

Exploring Opportunities of the Information Society

Information Logistics Research Program

executive edition

Dr. Darek M. HAFTOR

(prev. Darek M. Eriksson)

SCIENTIFIC COMMITTEE

Prof. Anita MIRIJAMDOTTER

Prof.em Jan ROSVALL

Centre for Information Logistics

Ljungby, Sweden

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CONTENT

1. Notion of Information Logistics

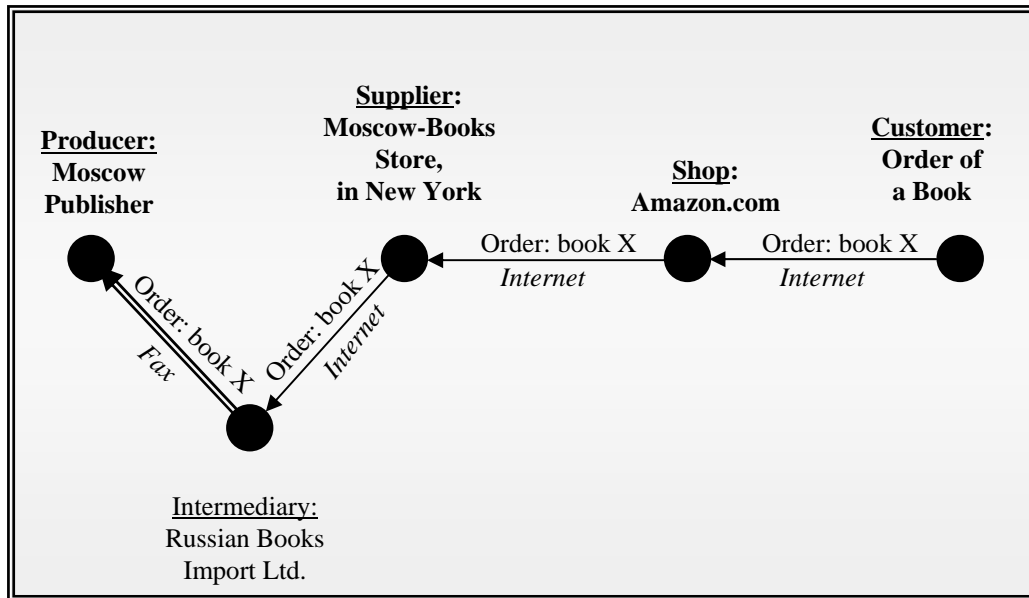
2. Information Logistics Research Program

Conception of Information Logistics

Information Logistics phenomena are empirical and multi-disciplinary

Mathematics
Logics
Physics
Engineering
Psychology
Linguistics
Organisation
Sociology
Business
Economics
Aesthetics
Law
Ethics, etc.

Illustration: Information Flow when ordering of a book



Key components of Information Logistics System

- Information
- Nodes (Information Systems)
 - Source / Sender
 - Intermediary
 - Destination / receiver
- Nodes functions:
 - produce
 - store
 - transfer
 - transform protocol
- Information Channels
- Information Flow Pattern
- Information Transfer Protocol

Information Logistics phenomena require multi-disciplinary inquiry to justify its complexity

Conception of Information Logistics

Scope of Information Logistics

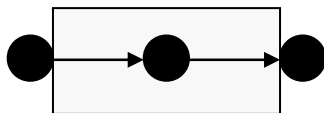
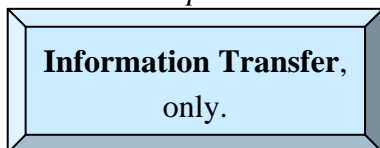
Short Definition

Example of Practical Concern

Pro & Con

Too limited Notion of Information Logistics; typically assumed by international IL Research: it addresses the information delivery only

A narrow scope



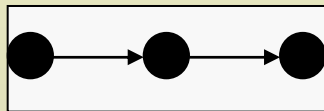
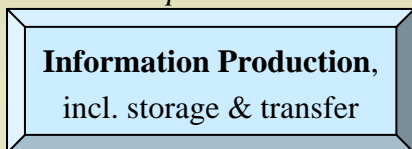
Information Logistics encompasses only the information transfer, including required processes, structures, conditions, etc.

Google's Search Engine that identifies on the Internet the defined information and then delivers it on request

- + Narrow scope easier to research
- + Correlates closer the research-scope of the current international IL-research
- Misses the full potential of information oriented research opportunities
- Information transfer may seldom be completely isolated from other information processing functions
- Fewer potential stakeholders for collaboration

Preferred Notion of Information Logistics: addressing the complete flow of information from its generation, throughout its delivery channels to its reception and utilisation

A broad scope



Information Logistics encompasses the information production, storage, delivery, and its utilization, including required processes, structures, conditions, etc.

Google's Information Production Software, such as language translations, earth maps, etc.

This both produces needed information and then transfers it to the needing actor.

- + Addresses the full potential of information oriented research opportunity
- + Offers many potential collaborators
- Broader scope may require more resources or alternative delimitations
- May be understood as overlapping with other disciplines

Conception of Information Logistics

Information Logistics Phenomena regards those arrangements of objects and processes that conduct generation, transfer, transformation, storage, reception and utilisation of information.

These phenomena can be natural – e.g. information transfer in atoms or in human neural systems – or artificial and social – e.g. the ancient Greek messenger who run from Marathon to Athens, the Viking Rune Stone, or and the Internet. The presents concern focuses on the latter kind.

Information Logistics Discipline is the academic intellectual domain that utilises a set of methods of inquiry from various academic areas, such as natural sciences, engineering studies, and social and behavioural sciences, in order to study existing Information Logistics Phenomena as well as the processes that design and develop such phenomena.

Information Logistics phenomena are necessarily inherent in all social and human affairs, this is so since as soon there are two or more people there merges information exchange

CONTENT

1. Notion of Information Logistics

2. Information Logistics Research Program

Mission the Research Program

**This Research Program aims
to guide the constitution and dissimilation of scholarly knowledge:**

- about current Information Logistic phenomena and about technology (procedures & artefacts) that produce new purposeful Information Logistics phenomena;
- that manifests value for the various regional, national and international stakeholders, such as businesses, governmental, and non-profit organisations, and for individual human beings.

Strategic Objectives of the Research Program

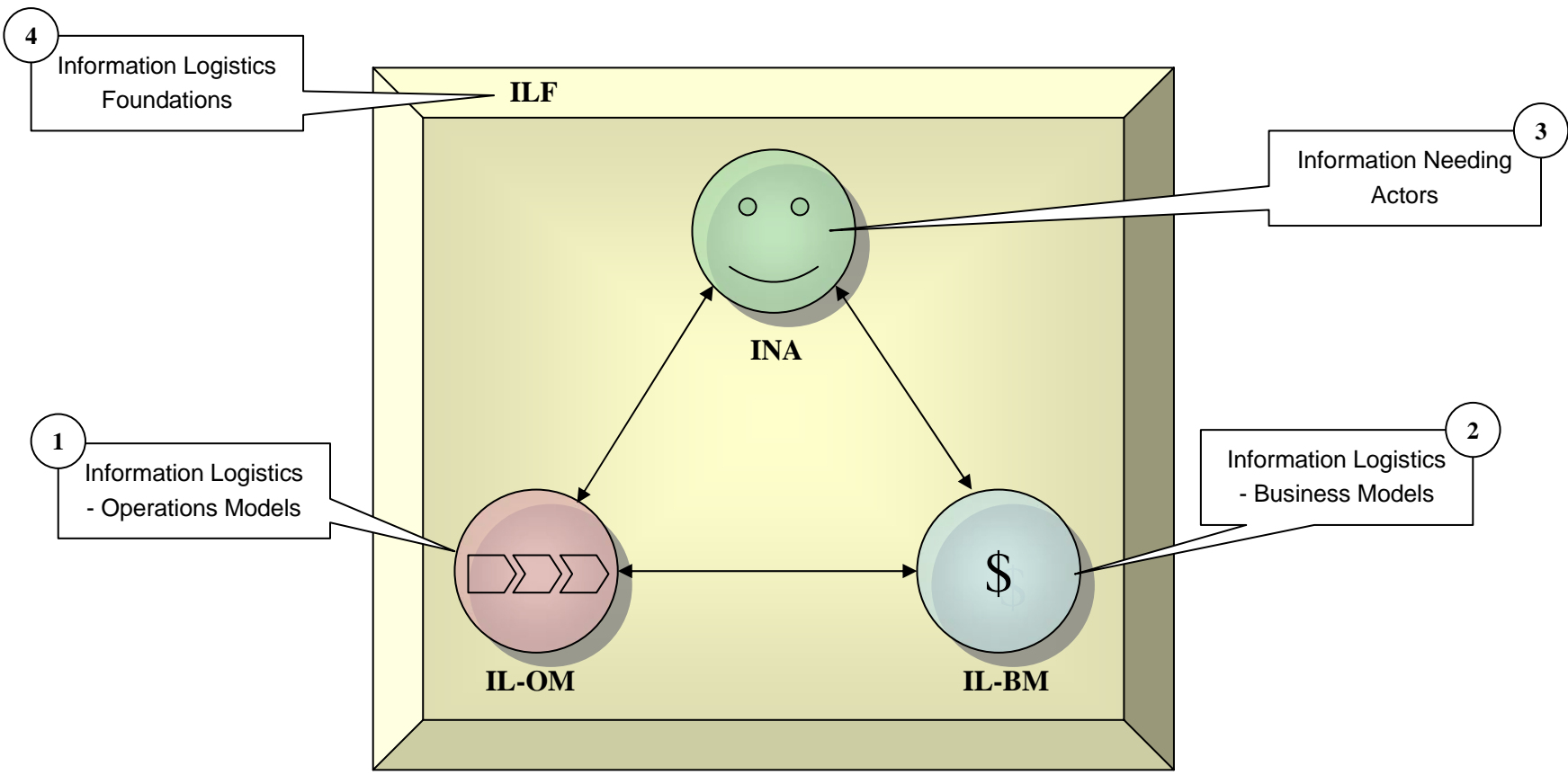
This Research Program aims:

to produce IL-knowledge that contributes to an increased productivity of organisational and inter organisational operations.

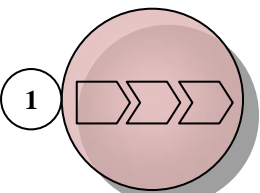
to produce IL-knowledge that contributes to an increased sustainability of human affairs and its nature.

to produce IL-knowledge that contributes to an increased human wellbeing.

Four Research Frontiers Proposed

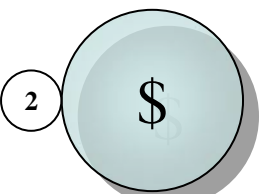


Four Research Frontiers Proposed



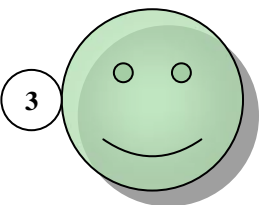
IL-OM

- Information-Logistic Operations-Models addresses the functionality, dependencies and productivity for human-activity-systems, such as the Value Chains and Life-Cycles.
- Ex: What limitations is the lack of needed information imposing upon the maintenance of a machine?



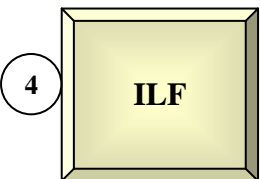
IL-BM

- Information-Logistic Business-Models addresses situations where information exchange generates financial transactions.
- Ex: Which kinds of actor-configurations, where exchange information gives rise to financial transactions, exist currently?
- Ex: how can the current IL Business Models be applied in a novel manner to conventional industries? -e.g. maintenance of a machine!



INA

- Information Needing Actor addresses the need for how to provide an actor with the right information at the right time, place, format, etc.
- Ex: what are the generic causes of the lack of information in complex human affairs, such as the 'Tsunami' and 'Challenger' disasters?
- Ex: how can machine-based context-awareness enable to deliver the needed information?



- Information Logistics Foundations addresses the key foundational concepts and assumptions of Information Logistics and its research.
- Ex: What is notion of 'information' is needed for Information Logistics? How is it possible to have information about information?
- Ex: what is the relation between data-and-information, and information-and-organisation?

About this Document

- **Context:** The Centre for Information Logistics, Ljungby, Sweden, aims to develop long-term research activities in the area of Information Logistics; a central component for such an endeavour is a Research Program aimed to guide such research.
- **Content:** This document contains a summary of a Research Program for Information Logistics Research, to be hosted by the Centre for Information Logistics, Ljungby, Sweden
- **Purpose:** The document aims to inform and guide research activities at the Centre for Information Logistics.
- **Version:** Executive Edition - 18-12-2009
- **Producer:** *Dr. Darek M. HAFTOR, (Darek M. Eriksson);* senior researcher, Växjö University
- **Owner:** The Centre of Information Logistics, Ljungby, Sweden,
Dr. Magnus HELLGREN, Managing Director
- **Scientific Committee:** Reviewed & approved by:
 - Professor Anita MIRIJAMDOTTER, Växjö Univ., Sweden
 - Professor em. Jan ROSVALL, Chalmers Univ. of Technology & Göteborg Univ., Sweden
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