Management in High Tech Organisations

### **Management in High Tech Organisations**

Concentration on science, technology, tools let forget about the essential



#### **Motivation**

employees come highly motivated from education

Who

demotivates

them?

(university,...)

#### How to motivate:

- Give tasks according to abilities
- Specify goals not hand moves
- The employee is responsible for his work (conflict: responsibility <-> specified procedures)
- Value trust over control

# **Specialities of SW-development**

creative work – ideas are crucial



It is done the first time

research -> knowledge development -> functioning product

- Invisibility of work progress and results ("90% ready")
- Who can I tell progress?
- "Think faster!" does not work

## **Specialities of SW-development**

- Insecure (data)base for planning traditionally: 1m2 family house costs...
- Rapid innovation / insecure basics (everything changes and often works only partially)
- Complexity of the tasks
   (e.g. the whole logic of a production process)
   mechanic becomes simpler, complexity goes to SW

Traditional thinking:

Boss knows everything best and solves the most difficult problems

High Tech:

Developer is a specialist and often knows more in his field than his boss

Boss is coach of the employee

He helps him to deploy his skills

## **Management in High Tech Organisations**

Employee is responsible for his work
(Conflict: responsibility <-> specified procedures)
The manager is responsible for the result

Trust versus control

Selecting the right person for the task Check of the (interim) results Contracting

Most frequent reason for quitting a job: bad leadership / poor behavior of manager

#### **Soft facts: communication**

- Level of communication
- Level of relationship
- Positive characteristics
  - Empathy
  - Openness
  - Esteem
- Positive attitude to people

### SQZ Creative Work

- Creation of an idea in the head (to be in flow)
   new set up after an interruption (phone call, door)
   takes ¼ hour
- No fear, errors have to be allowed
- Free space for creative work
- Communication also informal e.g. in tea kitchen

### Tools: e.g., brainstorming:

develop and collect many ideas to solve a problem in a meeting without criticizing it in the first round. Each idea, even a joke, may initiate an other idea. Afterwards explain and criticize.

# SQZ Development method or process

Relationship creative work to routine work (10% idea, 90% sweat / routine)

- Nothing goes without an idea
- Weak ideas lead to bad results or laborious tasks
- The best idea does not lead to success when routine processing fails
- Methodical process provides space for creativity
- Methodology without spirit → bureaucracy

## **Different world views**

Mechanistic world view	Holistic-systemic world view
Hierarchy, strict structure	Networks, processes
Mechanistic world view as reference	Living organism as reference
Manager is maker	Manager is coach
Hard thinking, logic, thinking in terms of consistency (simple messages)	soft thinking, psycho-logic (complex, ambiguous and interpretive messages)
Organisation other-directed	Self organisation
Exert pressure	Let thrive, release energy
Structure	Process
Cause – effect thinking	Thinking in terms of interaction
Right / wrong evaluation	Assessment of functionality
Planned change (static equilibrium)	Balance between change and preservation

### Maslow's pyramid of needs

