Abstract

Story telling was not used explicit during the development of the medical imaging workstation. Two stories which did have a great impact of the development of the product are described: “The sales story” and “The radiologist at work”. The relation of the stories to the requirements and design is shown.
Stories used during development

The sales story how to capture the interest of the radiologist for the product.
The radiologist at work describing the way a radiologist works, which explains why the radiologist is not interested in viewing, but very interested in films.
The gastro intestinal examination how the URF system is used to examine patients with gastro intestinal problems. This story is not described here, because it is outside the scope of the discussed thread of reasoning
Main sales feature: easy viewing

ECR'91 European Congress of Radiology

Try it yourself, see how easy it is

Yes, this is great!

salesman

radiologist
Remote control makes viewing easy

- next / previous examination
- next / previous image
- increase / decrease contrast
- increase / decrease brightness
Radiologist workspots and activities

supervision of the examination

view and diagnose, dictate report

verify and authorise report

activities of the radiologist
Diagnosis in tens of seconds

- Films loaded by clinical personnel during the day
- Looks at images
- Moves head forward/backward
- Moves head or eyes left/right/up/down
- Zoom in
- Overview
- Mumbles a few Latin words or clinical codes in recorder
- Presses next button
- Image selection, panning
- Report
- New films
- Old films
- Auto-loader
- Light-box
- Tens of seconds

Story Telling in Medical Imaging
6 Gerrit Muller
From story to design

Customer objectives
Application
Functional
Conceptual
Realization

sales story

response time, minimal UI
response times:
image retrieve, C/B
RC functionality
pipeline design
RC design

ease of use

radiologist at work

processing throughput and quality
20 1024² 8 bit images
3 films of 4k*5k pixels
per examination
4 exams / room
3 rooms/workstation

memory budget
CPU load
network load
disk budget
algorithms

analyse design

film efficiency

analyse design

C/BU
RC functionality
pipeline design
RC design