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Support users at their work place

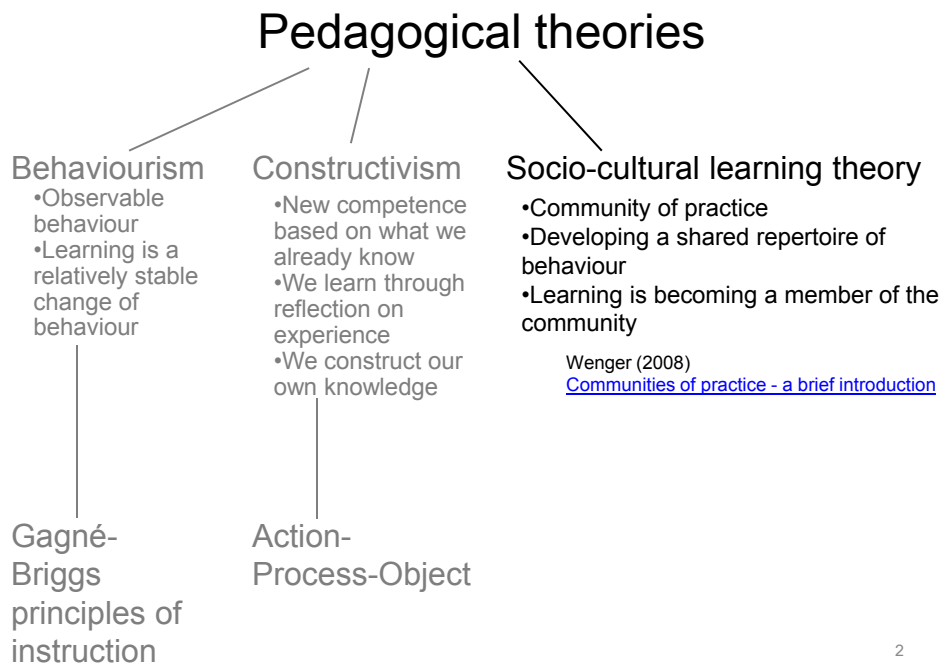
Learning aim

– Able to manage user support and training

• Literature

- Wenger, E. (2008) Communities of practice – a brief introduction
- Lecture note 7. IT support
- Boudreau and Robey (2005) Enacting Integrated Information Technology: A Human Agency Perspective
- Munkvold (2003) End User Support Usage
- van Velsen, Steehouder, de Jong (2007) Evaluation of User Support: Factors That Affect User Satisfaction With Helpdesks and Helplines

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Learning in the organisation

- Setting
 - Shared
 - Domain of interest
 - Practice
 - Could be on / off
 - Patterns of behaviour
 - Learning processes
 - Internalisation
 - Developing common patterns of behaviour
 - Preference to skills (know-how)
 - Not explicit understanding (know-that)
 - Socialisation
 - New people mimic the behaviour of the community
- Providing isolated practitioners with access to colleagues (know-who)

Competence for learning about IT	
• Facts	– Applications
	– Who knows what
• Skills	– Experimental for trying, error and success
	– Social for making relationships with expertise.
• Understanding	– Usefulness
	– Concepts and principles

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IT companies

- Communities of IT-practice
- Developer groups
- Support groups
 - Helplines
 - E-mail groups

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IT departments

- Network administration
- Support
 - Possibly several layers of support
- Keeping track of
 - Users
 - Configuration of their IT system
 - Requests
 - Database on question and answer

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Information officers

- Non-IT professionals
- Data management as core work task
 - accountants keeping the books
 - clerks doing data entry
 - statisticians producing reports
 - archivists storing and retrieving files.
- Groups in central departments
 - Communities of IS practice
- Individuals scattered in the organisation
 - In need of communication with peers
 - in order to participate in a community of IS practice
- Providing support for users
- Teaching users in training courses

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Superusers

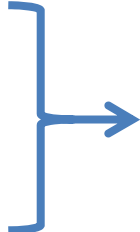
- Specific computer skills
- Helping colleagues
- Main domain different from IT and data
- Participates in the community of practice of their main domain
- Individuals scattered in the organisation
 - In need of communication with peers
 - in order to **also** participate in a community of IT practice

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Superusers in a local health administration

Superusers should

- Be selected amongst
 - People who are frequently asked for help
 - People who have an interest in computing
 - Avoid local managers
- Be well trained in the computer system and also in supporting others
- Have responsibility and resources within their area
- Be included in the planning of support
- Participate in the user training
- Be organized
 - Belonging to a group
 - Sharing experience
 - Receiving updates
- Communicate user requests to the computing personnel
- Communicate system updates to the users



Community of
IT practice

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Users

- Communities of non-IT practice
 - IT a tool for getting their core tasks done
 - Learning of IT of secondary priority

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Public institution in USA

- 3000 employees
- Legacy IS → Enterprise Resource Planning (ERP)
 - Semi finished software covering all functions of a company
 - Tailoring
 - Configuration by parameters designed by the vendor
 - Customisation by adding functionality
 - Efficient data processing
 - Long and costly adaptation
 - Freezes the organizational structure
- Technical installation on time and on budget
- Voluntary training
 - Few attended

Boudreau and Robey (2005) Enacting Integrated Information Technology: A Human Agency Perspective

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Three types of agency

Inertia

- Limited use
- Avoidance
- Superficial

Improvised learning

- Initiated by users
- No predetermined structure, schedule or method

Reinvention

- Compensating for limited knowledge and perceived system deficiencies
- Workarounds
- Using the system in unintended ways

I'm not doing things online yet. I'm by printing off a copy and then I fill it in and then send it through to power users

I can't tell you how many things that we learned, not because of training, not because the trainers knew it, but because somebody figured it out, and it became kind of folk knowledge

On a purchase order, if you find that you have to add money, you can't just go and change the line amount. It's not going to work; something is going to happen and Disbursements won't be able to pay it. So, a workaround we have here is to add an additional line to say "Increase PO by x amount of dollar" just so the dollar amount equals what you need it to be equal.

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Explanation of Inertia → Reinvented use

- Social pressure
 - Managers
 - Power users
 - Peers
- Improvised learning
 - Power users
 - Peers
 - User groups
 - Collections of material
 - E-mail
 - Individual



How does this correspond with theories of learning?

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Training

Transient communities of IT-practice

- Activity where IT constitutes the main domain
- Conversations about IT bring the community of IT practice into being
- Lasting throughout the training
- Several users who work together in training
 - Can continue their IT conversations when back at work
 - Strengthened by conversations with
 - Superusers
 - Information officers
 - IT staff

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Training – the teachers

Teachers

- Information officers
 - Bringing the domain of the information system into the training
- IT support personnel
 - Bringing the technological competence into the training
- Superusers
 - Bringing the users' main tasks into the training

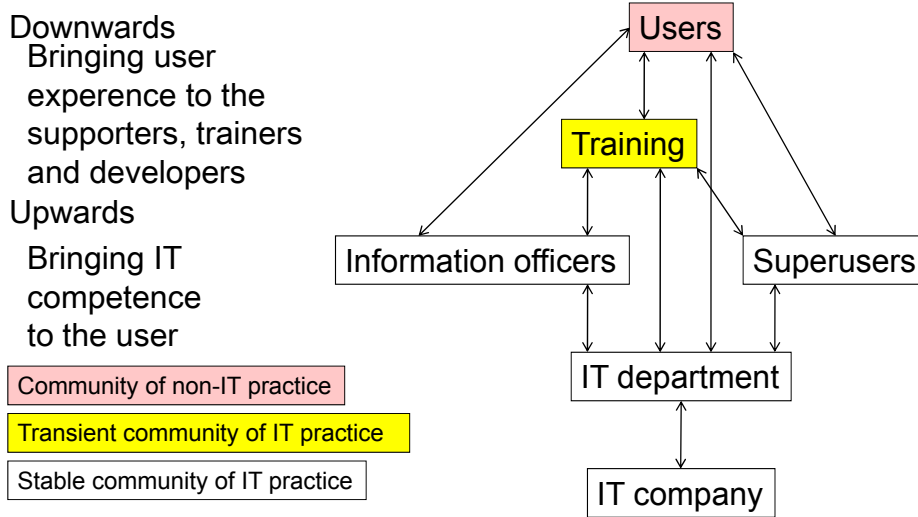
Teachers' main competence

- Representation of the domain
- Technology
- Tasks

*Facts about who knows what
Making relationships with expertise*

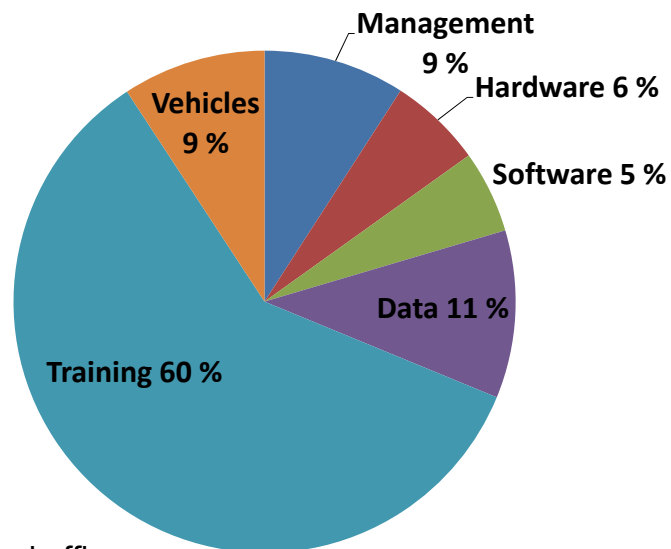
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The IT competence chain



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Cost distribution



- Tanzania
- 150 computerised offices
- 6000 clinics, paper forms

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User support

Supporters

- Information officers
- IT support personnel
- Superusers

Media

- Helpdesks – personal meeting
- Helplines – calling on the phone
- E-mail

On-line help

- Help functionality in the software

Internet-resources

- E-mail lists
- Blogs
- FAQs

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Users' preferences

	Informal	Formal
Personal	Consultation with colleagues	Consultation with IS professionals
Impersonal	External documentation	Internal documentation

Munkvold (2003) End User Support Usage

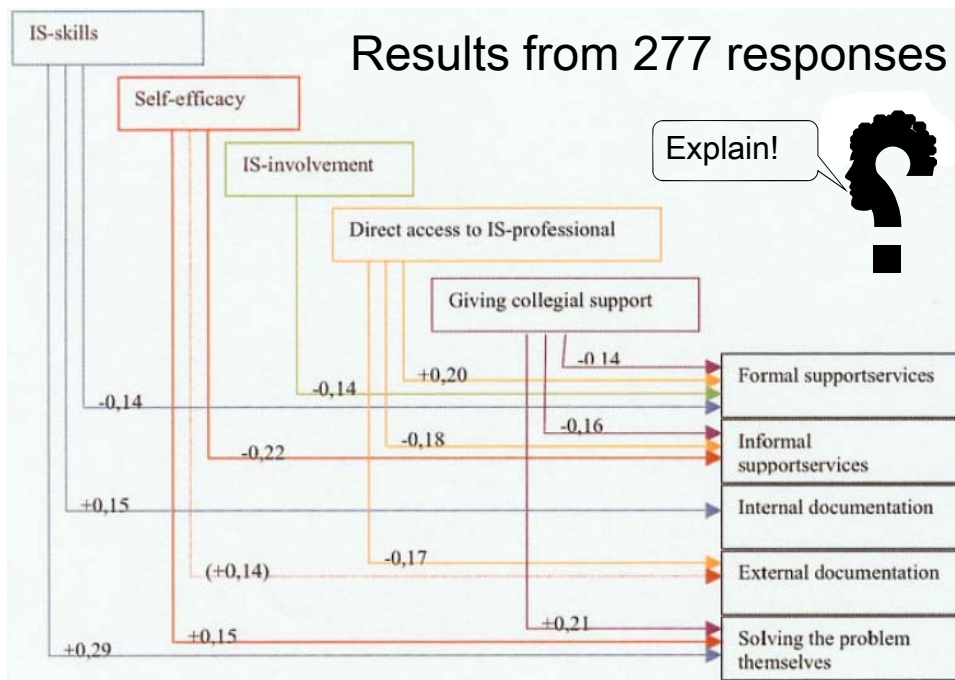
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Users' background

- Skills
 - In what degree a person manages to solve different problems with help from different work-related information system tools
- IT involvement
 - The importance and personal relevancy an end user attached to a computer and the use of it
- IT self-efficacy
 - People's perception of their own capabilities to use computers to accomplish a task

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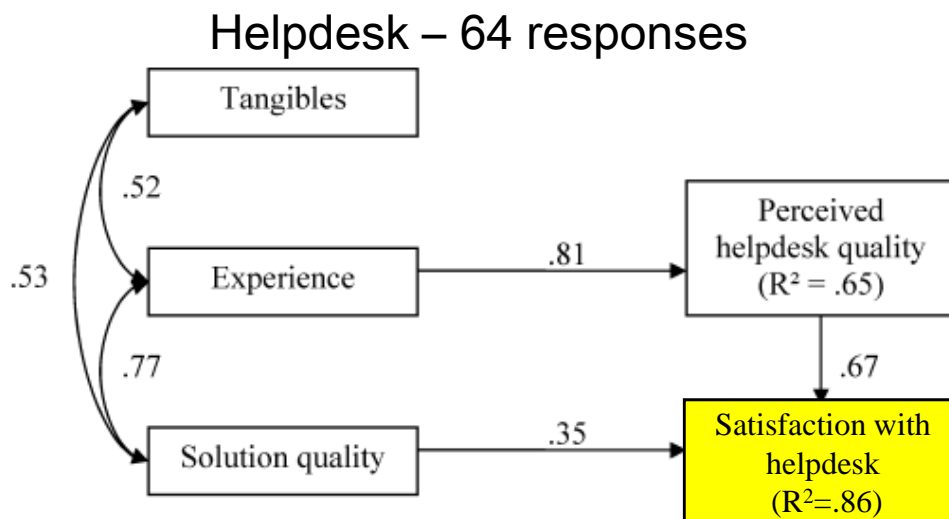
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Helpdesks and helplines

- Helpdesk
 - Personal visit
- Helpline
 - Telephone call for support
- Perceived support quality
 - Tangibles
 - Reliability
 - Responsiveness
 - Assurance
 - Empathy
- Survey of consumer – supplier relations
 - Not in-house support

- Perceived IT solution quality
 - Correctness
 - Promptness

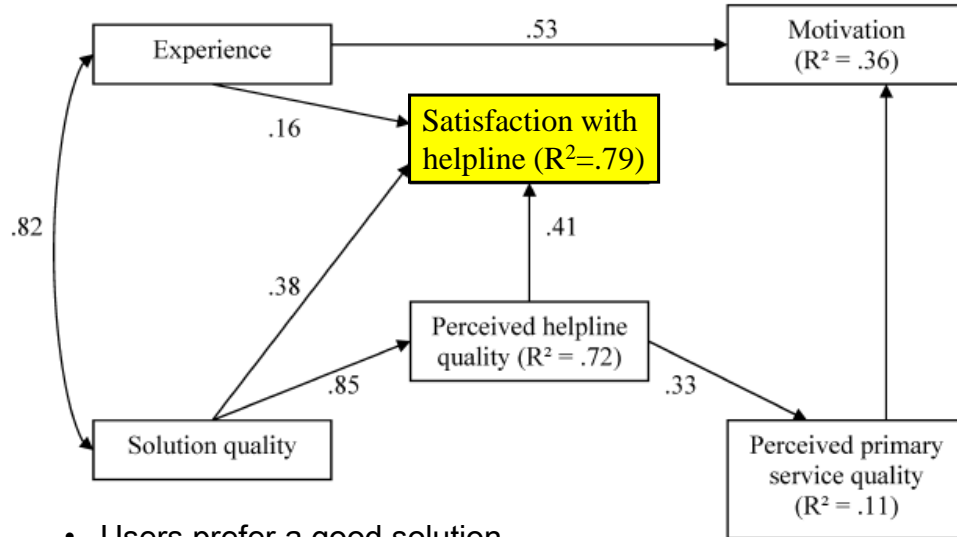
van Velsen, Steehouder, de Jong (2007) Evaluation of User Support: Factors That Affect User Satisfaction With Helpdesks and Helplines⁶¹



- Users prefer a good experience

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Helpline – 242 responses



- Users prefer a good solution
 - Motivation strongly affected by the experience