People’s presence and status information as the basis for community knowledge

Takeshi Ohguro,
Sen Yoshida, and Kazuhiro Kuwabara

NTT CS Labs., Kyoto, Japan
“Gleams of People”

proposes a new tool for (tacit knowledge)

- Overview     --- at a glance
- Motivation   --- why is it
- Concept      --- what is intended
- Architecture --- how it is implemented
- Issues       --- to be resolved
Overview
-- Gleams of People at a glance

- Sort of a network communication tool
- “ping” between people
  - with “color” (“mood”) of the sender
  - half asynchronously
- Who cares me?
  / I care you.
  - not only
    Here I am.
    / Are you there?
Motivation (1) -- “tacit knowledge”

current network communication tools
   (Email, Web, chat)
➙ depend on written language: Explicit knowledge
   • problem: e.g., flame wars
   • cause: lack of contexts, ethics, mood, ...
     ▼ shared implicitly: Tacit knowledge

➙ need to help on convey, convert, share tacit knowledge
Motivation (1; contd) -- related(?) researches

communication supports
- not limited to explicit form of knowledge

- Socia, FreeWalk (Kyoto-U)
- Knowledge as Media: CoMeMo-Community (NAIST, U-Tokyo)
- Affective Computing, Tangible Media (MIT Media Lab)

⇒ simple, basic form of tacit knowledge?
- presence and status information
Why presence and status information?

In networked environments,

- People do not share the same time and place
  - chances to pass by tend to be missing
- People merely express the information itself
  - Not so important matter as to talk to
  - but we want some information about
    “No news” (is good news).

- presence and status information for:
  - Who’s caring me? / I care you,
  - Here I am. / How’s life?
Motivation (2) -- for community

presence and status information on the community

- Who’s there, in what status?

- retains the “we-feeling”
- precondition for knowledge sharing

(can help community knowledge as well)
Concept
-- “ping” among people

● “ping” between people (personal agents), with “color” (“mood”) of the sender

⇒ simple and easy transmission for presence and status information only

● sending (with my “color”):
  □ simple action on the circle (person) to be send

● receiving:
  □ the circle gleams with the “color” of the sender

Planned UI
Concept -- half asynchronously

- "repeater" agent:
  - "ping" is stored and forwarded with it, if the receiver is offline
  - presence and status information is valuable during the absence of the user
  - may give users some relief that "ping" is not so disturbing.
Concept
-- why not ICQ (who’s online)?

- We don’t always want to talk to:
  - provide presence and status information itself.
  - not as a precondition for another communication.

- The objective is very (inter-) personal:
  - centered “server” is not desirable.
  - each personal agent should do the job.
Architecture

- Multi-agent system:
  - personal agents and a repeater agent

- Java application:
  - on top of “Shine”
    -- a multi-agent platform for “socialware”

- Current status:
  - Initial graphical components are done.
Issues

- Complete the implementation.
- Verify the assumptions:
  - Do we really not always want to talk to?
  - How the “ping” interpreted actually?
- “Community level” support:
  - Introducing “community agent”
  - Definition of the community and privacy control
- What else for shared tacit knowledge?
- How the interface should be?
Summary

- “Gleams of People”
  - new kind of network communication tool
  - provides presence and status information among people
  - can be a basis for shared tacit knowledge
- “ping” between people
  - with current “color” ("mood") of the sender
  - half asynchronously
  - simple, easy but limited messaging (signaling)
- Multi-agent architecture, using Java