Human-Centered Computing
RESEARCH GROUP

Freie Universität Berlin

Towards Sociotechnical Management of Intra-Organisational Knowledge Transfer

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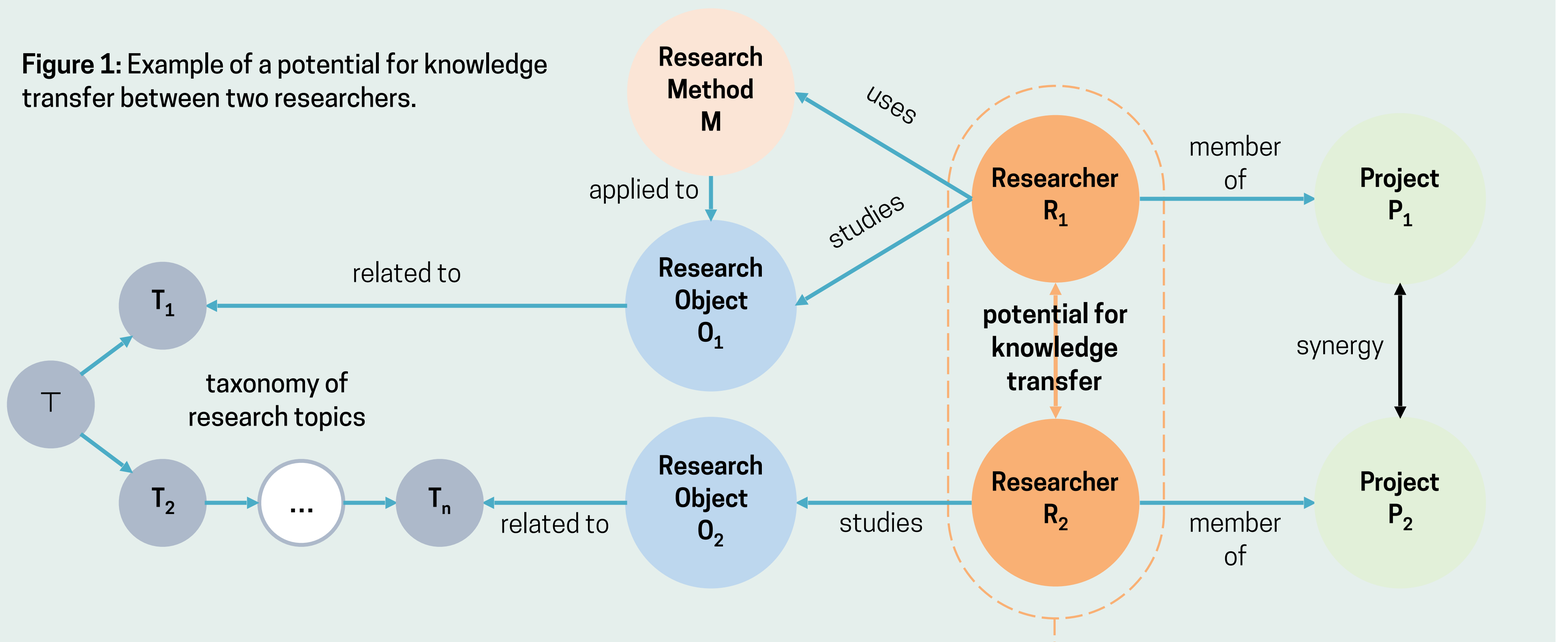

Figure 1: Example of a potential for knowledge transfer between two researchers.

The Problem

Context:

- Knowledge transfer in research organizations
- Research Networking Systems [1]

Two strategies [2]:

1. Knowledge codification
2. Personalization

Factors impeding knowledge transfer [3, 4]:

- Technology
- Organisation
- Culture

Design Problem

Accelerate knowledge exchange in a research organisation by designing a **socio-technical system** that satisfies the requirements of the knowledge transfer manager and researchers to **support the knowledge transfer manager** in matching researchers who have **mutual interests and complementary expertise**.

Methodology

Design Science Research [5, 6]

Identify Problem → *Define Objectives of Solution* → *Design & Development* → *Demonstration* → *Evaluation* → *Communication*

Preliminary Research Questions

(1) Data Integration

What are the **data sources** available in research organisations that can be integrated? What **relationships** can be **inferred** between the members of the organisation, based on the data sources?

(2) Visualization

How can we **present** the **inferred relationships** to produce insights that are **useful and actionable** for both knowledge managers and researchers?

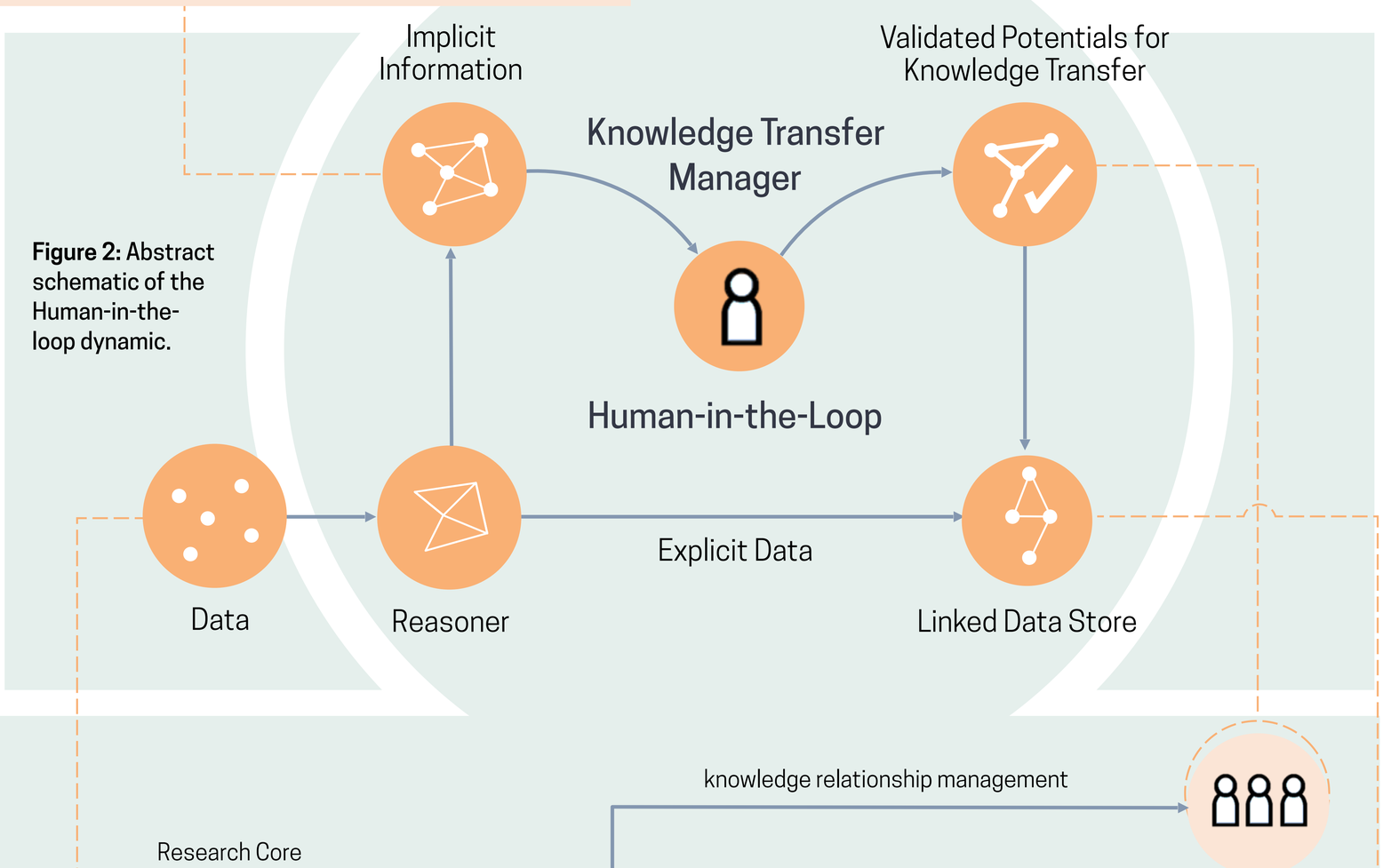

Figure 2: Abstract schematic of the Human-in-the-loop dynamic.

Proposed Solution

To address these research questions and to tackle the problems in the field of knowledge transfer, we have devised a **socio-technical knowledge management system [9].**

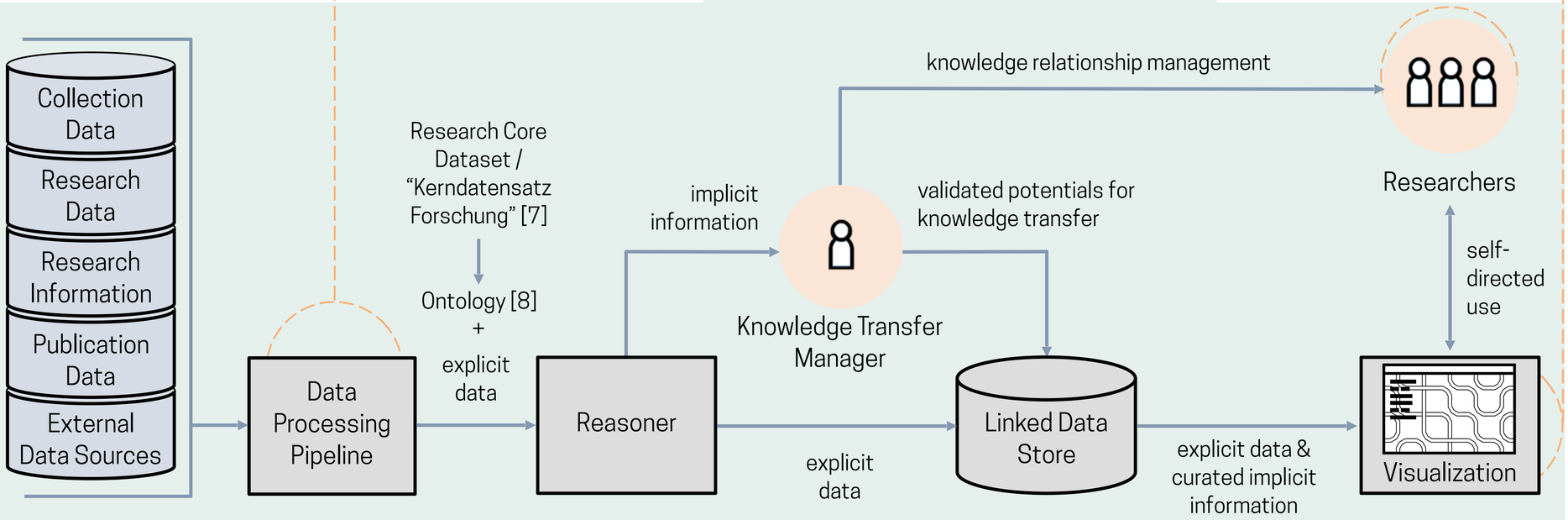

Figure 3: High-level architecture of the socio-technical knowledge management system.

Project Partner

Museum für Naturkunde Berlin

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