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## Engagement through Art and Open Source Software

Talk invited at Quality of Experience in New Media Landscape  
Seminar, R2D2 Networks – project  
29. June 2011 SINTEF Oslo

[www.artentnu.com](http://www.artentnu.com)

# Structure

- mini-performance max 15 minutes
- Context
- Cases
- Results
- Conclusions



sewing as a way of seeing 2009

# Why do we human beings need technology?

<http://u.ime.ntnu.no/smstavle>

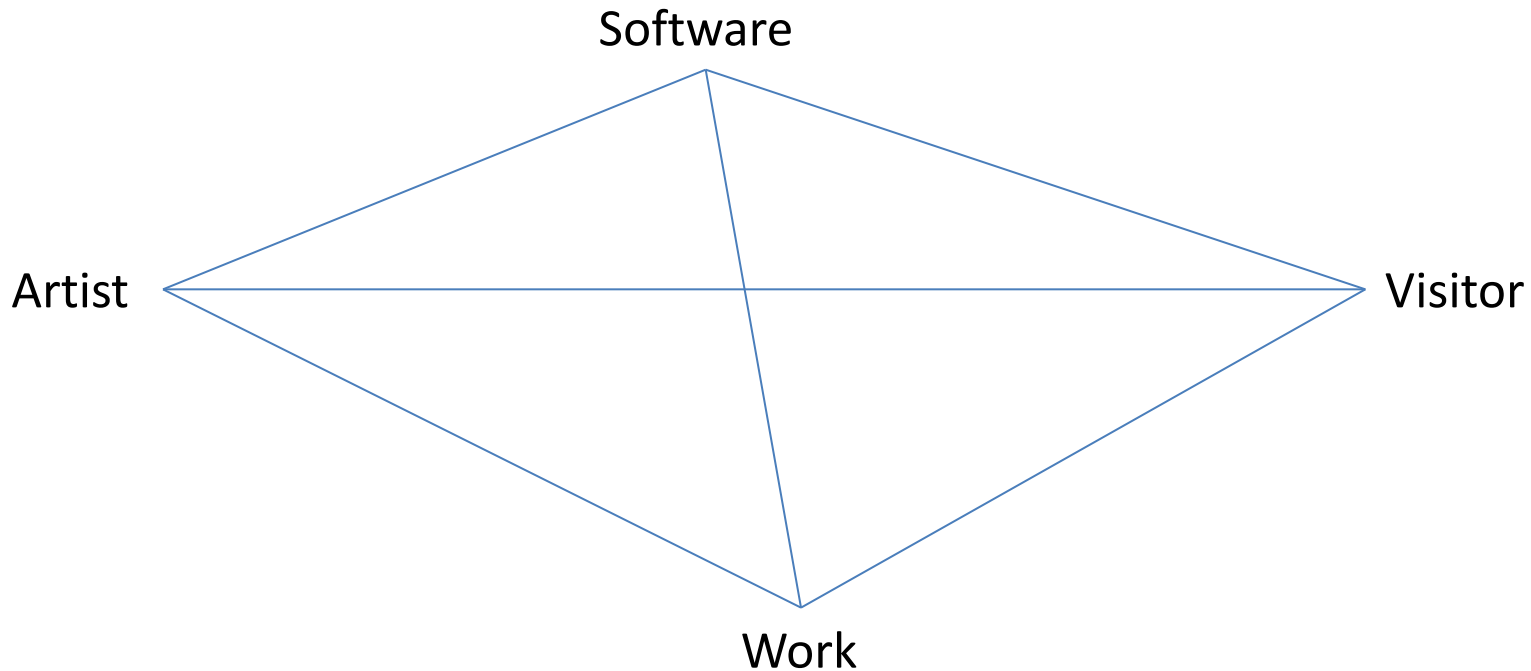
- ime ? your text
- Send to 1980
- for example ime ? because we love shopping

# Possible answers

1. to make work more effective.
  - Think about the plow, invented several millenniums B.C, or our beloved computer invented half century ago
2. to make life go faster
  - think about the train, airplane, telephone, and internet
3. to make life lighter and enjoyable
  - Think about cinema, radio, television, electronic games, and I-Pod

# ArTE answer

- to introduce more creativity, cooperation, and openness in our life



What is  
software?

# Software, also called program code, governs the behavior of computers

```
void setup() {  
  size(640, 200);  
  background(153,0, 153);  
}  
void draw() {  
  stroke(0,153,0);  
  if(mousePressed) {  
    line(mouseX, mouseY, pmouseX, pmouseY);  
  }  
}
```



# Open source software

- A software system is open source if its code is available to everybody for inspection, use, and modification. Use and further release of modified version of an OSS system are regulated by a license



OSS examples?

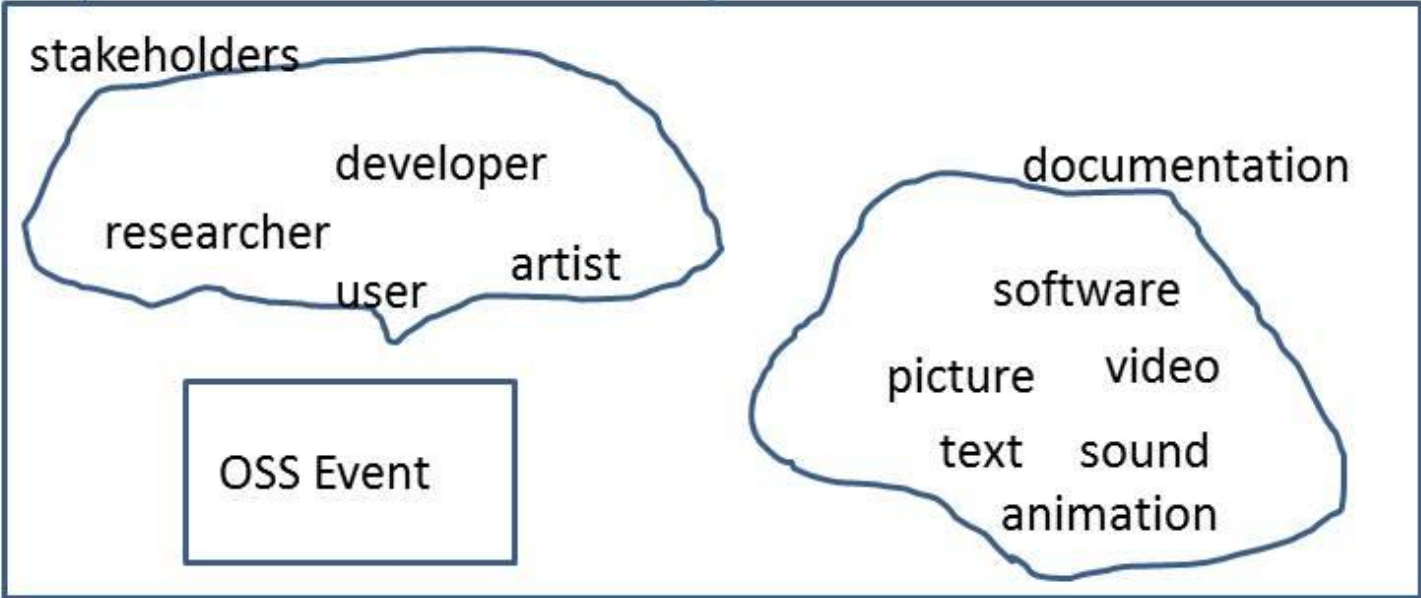
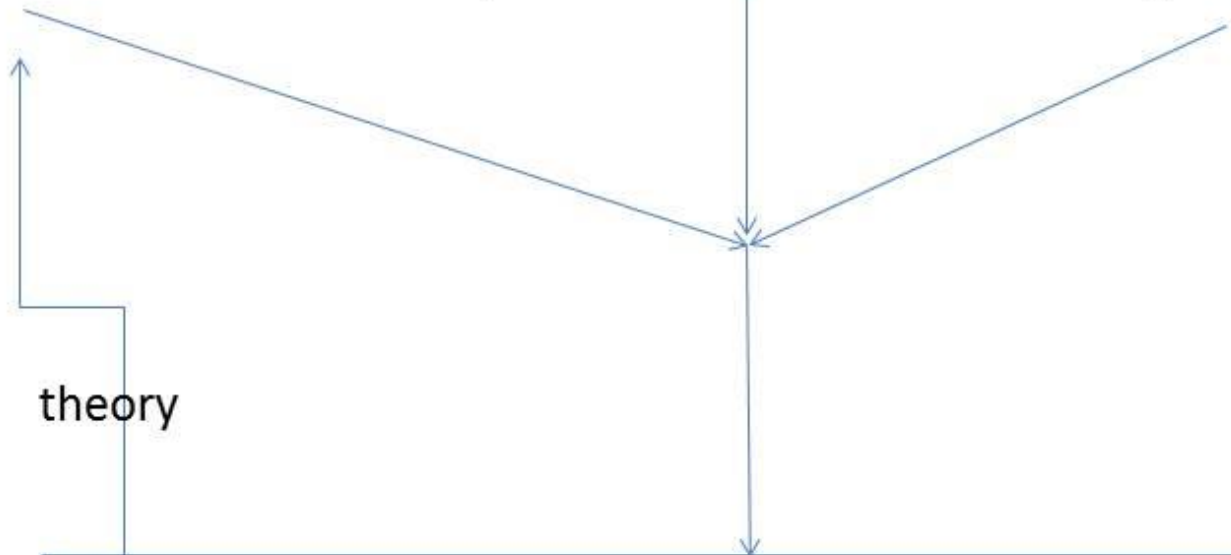
# OSS Examples

- Linux (operating system)
  - loc 4,142,481
- Apache (web server)
  - Web Sites hosted 179,720,332
  - Percent 60.31%
  - loc 89,967
- Scratch (to create animations, games, small multimedia programs)
  - [Users 300.000](#)
  - [Projects 1.5 M](#)
  - <http://scratch.mit.edu/users/artentnu2009>
- Arduino, Processing

# The new just might be old - Research methods in software engineering

- mathematical proofs
- empirical studies (qualitative, quantitative, experiments, case studies, surveys, positivism, interpretivism)
- Literature reviews
- Design science
- Action research
- ...

Research question → Commitment to practice → Question for practice



# Cases

- Researcher Days Night 2009
- Itovation 2009
- NTNU Fest 2010
- $K+K=K$  2010

# Research Questions

- Research Question: How can we increase knowledge about the intersection between software and art?
- Question for Practice: How can software benefit from art and vice versa?

# Researcher Days Night 2009 - stakeholders



# Itovation 2009 - stakeholders





# NTNU Fest 2010 - romantic



# K+K=K 2010 - fun



# K+K=K 2010 – concentrated



# Results

1. About stakeholders ...
2. Development or use?
  - HCI, software engineering
3. How to evaluate works in the art and technology intersection?
  - Technical and esthetics quality
4. Are there feelings beyond creativity and amusement we should look at?
  - Boring, romantic, contemplative, anger, etc.

# Results

- Our results suggest a model based on:
  - 1) a stakeholder
    - model for Science in Society Open Source Software events where stakeholders are artists, developers, researchers, and citizens;
  - 2) a open documentation model for open source software events where documentation consists of a patchwork of words, still and moving images, music and sound, and digital code.

# Conclusions

- Questions and comments
- More answers?
- [www.letiziajaccheri.com](http://www.letiziajaccheri.com)
- <http://letiziajaccherihp.wordpress.com/teaching/tdt4852-experts-in-team-new-media-art-for-interactive-campaigns-langsgaende/>