

A blue presentation slide cover with a vertical bar on the left side containing a repeating pattern of the Esprit logo. The main text is centered and includes the title, author, and date.

2nd Review of KnowNet - ESPRIT Project 28928

**INDIVIDUAL KM:
The MailTack Tool**

M. Bettoni - FHBB

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INDIVIDUAL Knowledge Management (IKM)

- FHBB's perspective:

1. TACIT knowledge is ONLY in the *individual knower*
2. IKM = *necessary condition* for successful OKM
3. IKM ignored & neglected by OKM theory & practice
4. **OKM Need:** Critical analysis of *emerging* IKM paradigm
5. **FHBB's solution**
 - 5.1 *Knowport*: Model for IKM in the context of OKM
 - 5.2 *MailTack*: Pilot tool for experimenting with IKM



KnowPort model: Individual KM = OKM

1. Critical factors for leveraging knowledge:
 - 7 Individual's factors = 7 Organisation's factors
 - Identification (mapping), acquisition, development, sharing, application, storage of knowledge
 - goals definition, achievement evaluation
2. Central issue: "*If I only knew what I know*"
 - NOT creating new individual knowledge
 - BUT figuring out what the individual already knows

MailTack's Objectives

- **ESPRIT call:**
 - support individuals in developing their learning capabilities
- **MailTack tool:**
 - support individuals in becoming more efficient and effective in "knowledge work" = working with Organisational KM
 - support organisations in gaining new insights on how IKM can contribute to the success of OKM
- **Unique Selling Proposition:**
 - unique visibility and transparency of knowledge work

Support Knowledge Work

- Central issue when *managing*:
 - figuring out what the individual ALREADY knows
 - ➔ Individual Knowledge Assessment (IKA)
- Salient properties when *doing*:
 - communication with other professionals
 - ability and willingness to share knowledge
 - ➔ Persistent Business Discussions

The MailTack Solution

- Build an individual *discussion knowledge base*
 - makes discussion items permanent
 - evolving, individual resource ("individual memory")
- Capture discussion items in a *knowledge schema*
 - specify elements & connections
- Visualize discussion knowledge
 - navigate and exploit the knowledge base graphically

MailTack's Related Work

- MIT : "Visualizing Conversation"
- Judith Donath et. al., June 1999, MIT Media Lab
- IBM: "Conversation: Knowledge Work Made Visible"
- Thomas Erickson, 2000 (!), T.J. Watson Research Center
- Natrifical LLC: "The Brain" tool
- "use your computer the way you use your mind – intuitively"
- IBM: "KnowledgeX" tool
- Version 6.1 announced June 1999: "uses knowledge maps to represent concepts and their relationships"
- DFKI: "KARAT" tool - KNAS: "PKM" tool

MailTack's Technology

- Combines 3 "killer applications" into one integrated tool:
 1. *Discussion Databases and E-Mail*
- contents imported as ASCII texts
 2. *Mind Mapping paradigm*
- for capturing and visualising discussion knowledge
 3. *ODBC Relational Database*
- for storing and accessing texts and structures

Individual Knowledge Assessment (IKA)

- How does MailTack support an IKA ?
 1. Creating a discussion knowledge base requires REFLECTION on what I know
 2. This reflection results in KNOWLEDGE of what I know
 3. This knowledge can be mapped in MailTack as:
 - *constellations*: flat network of associated categories
 - *categorizations*: categories of a text segment
 - *streams*: threads of text segments

Persistent Business Discussions (PBD)

- T. Erickson, IBM (op.cit.):
 - "It is through conversation that we create, develop, validate and share knowledge"
 - "primitive and cumbersome" E-communication
 - "Substantial shortcomings":
 - managing threads
 - keeping conversation on track and coherent
 - finding old messages with crucial information, etc.

Persistent Business Discussions (PBD)

- How does MailTack support PBD ?
 - structure
 - link
 - categorize
 - visualize
 - navigate
 - search
 - annotate

Professional skills promoted by MailTack

- Become more efficient and effective in:
 1. accumulating relevant knowledge bits
 2. accessing those bits of knowledge, much of which one does not immediately remember
 3. consulting another person about a particular question
 4. sharing the accumulated, structured knowledge
 5. mapping and storing knowledge in a more manageable way

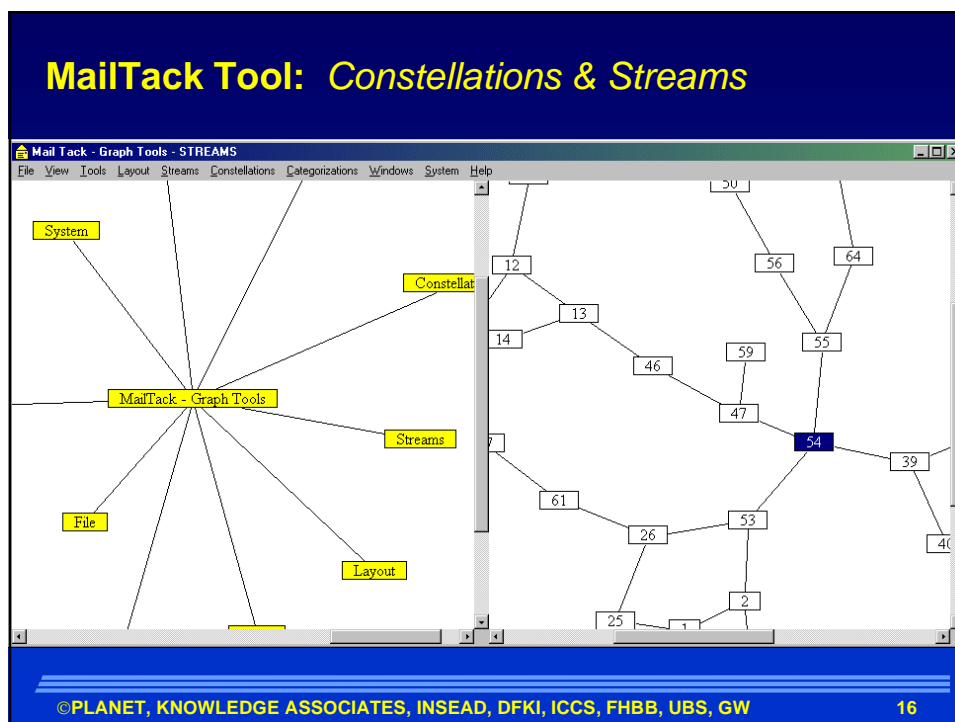
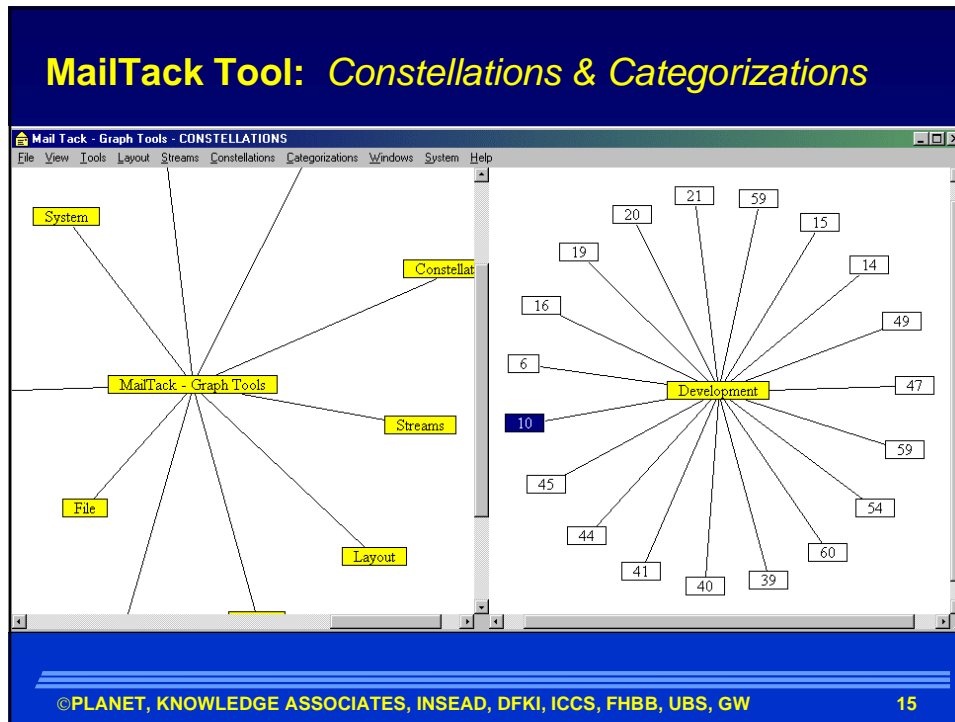


Collaborative Sharing of Expertise

- MailTack makes it *easier* to answer questions like:
 1. Where is particular ~PA of situation ~SI specified ?
 2. Did I discuss problem ~PR before ? When ?
 3. How did other people approach problem ~PR ?
 4. Was my question ~QU answered or is it still pending ?
 5. Which arguments were use to support position ~PO ?
 6. Who raised issue ~IS and used argument ~AR ?

MailTack Tool: Graph Tools Window

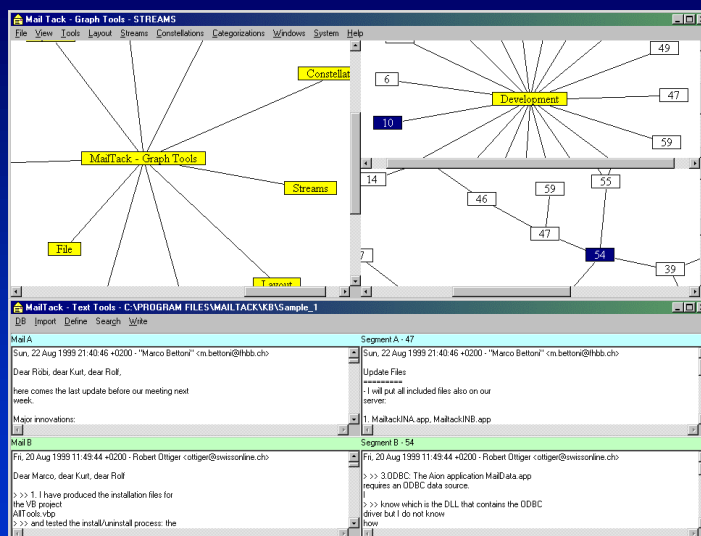
- STREAMS graph
- CONSTELLATIONS graph
- CATEGORIZATIONS graph
- Overview windows (symbolic scroller)
- Circular, symmetric, hierarchical layout



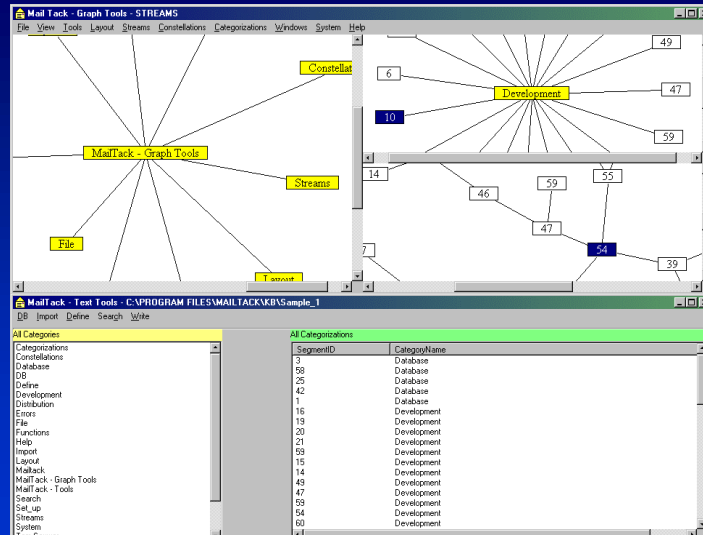
MailTack Tool: Text Tools Window

- DBMS tool
- IMPORT tool
- DEFINE SEGMENTS tool
- SEARCH tool
- WRITE tool

MailTack Tool: Graphs & Texts



MailTack Tool: Graphs & Search



Technical Integration with KnowNet

- MailTack manages an *individual* resource:
 - ➔ requires an *individual* architecture = *local* application
- Starting MailTack from KnowNet Navigator
 - individual path stored in individual profile
- Importing documents from KnowNet's Discussion Databases
 - already possible through saving as local *.txt file
 - improvements to be discussed

Conceptual Integration with KnowNet

- Supports a central issue and some salient properties of knowledge work *in general*
- Provides unique visibility and transparency of knowledge work
- Conceptually consistent with the KnowNet framework
- Implements the integration of the process and object view

FHBB's contribution to KnowNet: Summary

- Need
 - ➔ OKM needs to *experiment* with IKM
- Goal
 - ➔ development of professional staff's skills for OKM
- *Thinking about this: KnowPort*
 - ➔ Individual KM = Organisational KM
- *Acting for this: MailTack*
 - ➔ knowledge work uniquely visible & transparent