

## Superusers and IT support

### Learning aim

- Identify groups supporting in IT use
- Specify conditions for these groups
- To be able to
  - Support users
  - Manage IT support
- Basis for Assignment 3

### Superusers

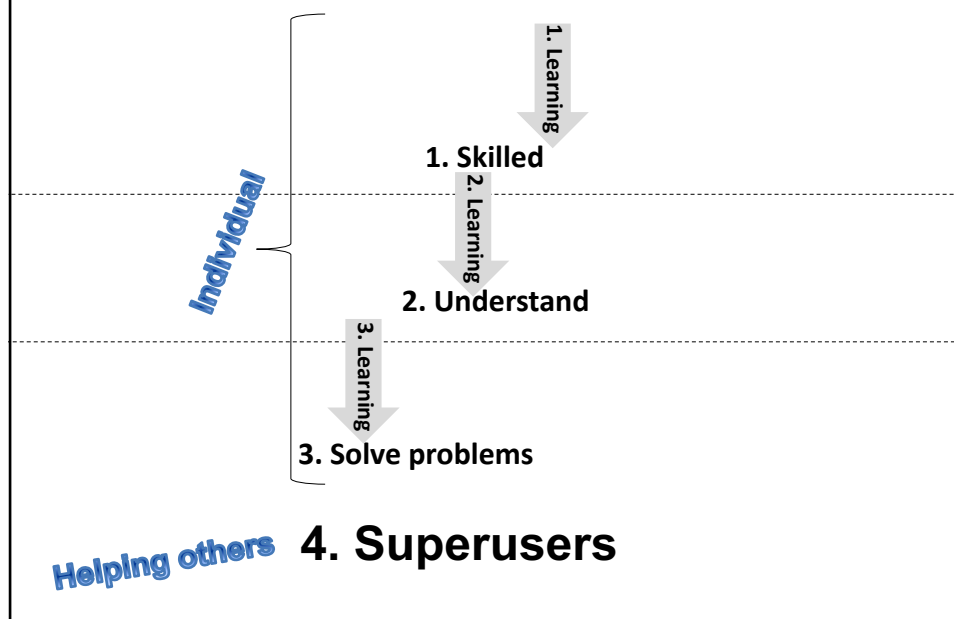
- Chapter 11
- Bjørge et al. (2015) [Training Mentors of Health Information Systems Through eLearning](#)
- Gallivan, M., Spittler, V. & Koufaris (2005) [Does Information Technology Training Really Matter? A Social Information Processing Analysis of Coworkers' Influence on IT Usage in the Workplace.](#)
- McNeive (2009) [Super Users Have Great Value in Your Organization](#)

### IT support

- Chapter 12
- Bruton (2002) [How To Manage The IT Helpdesk - A guide for user support and call centre managers](#) chapter 23 & 27
- Iden & Eikebrokk (2013) Implementing IT Service Management: A systematic literature review
- Munkvold (2003) End User Support Usage
- Santhanam, Seligman, Kang (2007) Postimplementation Knowledge Transfers to Users and Information Technology Professionals

1

## From individual to organisational learning



## IT users

- Shared repertoire of practice
  - Carrying out activities in their business
  - IT
    - tool for getting their core tasks done
- Expertise on fitting IT in business
- Learning of IT of secondary priority
  - ... or even lower



3

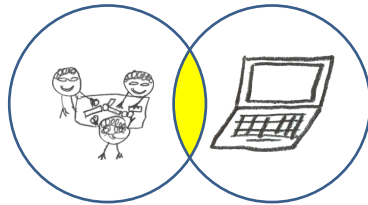
## IT personnel

- IT departments
  - Network administration
  - Support
    - Possibly several layers
  - Keeping track of
    - Users
      - Configuration of their IT system
    - Requests
      - Database on question and answer
- IT companies
  - Developer groups
  - Support groups
    - Helplines
    - E-mail groups



4

## Superusers



Double affiliation

IT  
and  
Users

Possibly also their own  
Superuser group

*Not necessarily the same as  
users with administrative rights  
on the system*

5

## Interactions between groups

### Boundary interactions

- Common activities

### Examples

Teaching

Support

### Boundary objects

- Object making sense to more than one group

User interface

Instruction sheets

### Broker

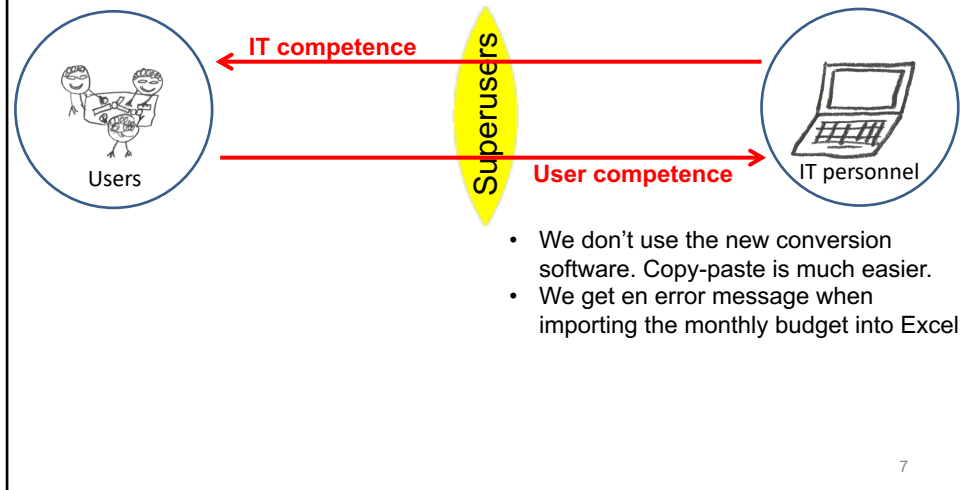
- Member of two groups
- Can introduce practice from one into the other

Superuser

IT + users

6

## Superusers' roles in exchange of competence



## Scaffold for superusers who guide users

1. Users learn more by operating the computer themselves than by a trainer demonstrating on the user's computer.
2. If a trainer takes over the keyboard, the user may feel stupid and his self-efficacy can be lowered.  
→ Make the user use the keyboard and mouse, **don't** take over.

Bjørge and Jønsson (2015) Cultivating local champions for mentoring colleagues through integrated e-learning within District Health Information System: A quasi field experiment in Malawi. Master thesis. Department of Informatics, University of Oslo

Scaffold for **superusers** for preparing before guiding a colleague

## 6. Overview of your data – Dashboard

### Prerequisites

Before you start guiding a user on Dashboard, you need to prepare some tables, charts etc. that the user can add to the Dashboard.

What is your most important dashboard item?

### Guidelines

Make the user make a graph and store it as a Favorite.

1. Show your most important dashboard item to the user and explain why it is important for you.
2. Make the user explain a strategy for making a dashboard (the idea of collecting exactly these data in the same dashboard)
3. Tell the user that one can make several dashboards for analysis. Make the user add several dashboards.

### Common mistakes

- Users can get confused by the shared dashboard at district level, and the personal (the one you create on your own).
- Users have trouble finding their stored favourites. Make sure that your users names his/hers favourites such that they can remember the name.

9

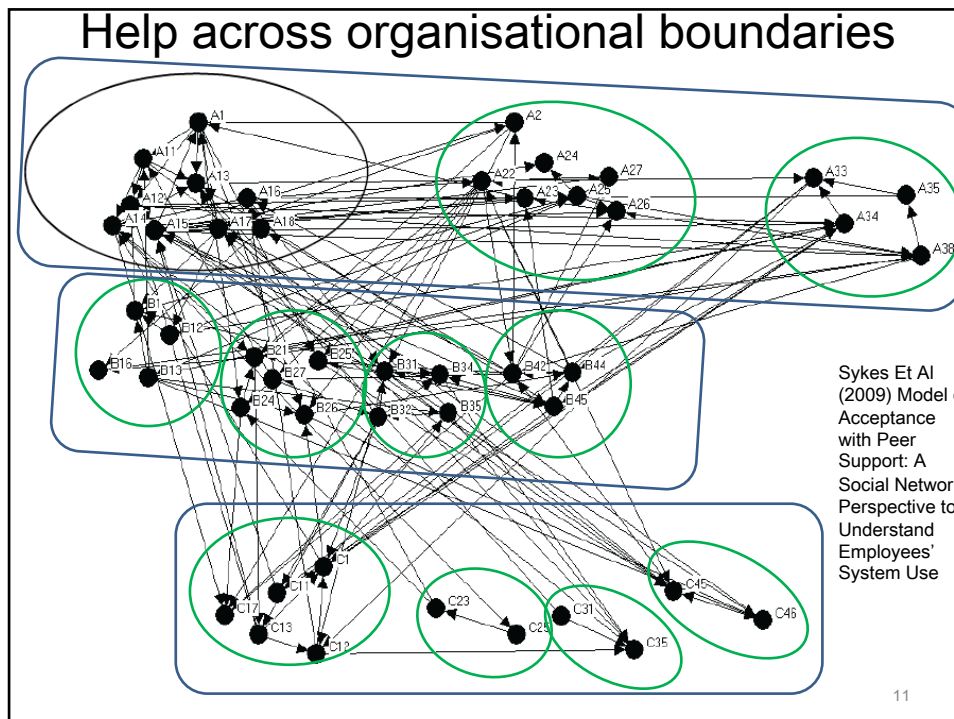
## Emergence of superusers

- 100 staff trained
  - Finish company
- No organised superusers
- 3 month later
  - All had helped out others
  - A few helped more than 10

Sykes Et Al (2009) Model of Acceptance with Peer Support: A Social Network Perspective to Understand Employees' System Use

10





### Organised superusers

Nursing homes in a municipality

**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

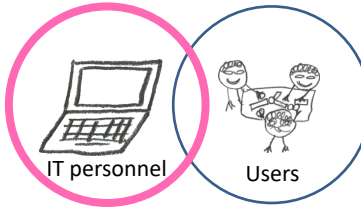
} → **Community of superusers**

Almnes (2001) Superusers: how to improve user support and information flow. Master thesis. Department of Informatics, University of Oslo

12



## IT support



- **Boundary interactions**
  - Common activities
- **Boundary objects**
  - Object making sense to more than one group
- **Broker**
  - Member of two groups
  - Can introduce practice from one into the other
- **Teaching**
- **Support**
- **User interface**
- **Instruction sheets**
- **Superuser**  
IT + users

13

## IT supporter on the phone

- **Understanding each other**

Customer: I'm getting poor quality prints – sort of smudges on them.  
 Troubleshooter accesses knowledge base and selects 'image quality'.  
 Troubleshooter: When it's printing?  
 Customer: Yes.  
 Troubleshooter: OK, do you get this when it's copying?  
 Troubleshooter: So you get it printing and copying and they're like smudges?  
 Troubleshooter selects 'smears and smudges' in knowledge base.
- **Helping the user navigate**

Troubleshooter: OK could you - do you know where the xerographic module is in the machine?  
 Troubleshooter: OK, I'll tell you exactly where it is as there's something I want you to try, just to see if this will rectify the problem for you – if you open the front door of the machine ...
- **Thereafter leading the user through the troubleshooting cycle**

Crabtree et al., 2006

14

## Scaffolds for IT supporters guiding users

### Guiding user on the phone

- Carry out the operations on your own computer and instruct the user accordingly
- Challenge the user to observe precisely
- Make the user talk

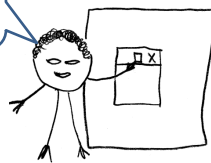
### Learning user terminology

- Listen to the user's terminology
- Add new phrases to your own repertoire of user terminology

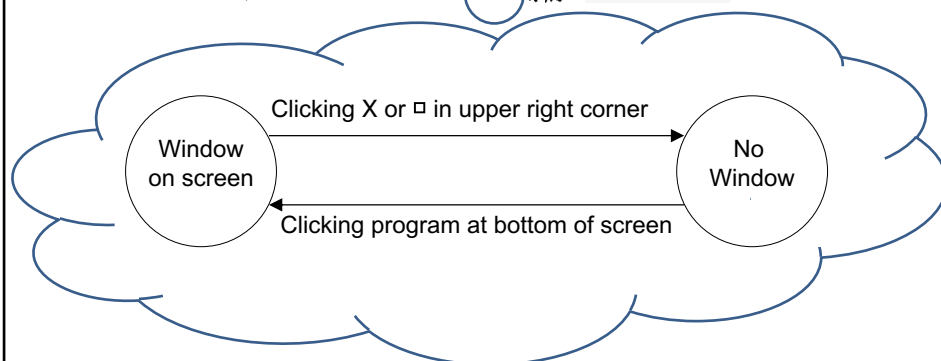
15

## Discrimination error

With this you can minimise the window



Oh, I can use this one also



16



## Scaffolds for IT supporters helping users understand

### Guiding towards understanding

- Observe user reactions
- Compare user reaction with possible conceptions of the IT
- Explain the difference between user misconceptions and an adequate model

### Learning user understanding

- Add a misconception to your repertoire.
- Compare your explanation with possible changes in the user's conception
- Add an explanation to your repertoire.

17

## Support quality

- Support factors vs satisfaction
  - 484 users
  - US university

**Warning!**  
**Large variations**

Rank	Factor
1	Fast response time from system support staff to remedy problems
2	Data security and privacy
3	User's understanding of the system
4	New software upgrades
5	Positive attitude of information systems staff to users
6	A high degree of technical competence of systems support staff

- Quality of training documentation received the lowest score  
Shaw et al., 2002

18

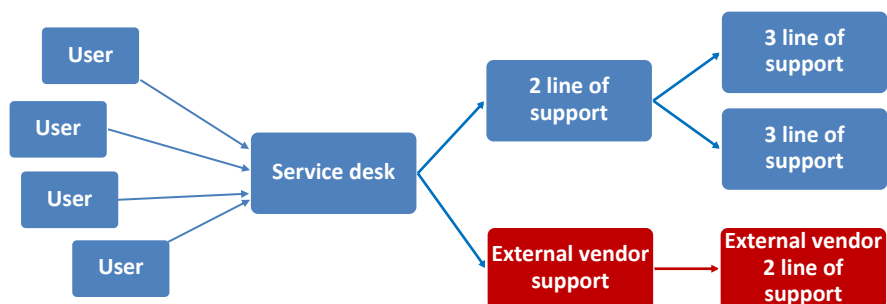


## Improve support quality

- Organise one service desk for all user requests
- Set a target for response time
- Track requests
- Learn from previous requests
- Select appropriate staff

19

## Service desk – single point of contact



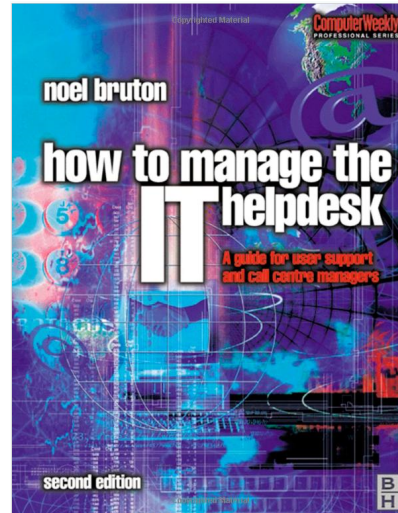
- Improves
  - User satisfaction
  - Response time
    - Iden and Eikebrokk, 2013
  - More success in larger companies
    - Kanapathy and Khan, 2012

20



## Criteria for selecting support staff — support managers' view

- Patience
- Assertiveness
- Thoroughness
- Enthusiasm
- Responsibility
- Technical knowledge
- Empathy
- Communicative ability
- Works well under pressure
  - Bruton, 2002



21

## Summary

8. Identify, organise, authorise and cultivate superusers.
9. Include superusers as trainers and champions for new IT systems.
10. Organise one service desk for all user requests with service minded staff.

22