

**Interactive Research Promoting a
Systems Perspective
in Improving the Work Situation of
15,000 Postmen**

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Introduction

- The Swedish Post Office introduced a rationalization method in 2000 for mail delivery
- Productivity did not increase as calculated
- Linköping University was called in to examine the entire work situation and reasons for the shortage of productivity gains

The interactive collaboration

- Interactive research for 5 years
- 1100 postal workers involved in the research
- Work environmental improvements were carried out for 15 000 mail carriers at 600 postal offices in Sweden
- 50-70 MSEK were invested in the improvements, including physical, cognitive and organisational improvements

Aim

- to empirically illustrate how interactive research can serve as a platform for adopting a systems thinking in workplace design and thereby contributing to efficient and healthy work processes for postmen in mail distribution

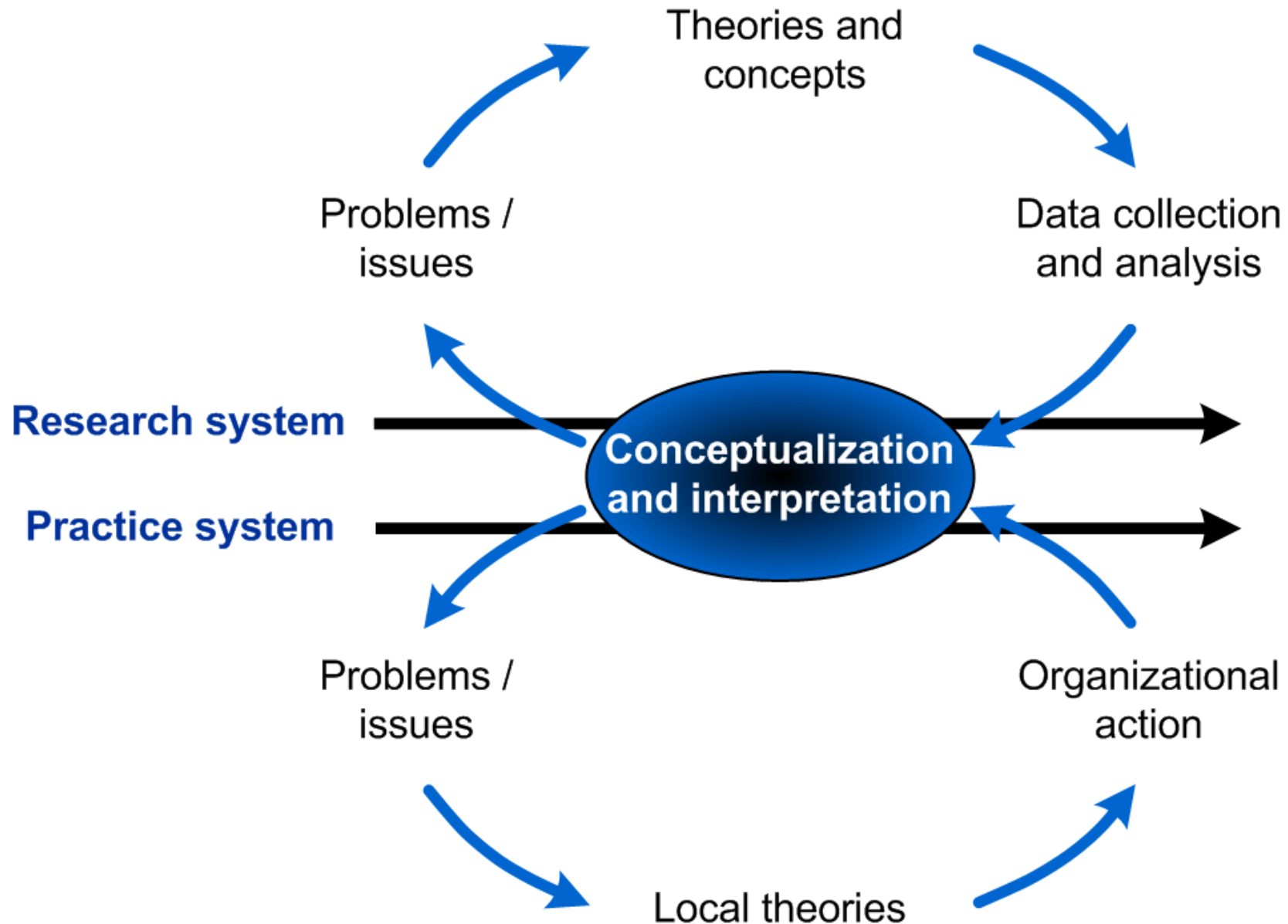
The HTO perspective

- Interactions between humans, technology and organization
- Socio-technical systems
- A systems view

Interactive research approach

- Integrate practitioners in the research process
- Knowledge is created in the interplay
- Methods: participant field observations, interviews, questionnaires, physical measurements, meeting observations, continuous documentation and memorandums from project meetings and workshops, and company documentation

Interactive research



Results

- Diagnostic phase identifying the basis for action
- Development phase of labelling and lighting, physical workplace design, training in work technique and a manual for work organization
- Implementation phase, all developed improvements were implemented at one pilot post office
- Evaluation phase, including data from 30 of the 600 post offices

Reasons for the problems experienced

- Insufficient systems thinking
- Discrepancies in technical design of work tools, planning of physical work areas, organisational arrangements and human prerequisites to perform the work
- Underlying HTO problems and a lack of a participative change process

Discussion

- A need to integrate HTO components into systems thinking
- Collaborative and interdisciplinary research
- The interactive approach contributed through: extensive discussions, regular project meetings, joint ownership of the research process, learning laboratories
- Was there a sufficient critical distance?

Concluding remarks

- Extensive discussions between the researchers and company representatives on the contract plan,
- Articulating the division of roles between researchers and practitioners,
- Regular project meetings as a forum for discussing practical and research issues,
- Being able to shift among various research roles due to changing needs,
- Researchers creating direct opportunities for learning through learning laboratories,
- Being aware of practitioner groups' levels of preparedness and maturity during the course of the intervention process