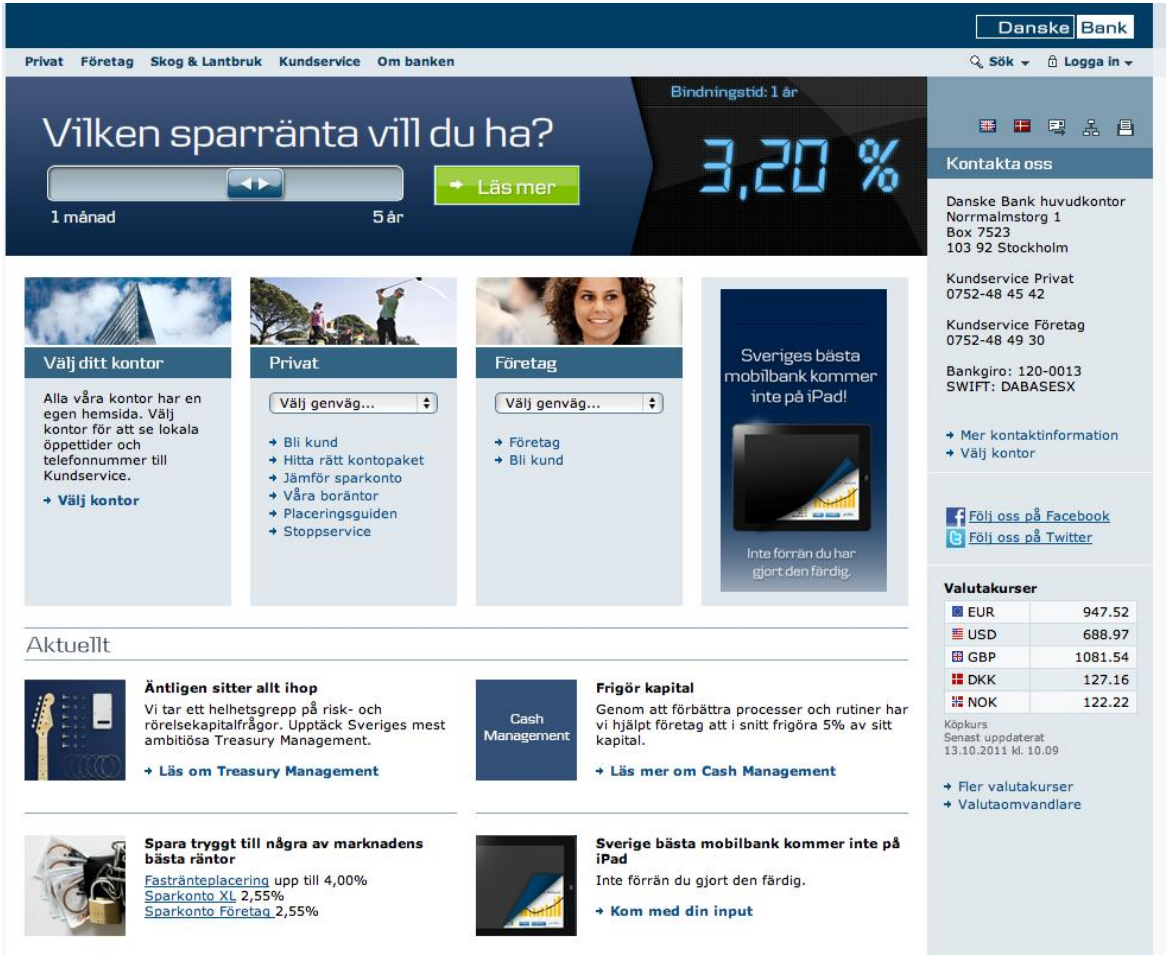
What is the Mission of a Software Developer?

The understatement of the day:

Software is getting ever more important in our societies!

The bank yesterday…

... and today


Danske Bank
Privat
Företag
Skog & Lantbruk
Kundservice
Om banken
Sök
Logga in
Vilken sparränta vill du ha?
Läs mer
1 månad
5 år
Bindningstid: 1 år
3,20 %
Kontakta oss
Danske Bank huvudkontor
Norrmalmstorg 1
Box 7523
103 92 Stockholm
Kundservice Privat
0752-48 45 42
Kundservice Företag
0752-48 49 30
Bankgiro: 120-0013
SWIFT: DABASESX
Mer kontaktinformation
Välj kontor
Välj ditt kontor
Alla våra kontor har en egen hemsida. Välj kontor för att se lokala öppettider och telefonnummer till Kundservice.
Välj kontor
Privat
Välj genväg...
Bli kund
Hitta rätt kontopaket
Jämför sparkonto
Våra boräntor
Placeringsguiden
Stoppservice
Företag
Välj genväg...
Företag
Bli kund
Sveriges bästa mobilbank kommer inte på iPad!
Inte förrän du har gjort den färdig.
Följ oss på Facebook
Följ oss på Twitter
Valutakurser
EUR 947.52
USD 688.97
GBP 1081.54
DKK 127.16
NOK 122.22
Köpkurs
Senast uppdaterat
13.10.2011 kl. 10.09
Fler valutakurser
Valutaomvandlare
Aktuellt
Äntligen sitter allt ihop
Vi tar ett helhetsgrepp på risk- och rörelsekapitalfrågor. Upptäck Sveriges mest ambitiösa Treasury Management.
Läs om Treasury Management
Cash Management
Frigör kapital
Genom att förbättra processer och rutiner har vi hjälpt företag att i snitt frigöra 5% av sitt kapital.
Läs mer om Cash Management
Spara tryggt till några av marknadens bästa räntor
Fastränteplacering upp till 4,00%
Sparkonto XL 2,55%
Sparkonto Företag 2,55%
Sverige bästa mobilbank kommer inte på iPad
Inte förrän du gjort den färdig.
Kom med din input

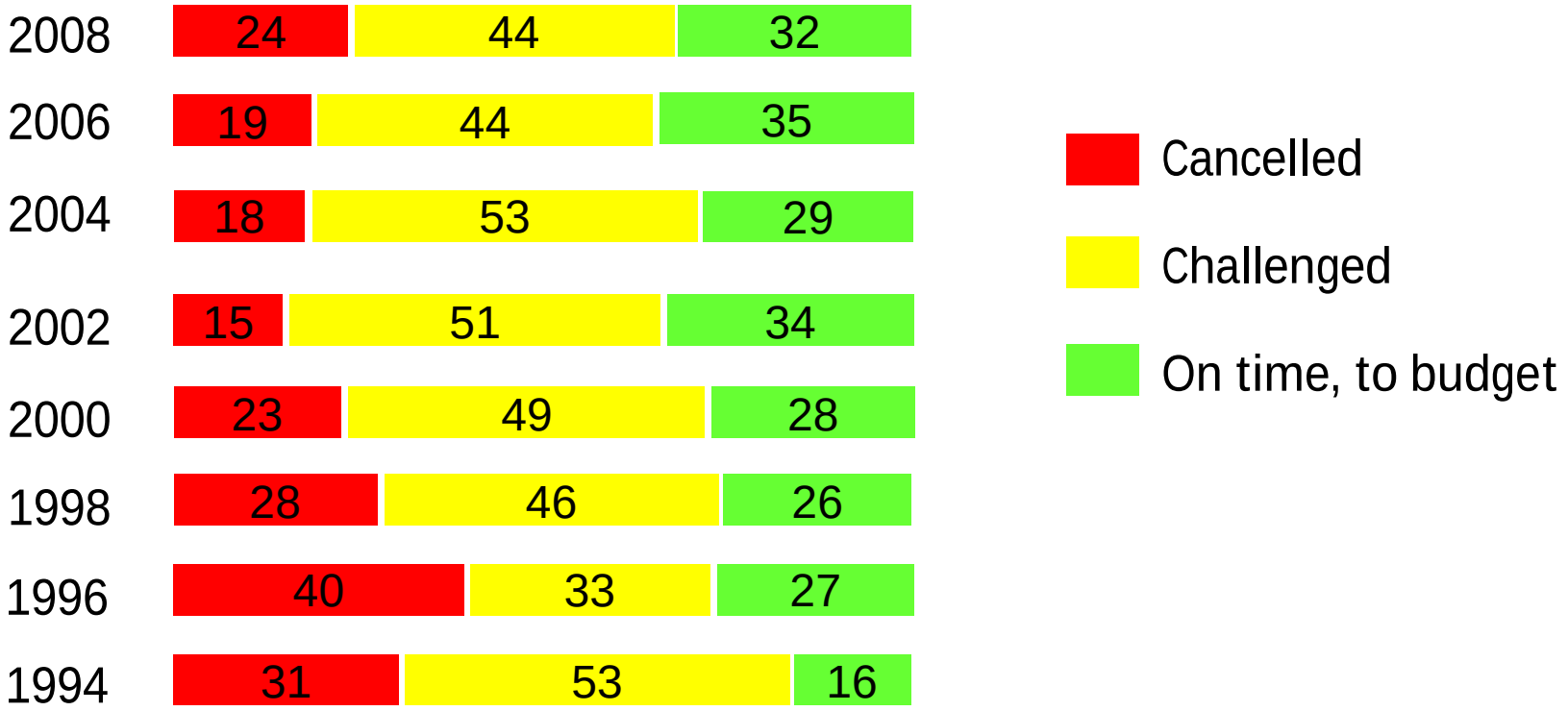
IT Application development in USA, 1994

$250 billions per year on 175.000 projects:

31.1% cancelled
52.7% cost overrun by >189%
16.2% on time, to budget

(Source: CHAOS Report 1995, Standish Group International Inc.)

Track record of software projects



(Source: CHAOS Report, Standish Group International Inc.)

Project challenged factors

Lack of User Input	12.8%
Incomplete Requirements & Specifications	12.3%
Changing Requirements & Specifications	11.8%
Lack of Executive Support	7.5%
Technology Incompetence	7.0%
Lack of Resources	6.4%
Unrealistic Expectations	5.9%
Unclear Objectives	5.3%
Unrealistic Time Frames	4.3%
New Technology	3.7%
Other	23.0%

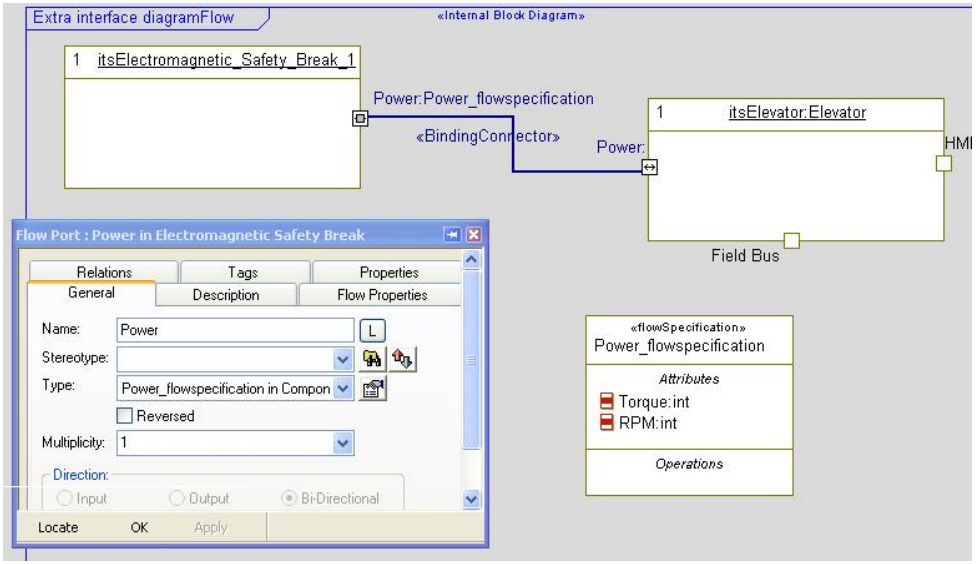
(Source: CHAOS Report 1995, Standish Group International Inc.)

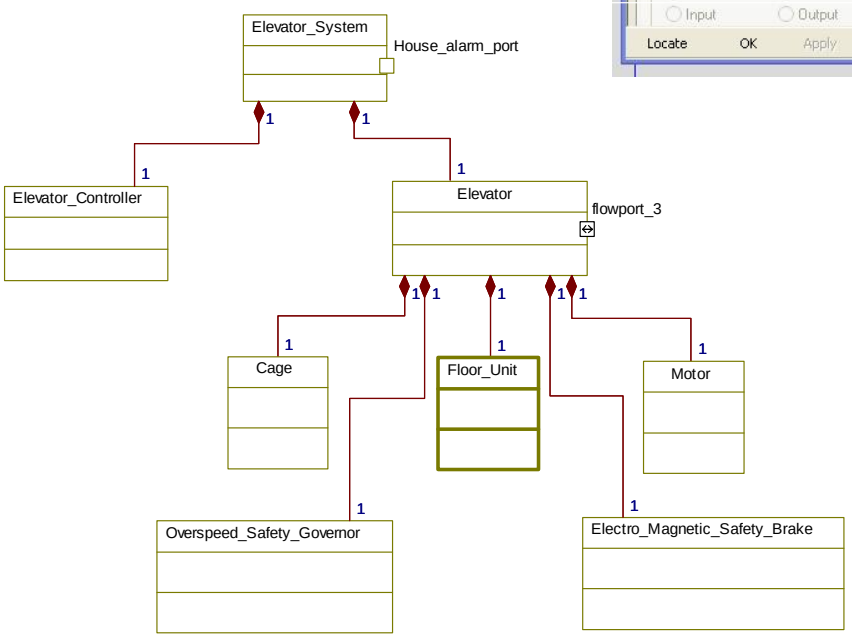
Theme park development

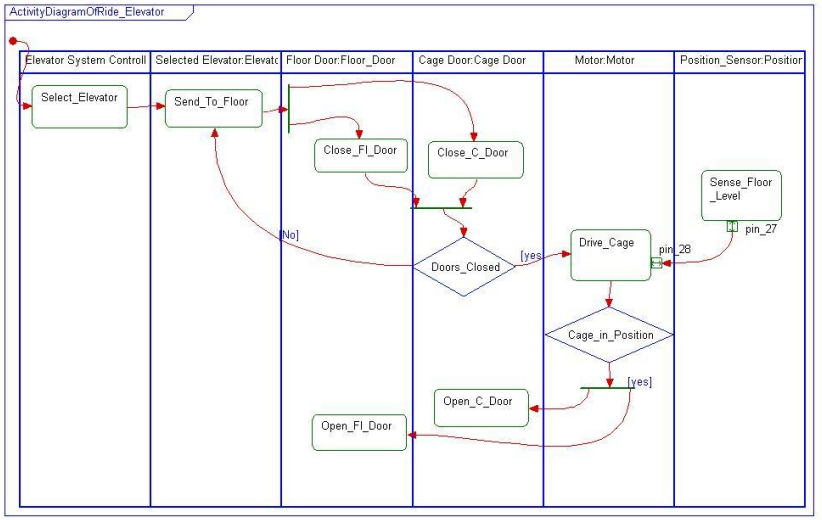
The truck veers off the road, bounces down the side of the hill, ends up in the gully then drives off down an old riverbed. The path down the hill looks like its never been driven on and the riverbed looks like a real dry riverbed full of big rocks. Can you make the ride smooth, not too jerky but bouncy?

Question asked of an engineer at Walt Disney Studios

Model Based Systems Engineering ...







How do we value the user?

#1

How to Invent a Usable Fighter

The Gripen fighter:

Alarm philosophy

- Dark Panel Philosophy
- Don’t issue alarms for problems that don’t require pilot action
- Alarms categorized wrt level of threat and criticality
- Uniform alarm presentation:

  Alarm overview ->
  Detailed information ->
  Action plan

#2

#2

#2

#2

#3

Our new blood warming system

A blood warmer is an electrically powered device that heats cold fluids to be infused into a patient. It is often equipped with some form of pressurization to increase speed of the infusion, for example when massive bleeding occurs during surgery.

One day, we got a new blood warming system to our surgery clinic. It was said to be far better than our old, bulky equipment. Apart from the power cord the old system was equipped with two blood pressure cuffs, and both were connected to the compressed air supply, ie two air supply tubes and two power cords. That is a lot of tubes and cords in an already high-tech environment. The new blood warmer had only one power cord to be connected to the power plug, and the blood pressure cuffs were electrically powered. That's great, we said! The old blood warmer was swiftly sent to Estonia.

One late night there was a traffic accident and we received a trauma alarm. The patient arrived in a very serious condition and we decided to use our new blood warming system, since it turned out to be necessary to infuse the patient with large quantities of blood. Said and done, we mounted the now wonderful piece of equipment, pushed the button, and ... nothing happened! The thing was dead! All lamps were green as expected, but there was no pressurization, so the blood just dripped slowly, while the patient's blood pressure dropped drastically. Disaster! So, we quickly ripped down the blood bags and using hand power we pressed the blood into the patient. I can assure you, that this is a very tiresome and ineffective way of keeping the patient alive.

After the operation we were quite upset, and we contacted the sales representative that had sold us the new blood warmer, and asked what went wrong. He explained that there is a separate power switch for the compressor, and it is placed UNDER the device, at floor level. Absolutely impossible to see it if you didn't already know it was there. Why on earth is it placed under the device, we asked. Well, because it CANNOT BE EXPOSED TO FLUID, and if it would be placed on a visible surface it would be drenched in blood during a trauma case!

So why don't you put a switch that can be exposed to fluid there, we wondered, and by the way, wouldn't that be appropriate for a device to be used under "very wet" conditions? Altogether, wouldn't it be a nice thing to put such an important switch in a fully visible position? After all, it may be a question of life and death.

"We will forward your viewpoints to the manufacturer", the sales representative said.

Why don't they ask us about the environment the equipment is used in, and what we need, before they build the stuff? Now we have put a big red note on the blood warmer where it reads "NB Don't forget the compressor switch, it is under the equipment".

Later, after this incident, we used the blood warmer again, when suddenly we had a black-out in the surgery room. All the fuses blew, and when we changed them for new ones, they blew again! After a certain amount of panic and quite some time to locate the problem, when we systematically shut down all surgery room equipment, one at a time, we found that the new blood warmer was to blame. We later learned that this piece of equipment was so packed with advanced electronics that it needed to have **a power plug of its own**. Unfortunately, our surgery rooms don't have so many power plugs that this is possible!

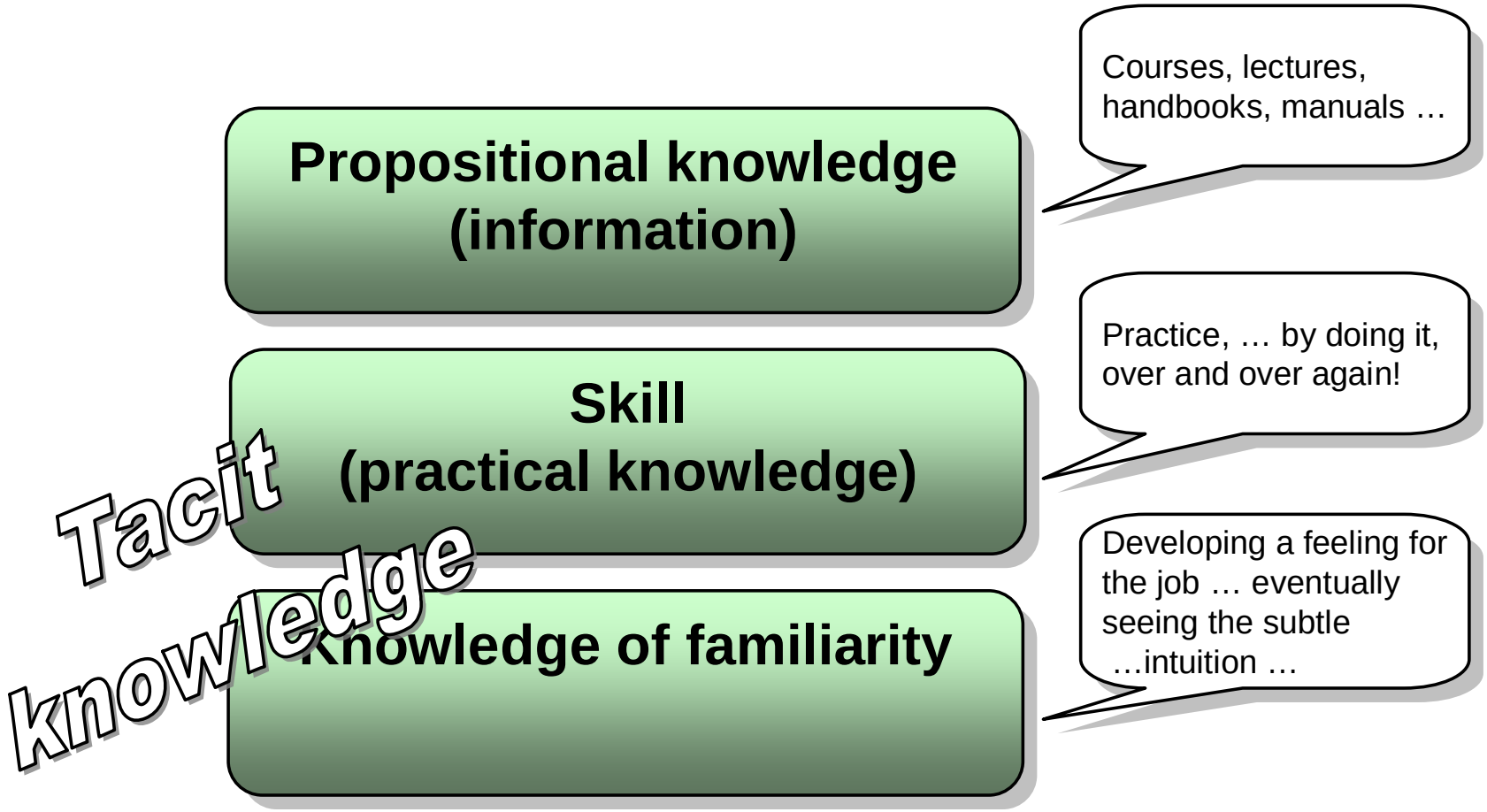
One quietly wonders if the medtech engineers have ever set foot in a hospital and seen the grim reality, with budget cuts and postponed refurbishments. We need stuff that **works**, not technical miracles.

PS. The patient under surgery survived.

If that had not been the case, who would have been held responsible? I promise you that it would have been the anaesthetics nurse on duty – not the engineer! The nurse would probably be accused of being irresponsible for using inadequate equipment …

Marina Backlund, Anaesthetic Nurse.

What is knowledge?



Source: Kjell S Johannessen, University of Bergen, Norway


Wednesday
7
Calendar

Demonstrators:

Safedock Advanced Visual Docking Guidance System

Engineers *serve* other people

About helping other people ...

If one is truly to succeed in leading a person to a specific place, one must first and foremost take care to find him where he is and begin there.

This is the secret in the entire art of helping.

Anyone who cannot do this, is himself under a delusion if he thinks he is able to help someone else. In order truly to help someone else, I must understand more than he – but certainly first and foremost understand what he understands.

If I do not do that, then my greater understanding does not help him at all. If I nevertheless want to assert my greater understanding, then it is because I am vain or proud, then basically instead of benefiting him I really want to be admired by him.

But all true helping begins with a humbling.

The helper must first humble himself under the person he wants to help and thereby understand that to help is not to dominate but to serve ...

Søren Kierkegaard, *The Point of View for My Work as an Author*

So … *demand* to get out there,and meet the user, every once in a while!