Requirements engineering meets reality

I’ll design the system as soon as you give me the user requirements.

Better yet, you could build the system, then I’ll tell your boss that it doesn’t meet my needs.

I don’t mean to frighten you, but you’ll have to do some actual work.

That’s crazy talk.

Prof. Ian Sommerville
School of Computer Science
University of St Andrews
Scotland
Potential users

- 658,000
- 52,000
- 650,000
- 10,000
Requirements Engineering meets Reality

Slide 5
What didn’t work!
What didn’t work!
“We don’t need a new system, just the freedom to use what is available”
What didn’t work!

**Viewpoint-Oriented Requirements Definition (VORD)**

- **Viewpoint identification**
  discover viewpoints which receive system services; identify services provided to each viewpoint

- **Viewpoint structuring**
  group related viewpoints into a hierarchy; common services provided at higher-levels

- **Viewpoint documentation**
  refine the description of identified viewpoints and services

- **Viewpoint-system mapping**
  transform the analysis to an object-oriented design
What didn’t work!

Diagram

Structure Diagram

Class Diagram

Profile Diagram

Composite Structure Diagram

Notation: UML

Component Diagram

Deployment Diagram

Object Diagram

Package Diagram

Behaviour Diagram

Activity Diagram

Interaction Diagram

Use Case Diagram

State Machine Diagram

Interaction Overview Diagram

Timing Diagram

Sequence Diagram

Communication Diagram
What didn’t work!
What didn’t work!
Why must our children pay?

Campaign against budget cuts in Scottish Education
Jack is a primary school teacher in Ullapool, teaching P6 pupils. He has decided that a class project should be focused around the fishing industry in the north-west Highlands, looking at the history, development and economic impact of fishing. As part of this, pupils are asked to gather and share reminiscences from relatives, use newspaper archives and collect old photographs related to fishing and fishing communities in the area.

Pupils use a Glow+ wiki to gather together fishing stories and SCGRAN to access newspaper archives and photographs. However, Jack also needs a photo sharing site as he wants pupils to take and comment on each others’ photos and to upload scans of old photographs which they may have in their families.
Jack sends an email to a primary school teachers group which he is a member of to see if anyone can recommend an appropriate system. Two teachers reply and both suggest that he uses KidsTakePics, a photo sharing site that allows teachers to check and moderate content.

As KidsTakePics is not integrated with the Glow+ authentication service, he sets up a teacher and a class account. He uses the Glow+ setup service to add KidsTakePics to the services seen by the pupils in his class so that when they login, they can immediately use the system to upload photos from their phones and class computers.
Browser-based user interface

**Configuration services**
- Group management
- Application management
- Identity management

**Productivity package**
- Email
- Messaging
- Word processing
- Spreadsheet

**Application services**
- Video conferencing
- Resource finder
- Simulation
- VLE

**Utility services**
- Authentication
- User storage
- Application storage
- Interfacing
- Logging and monitoring
- Search
Lessons learned
Coolness!

“It has to look cool or the kids won’t use it”
Permission granted to use postcard above

Adding the links as you mention is fine. I wish you all the best for the school's celebrations of its 120th Anniversary. If there is anything that you would like me to mention on the EdinPhoto web site about the Anniversary of the school or the activities surrounding it, please let me know what you'd like me to say, and I'll see if I can find a place to include it. I'm happy for you to use that photo of
I'd like to thank all of the people who helped design the technology test parameters.

Thanks to your input, the test had nothing in common with how things work in the real world.

So I wasted two weeks of my life on a test that is not only meaningless... ...but also dangerously misleading.

This slide shows the gap between the test results and reality.

We'll use the test results anyway because it's the only data we have.

Fine. I hope you all choke to death on your lunches.

Why's he so cranky? Something about data.