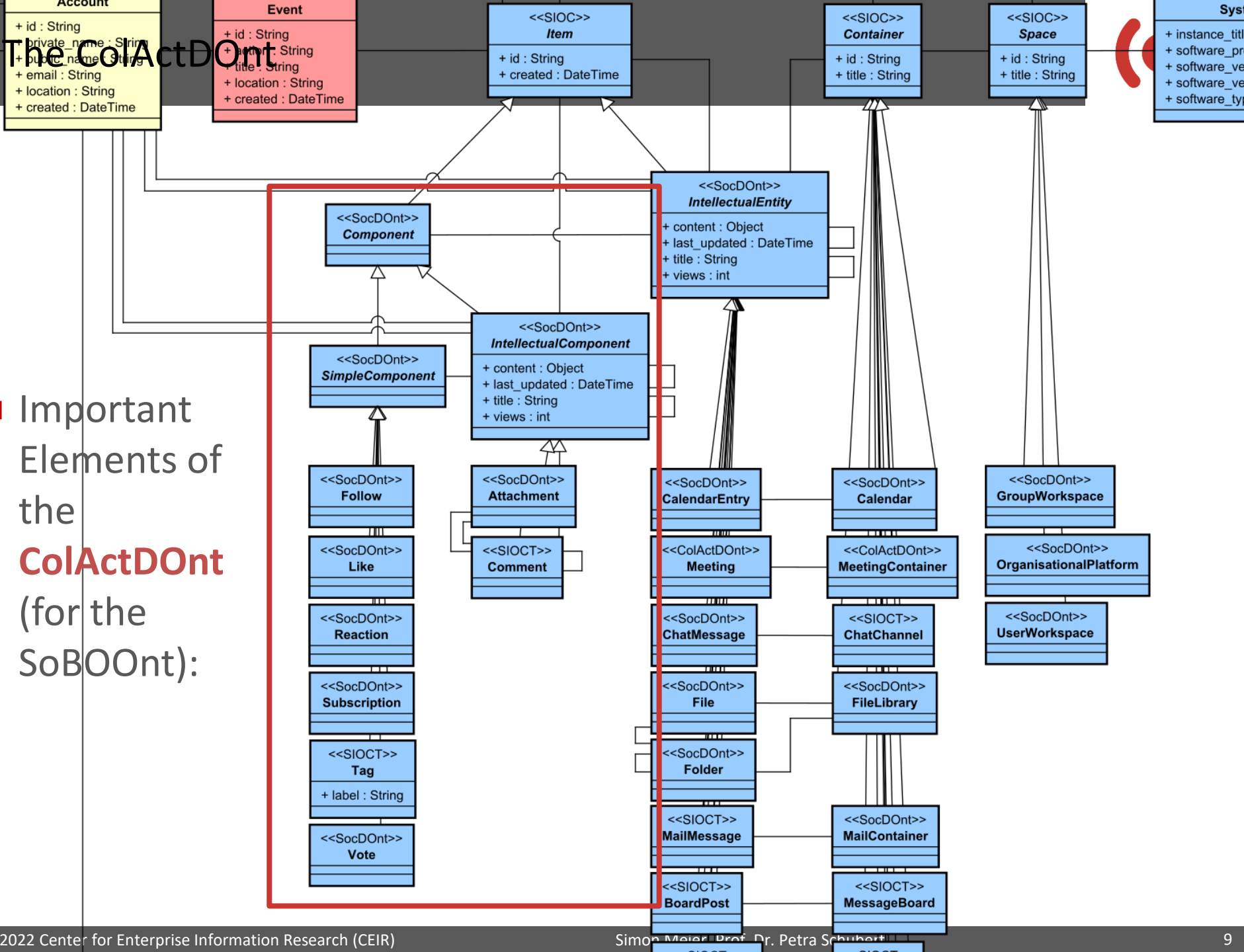
■ The **ColActDOnt** will be presented at this conference.
(Just & Schubert, 2022)

The ColActDOnt

■ Important Elements of the **ColActDOnt** (for the SoBOOnt):
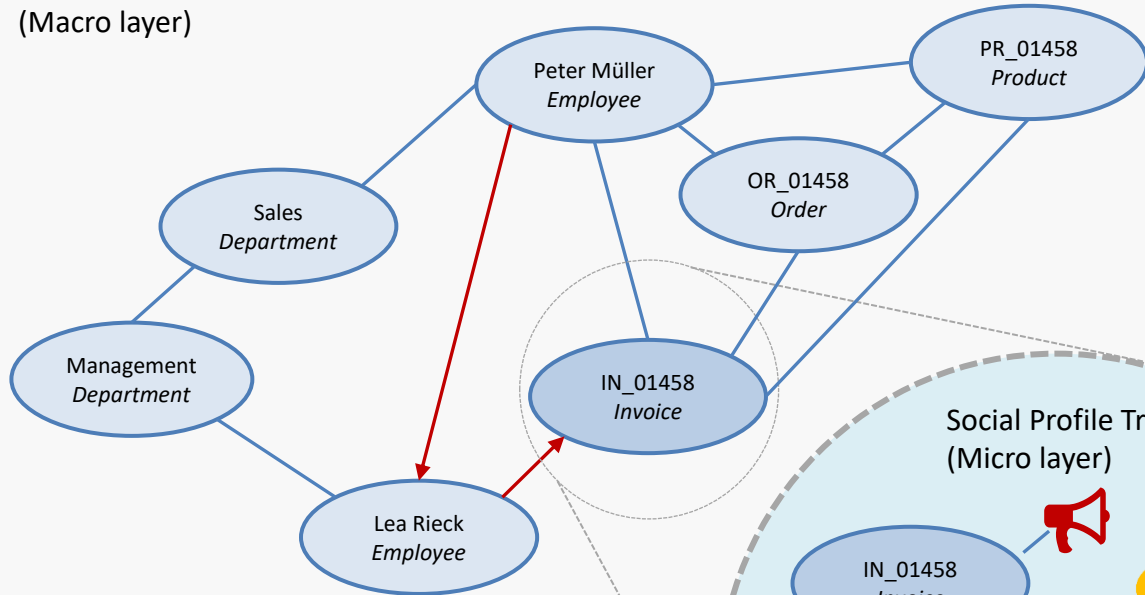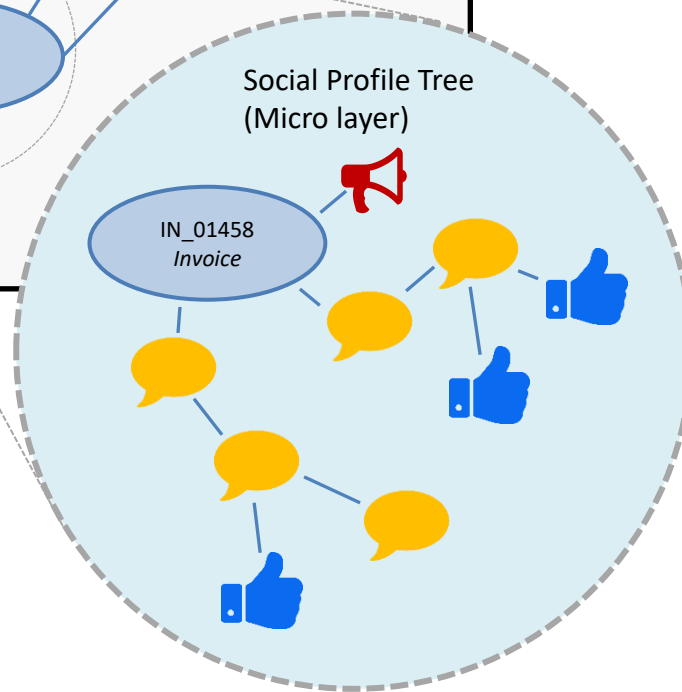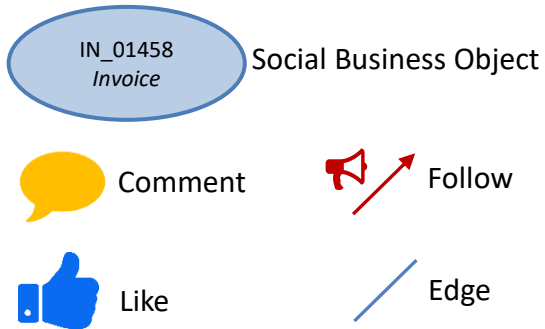
The Social Profile Tree

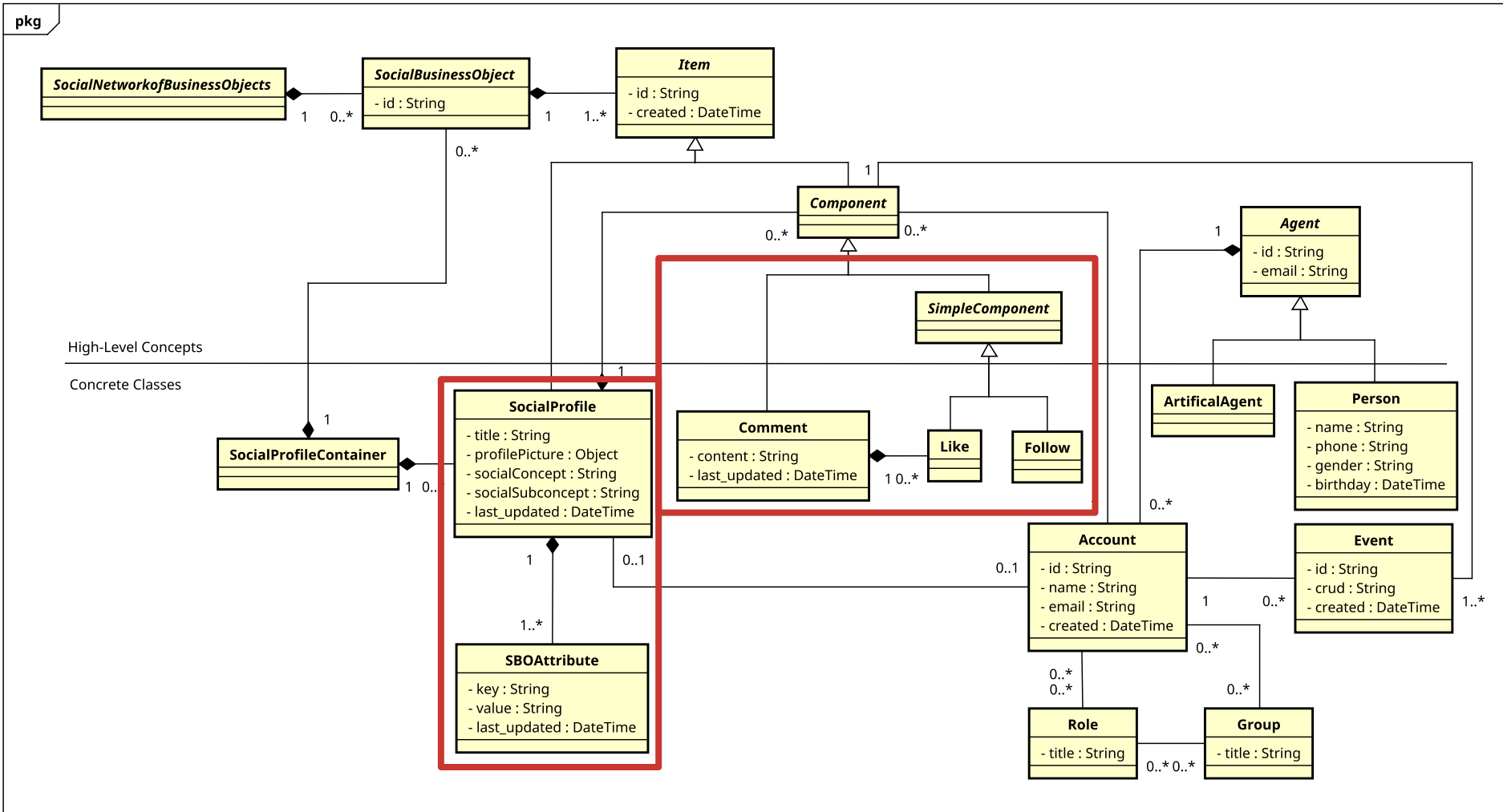Social Network of Business Objects
(Macro layer)

Peter Müller
Employee

PR_01458
Product

Sales
Department

OR_01458
Order

Management
Department

IN_01458
Invoice

Lea Rieck
Employee

Social Profile Tree
(Micro layer)

IN_01458
Invoice

Legend

IN_01458
Invoice   Social Business Object

Comment   Follow

Like   Edge

- Improvement of the **end-user collaboration** on business-relevant data from process-oriented systems (such as ERP systems) by extracting and transferring them into a social software environment

- The concept takes advantage of the inherent **functionality of collaboration software** to enable (social) interaction with information objects, thus allowing to **extend and enrich** the existing information.

- The key contribution of this phase of our longitudinal project is a formal description (of an ontology) for the possible **actions of users on social business objects** (SoBOOnt)

- The new ontology provides the necessary **basis for the further development** of the existing SoNBO software application.

Thank you for your attention!

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