

A collage of eight small, square, grayscale images is arranged in two rows of four. The images depict various scenes related to agile development and human-centered design, including people working at tables, reviewing documents, and interacting in a collaborative environment. The text 'Agile development and human-centered design' is overlaid in white, serif font across the middle of the collage.

Agile development and human-centered design

*How can they get along?*

*Joannes Vandermeulen, Namahn, 24/11/2011*

## What I'll discuss

---

- **What's HCD and how can it relate to agile?**
- Product owners and users
- Making movies
- Spaces and schedules
- HCD and technology

# What is HCD?

---

- Human Factors/Ergonomics
- Usability Engineering
- Interaction Design
- User eXperience
- **Human Centered Design**

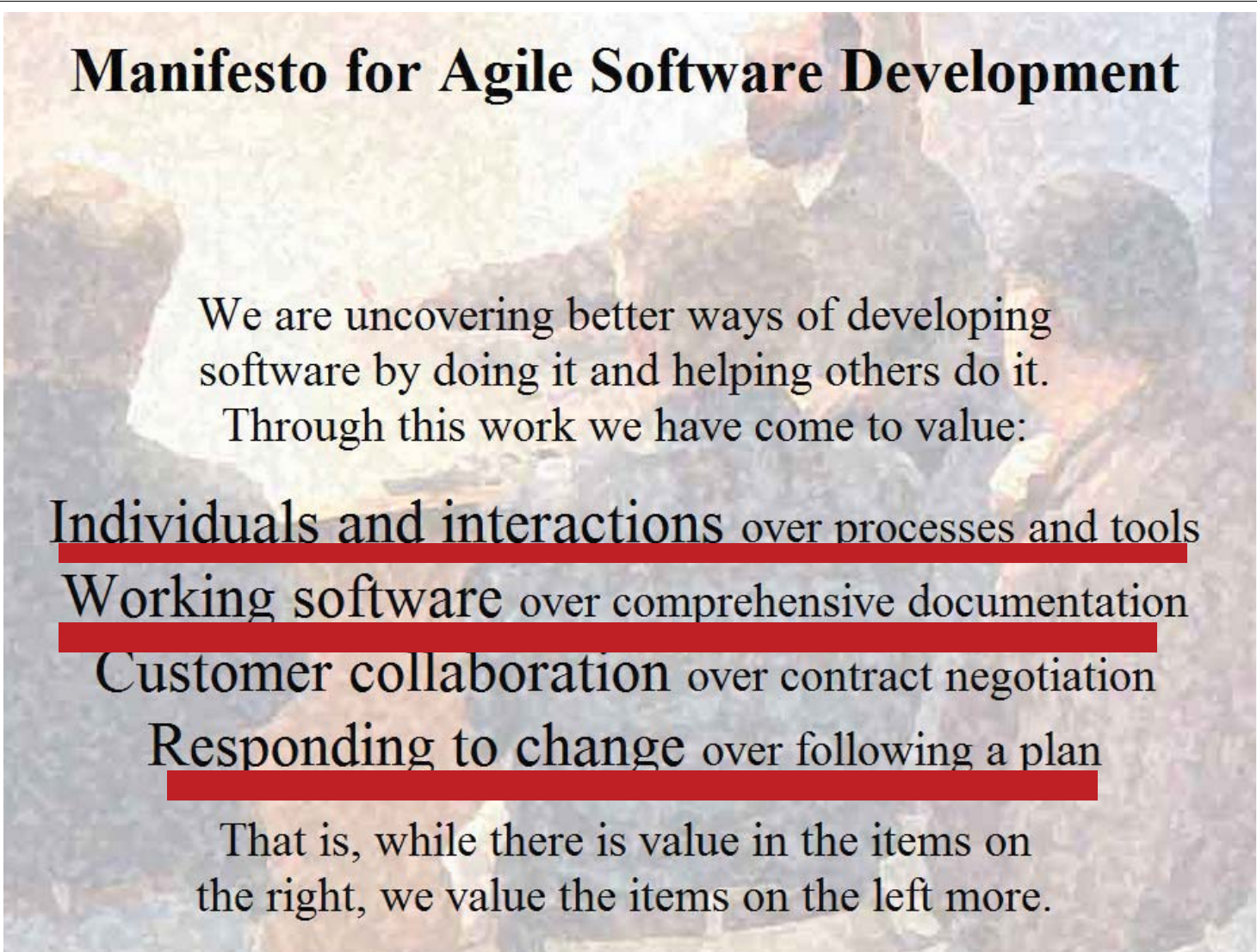
ah

## Marrying HCD to agile

---

- Many causes for concern about the relationship
- Many reasons to think that it may become a marriage made in heaven
- It certainly requires good thinking, high maturity and quite a few adjustments

ah

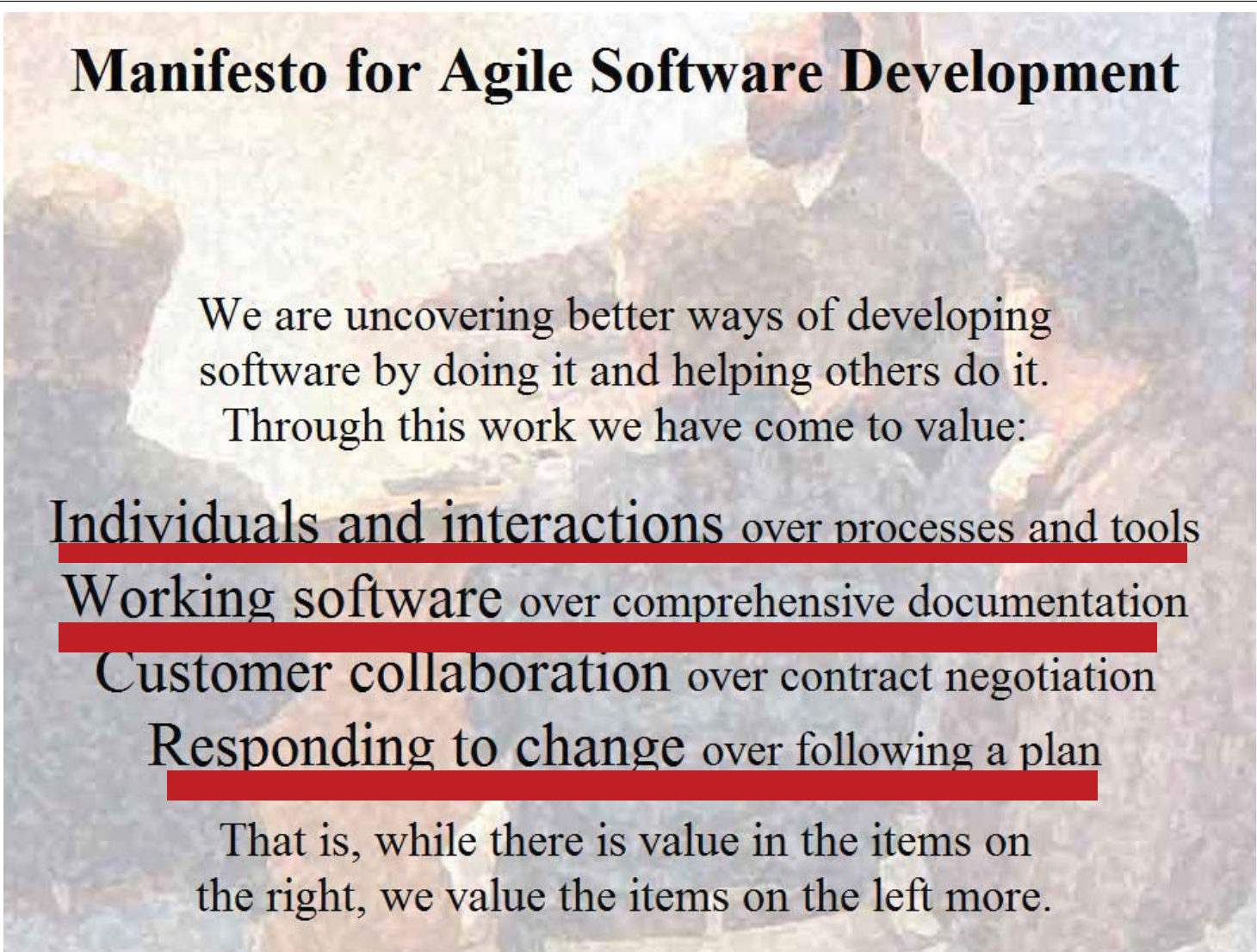


# Manifesto for Agile Software Development

We are uncovering better ways of developing software by doing it and helping others do it.  
Through this work we have come to value:

- Individuals and interactions** over processes and tools
- Working software** over comprehensive documentation
- Customer collaboration** over contract negotiation
- Responding to change** over following a plan

That is, while there is value in the items on the right, we value the items on the left more.

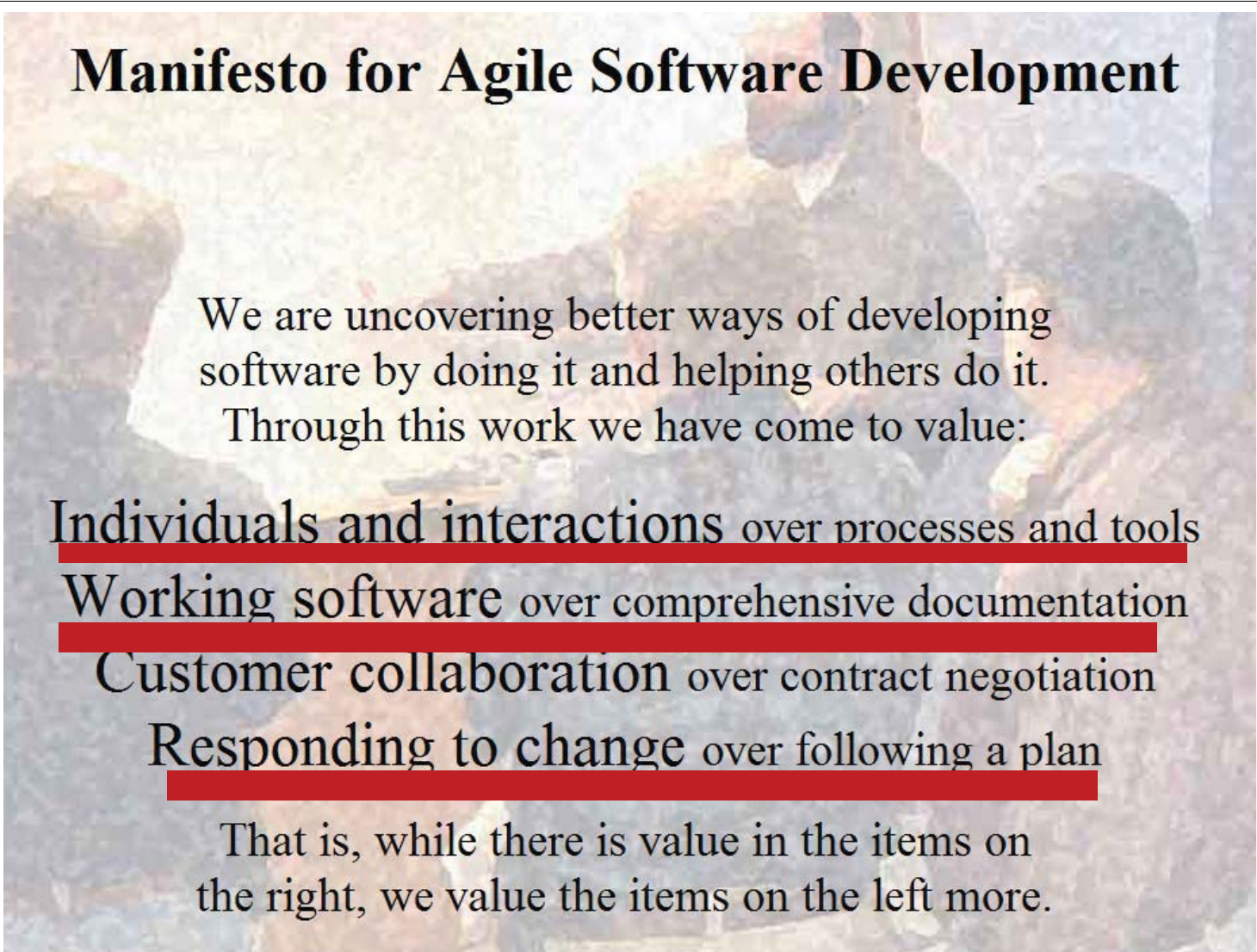


# Manifesto for Agile Software Development

We are uncovering better ways of developing software by doing it and helping others do it.  
Through this work we have come to value:

- Individuals and interactions** over processes and tools
- Working software** over comprehensive documentation
- Customer collaboration** over contract negotiation
- Responding to change** over following a plan

That is, while there is value in the items on the right, we value the items on the left more.

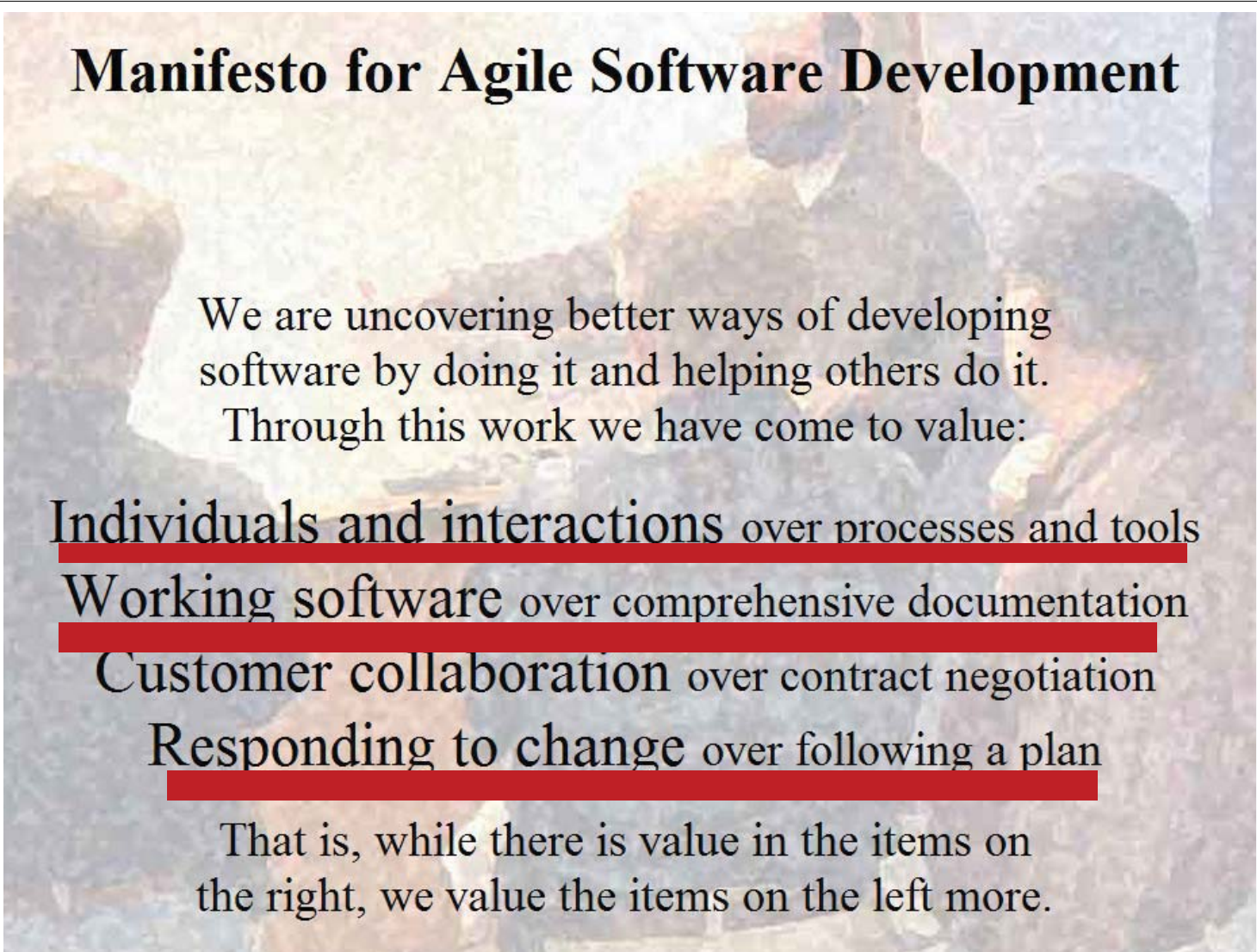


# Manifesto for Agile Software Development

We are uncovering better ways of developing software by doing it and helping others do it.  
Through this work we have come to value:

- Individuals and interactions** over processes and tools
- Working software** over comprehensive documentation
- Customer collaboration** over contract negotiation
- Responding to change** over following a plan

That is, while there is value in the items on the right, we value the items on the left more.

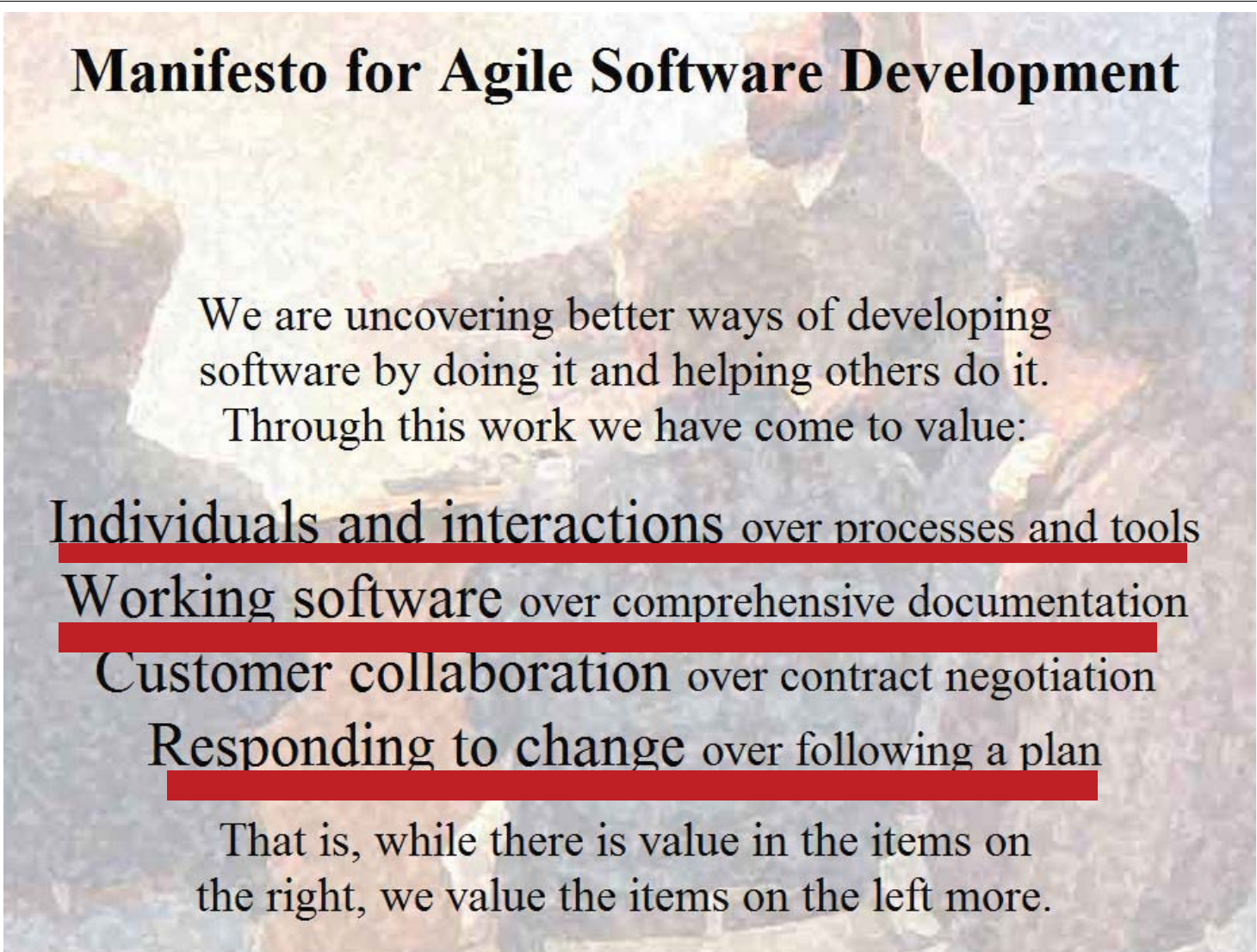


# Manifesto for Agile Software Development

We are uncovering better ways of developing software by doing it and helping others do it.  
Through this work we have come to value:

- Individuals and interactions** over processes and tools
- Working software** over comprehensive documentation
- Customer collaboration** over contract negotiation
- Responding to change** over following a plan

That is, while there is value in the items on the right, we value the items on the left more.

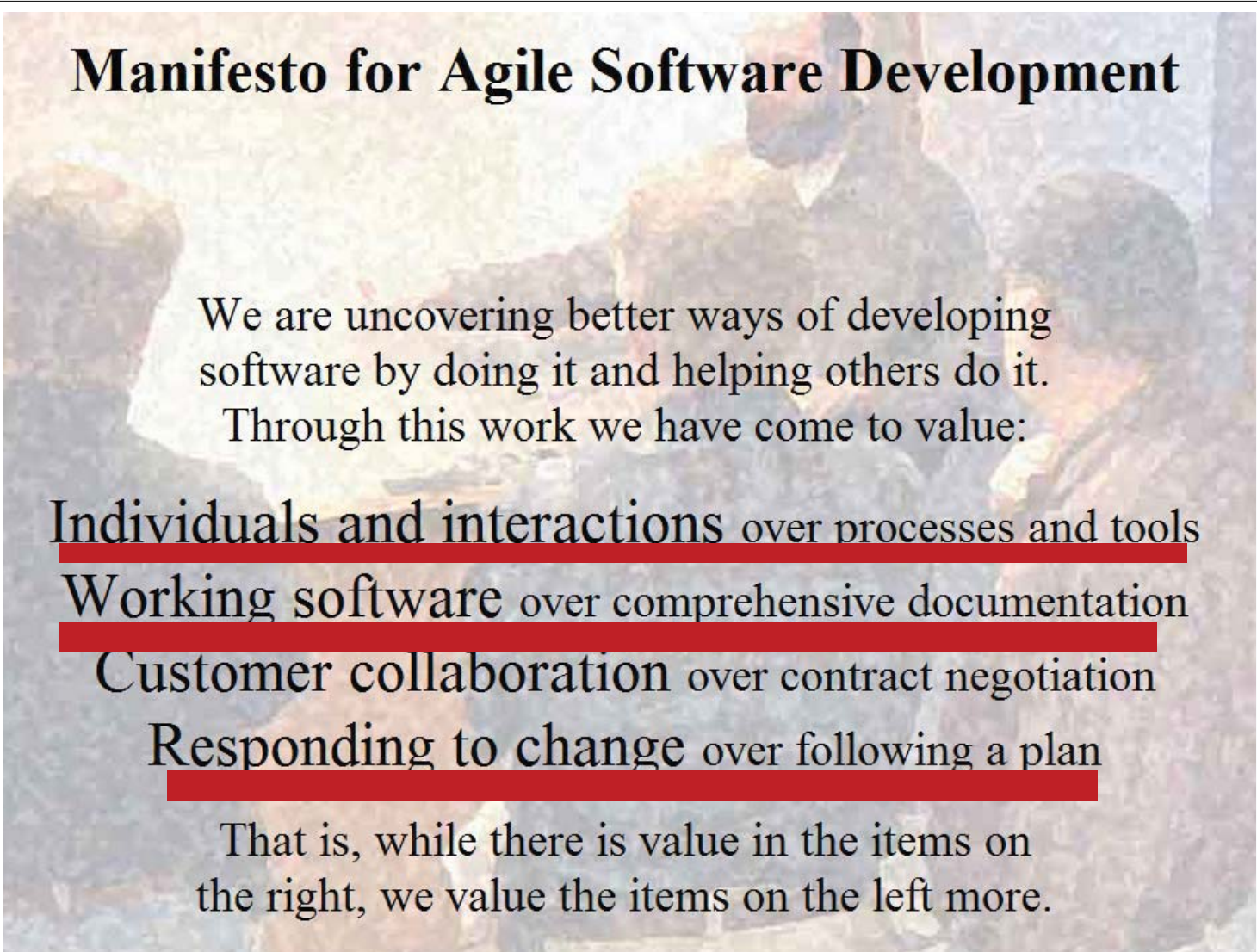


# Manifesto for Agile Software Development

We are uncovering better ways of developing software by doing it and helping others do it.  
Through this work we have come to value:

- Individuals and interactions** over processes and tools
- Working software** over comprehensive documentation
- Customer collaboration** over contract negotiation
- Responding to change** over following a plan

That is, while there is value in the items on the right, we value the items on the left more.

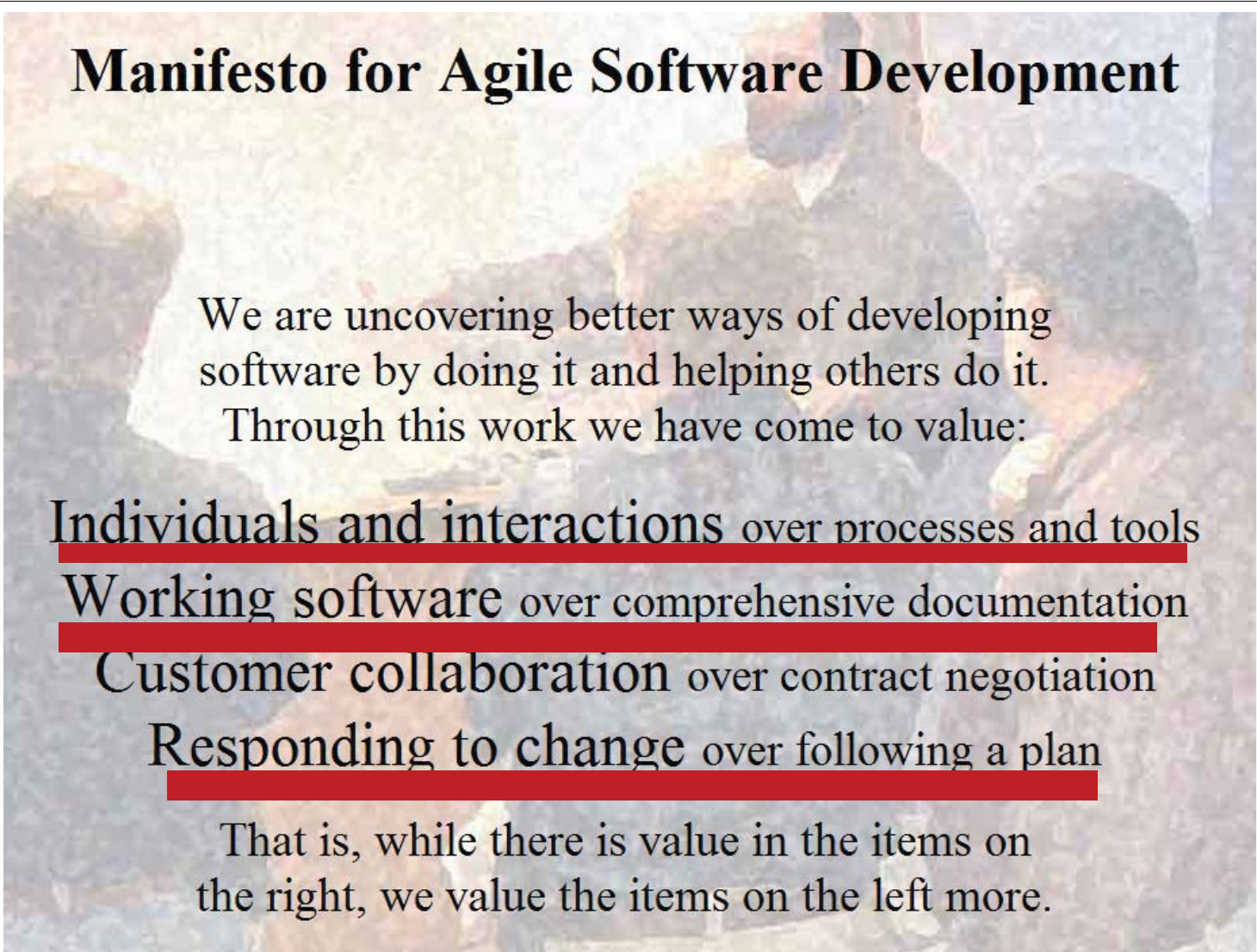


# Manifesto for Agile Software Development

We are uncovering better ways of developing software by doing it and helping others do it.  
Through this work we have come to value:

- Individuals and interactions** over processes and tools
- Working software** over comprehensive documentation
- Customer collaboration** over contract negotiation
- Responding to change** over following a plan

That is, while there is value in the items on the right, we value the items on the left more.

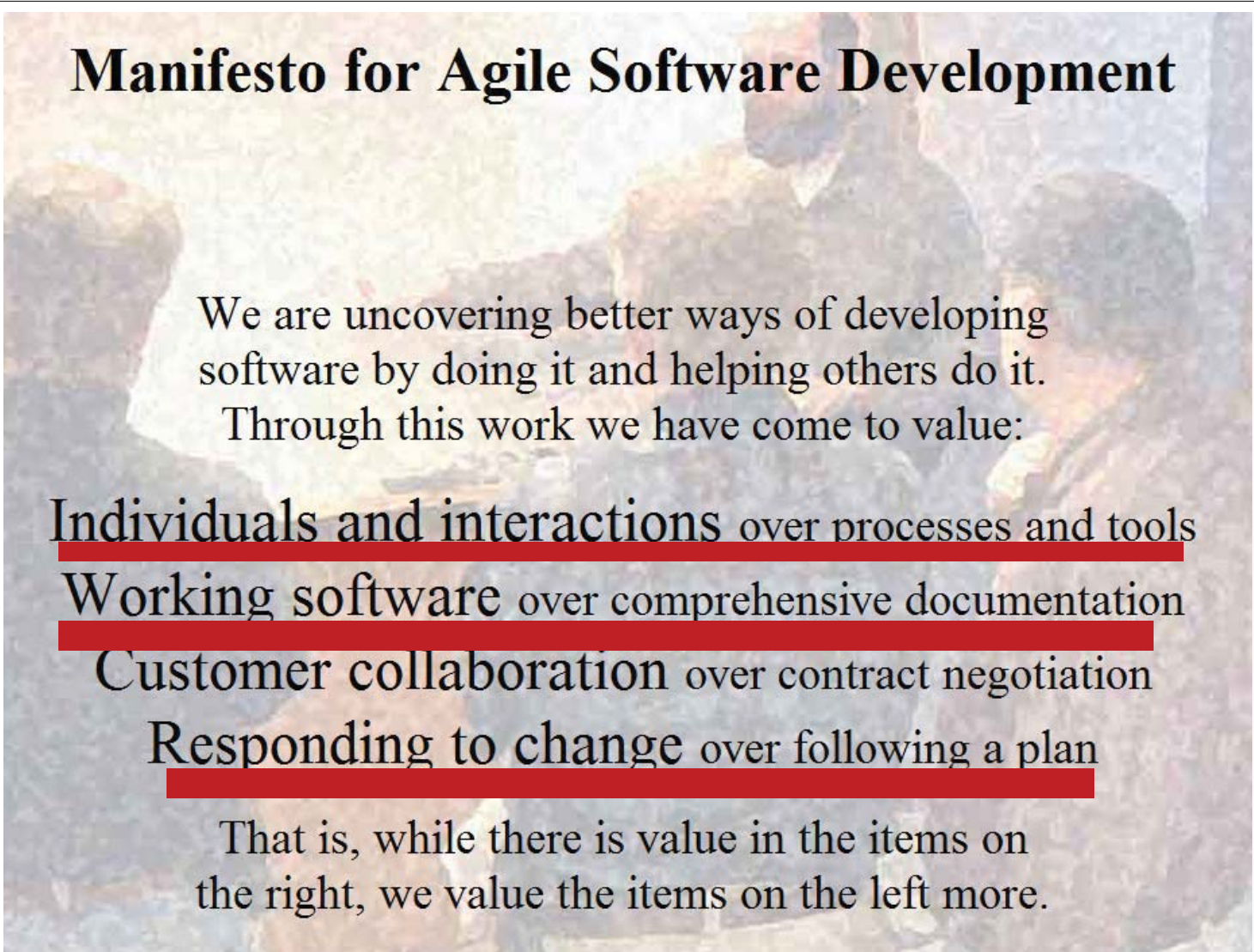


# Manifesto for Agile Software Development

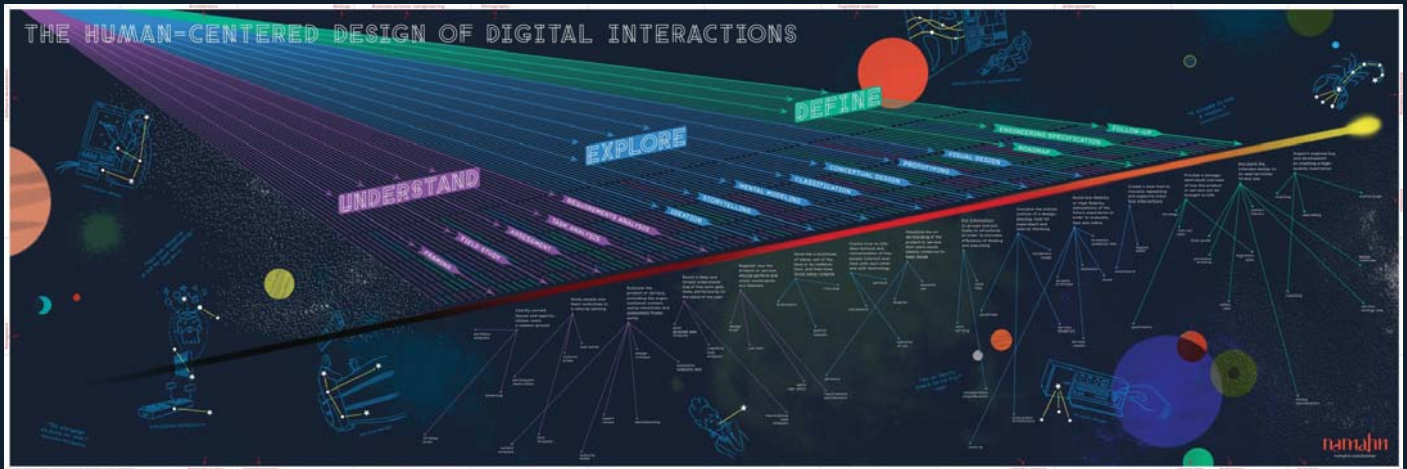
We are uncovering better ways of developing software by doing it and helping others do it.  
Through this work we have come to value:

- Individuals and interactions** over processes and tools
- Working software** over comprehensive documentation
- Customer collaboration** over contract negotiation
- Responding to change** over following a plan

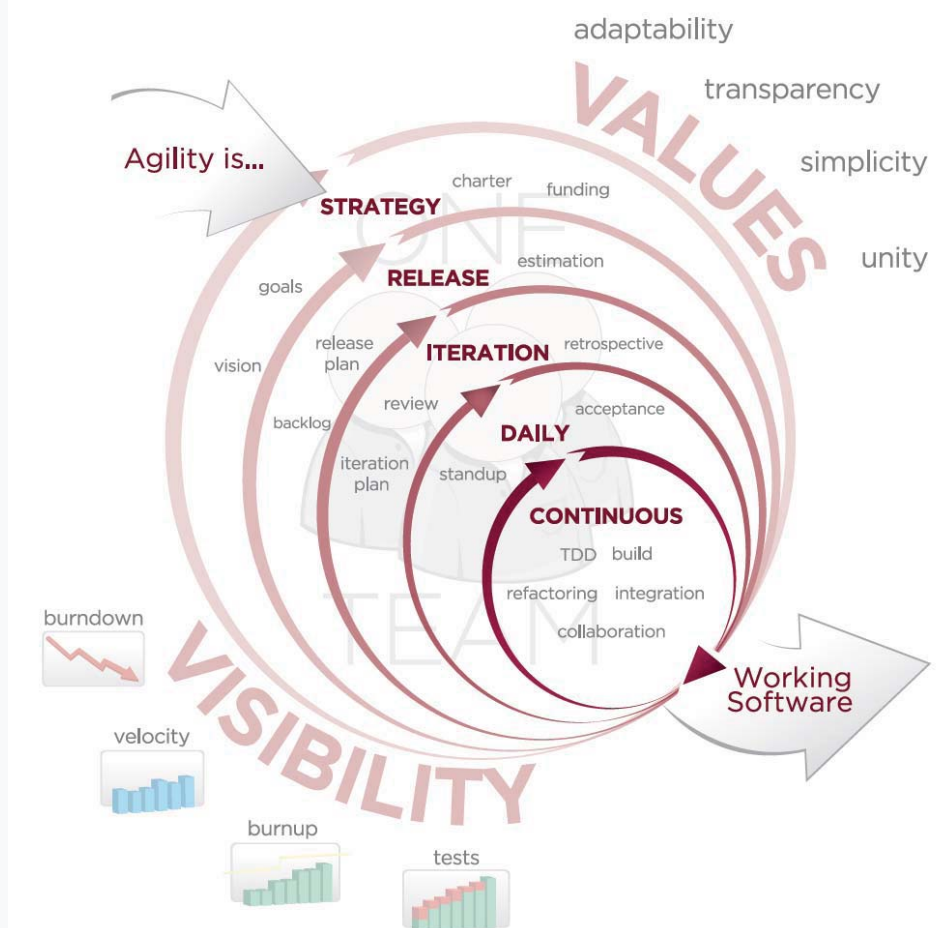
That is, while there is value in the items on the right, we value the items on the left more.







# AGILE DEVELOPMENT



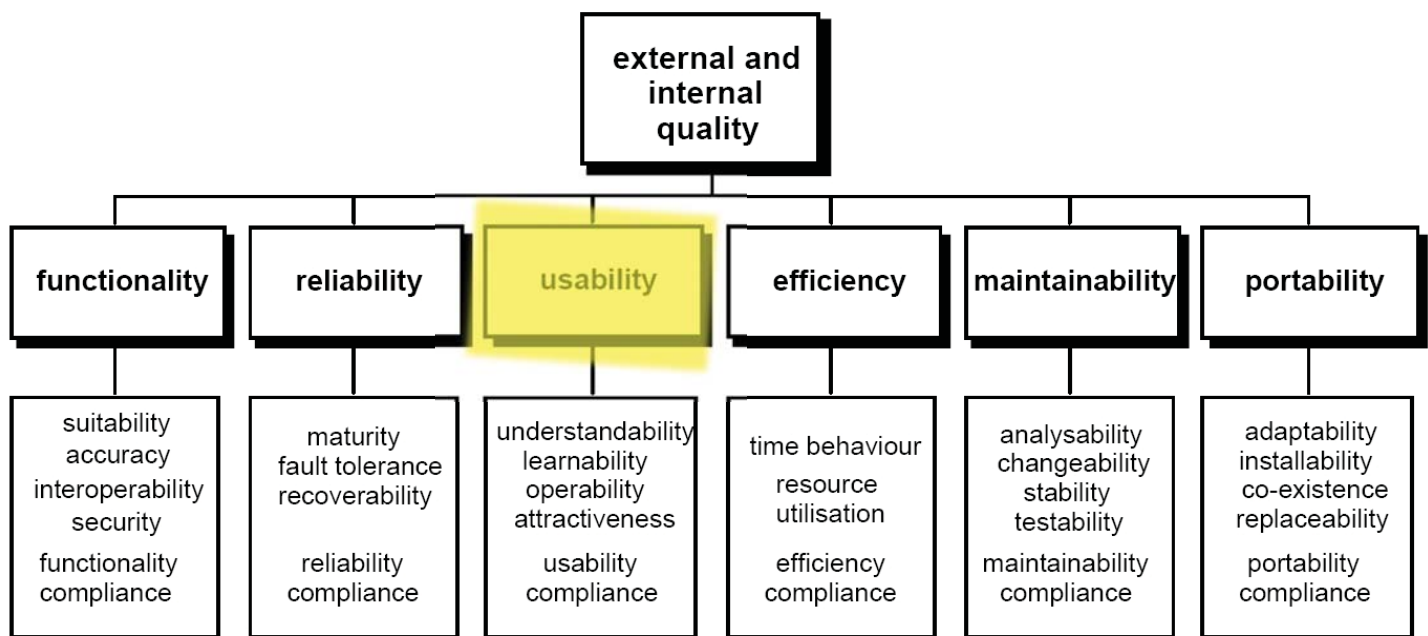


Figure 4 – Quality model for external and internal quality

## 1. THE PRINCIPLES

We recommend three principles of design.

### Early Focus on Users and Tasks

First, designers must understand who the users will be. This understanding is arrived at in part by directly studying their cognitive, behavioral, anthropometric, and attitudinal characteristics, and in part by studying the nature of the work expected to be accomplished.

### Empirical Measurement

Second, early in the development process, intended users should actually use simulations and prototypes to carry out real work, and their performance and reactions should be observed, recorded, and analyzed.

### Iterative Design

Third, when problems are found in user testing, as they will be, they must be fixed. This means design must be iterative: There must be a cycle of design, test and measure, and redesign, repeated as often as necessary.

# My basic position

---

- HCD has to adapt to agile
- HCD can be inspired by agile; and can inspire back
- HCD should contribute in with great humility

ah

# HCD inspired by agile

---

- Excel in team play
- Be confident in the HCD craft
- Think on your feet
- Apply time boxes
- Go light on deliverables

ah

# Dealing with users

- Quite daunting for many technologists
- Who is the 'product owner'?
- How to involve users?
  - Field studies
  - Focus groups
  - Usability test
  - ...
  - Co-design

ah





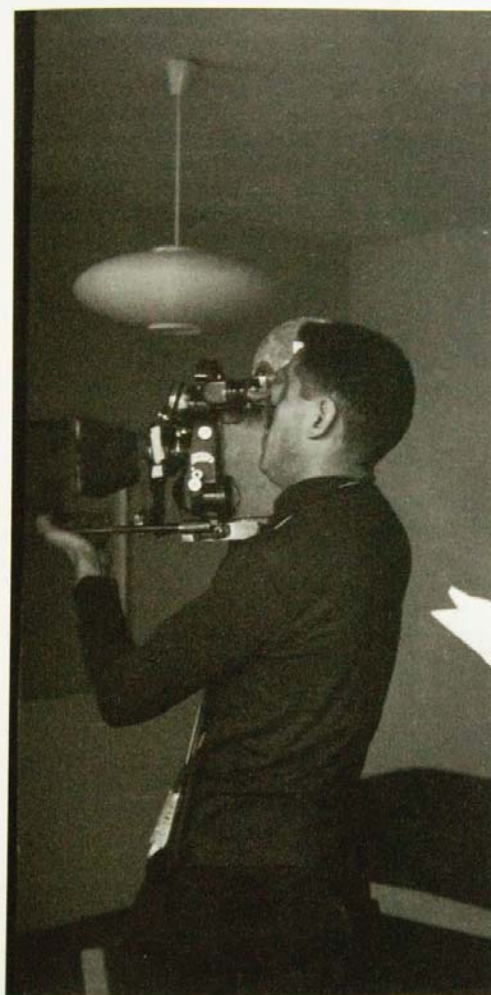
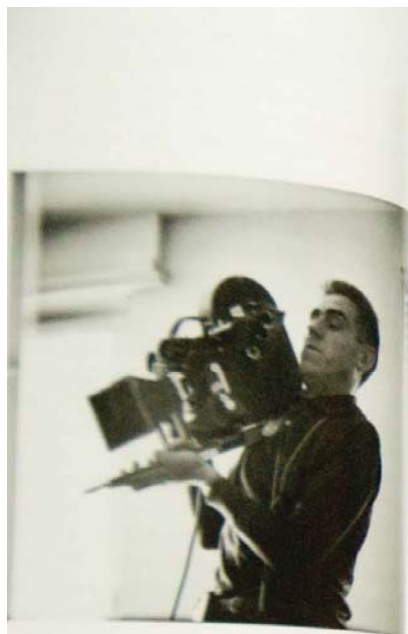






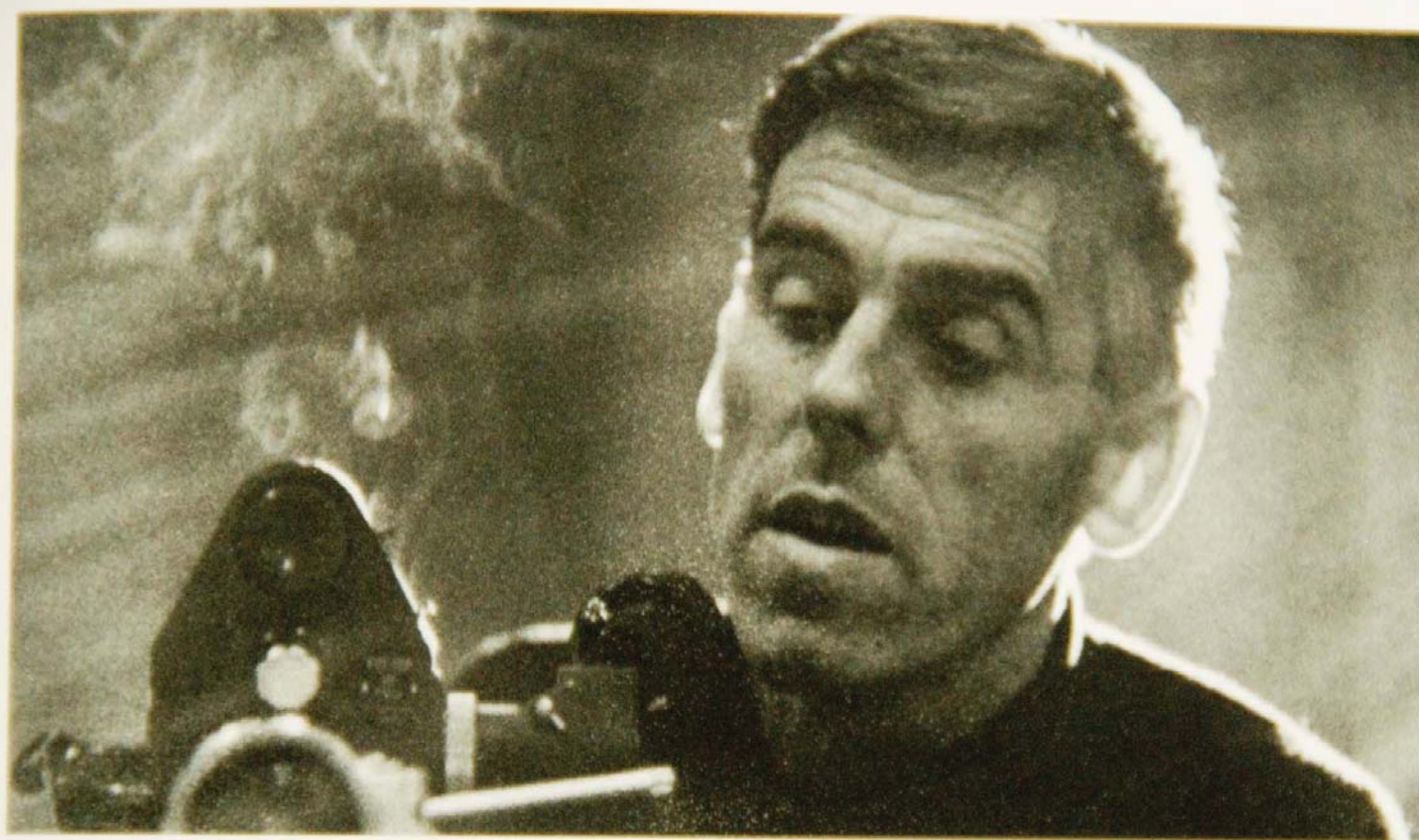
149

Vivian, devant un système de classification; Sauter dans le bureau de Kullerick, en train de s'amuser.  
Photographie de Kullerick.



Où  
tour  
le p  
à la  
des  
piec  
peri  
syn







## Offer 'design studio'

---

- In dedicated space
- Day-long workshops, getting users and engineers in design mode, with design critique

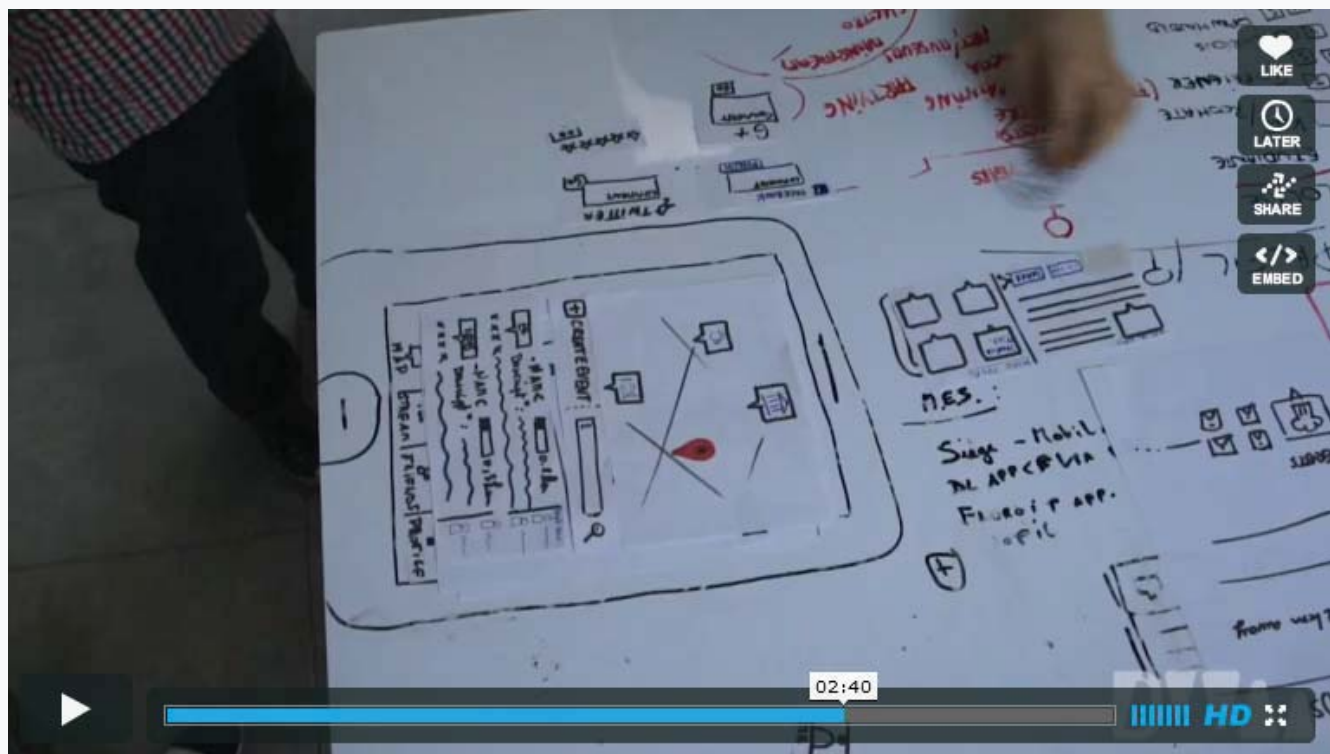


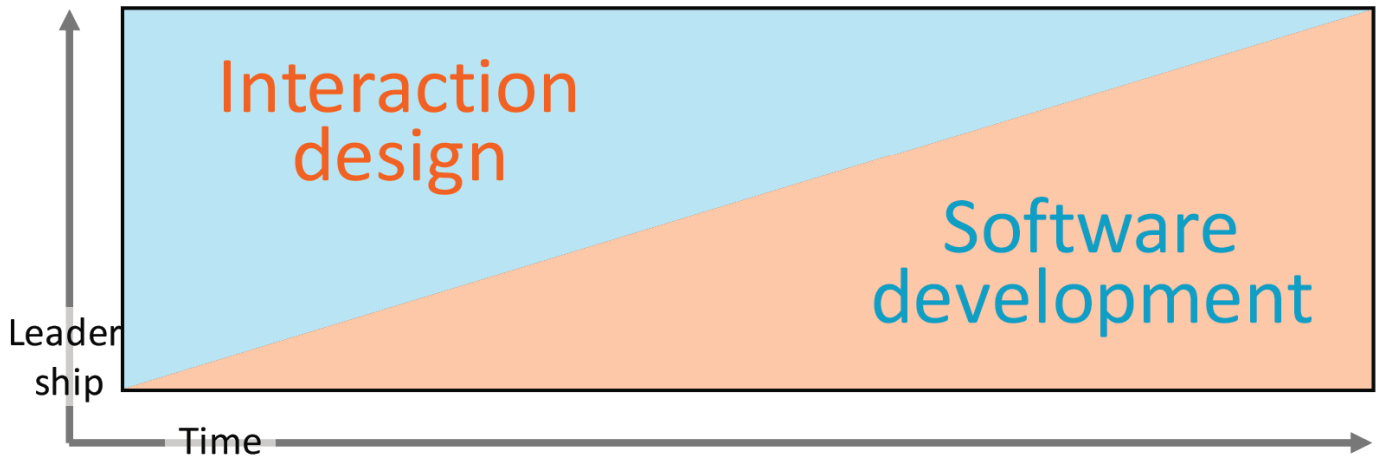


The design studio



The design studio





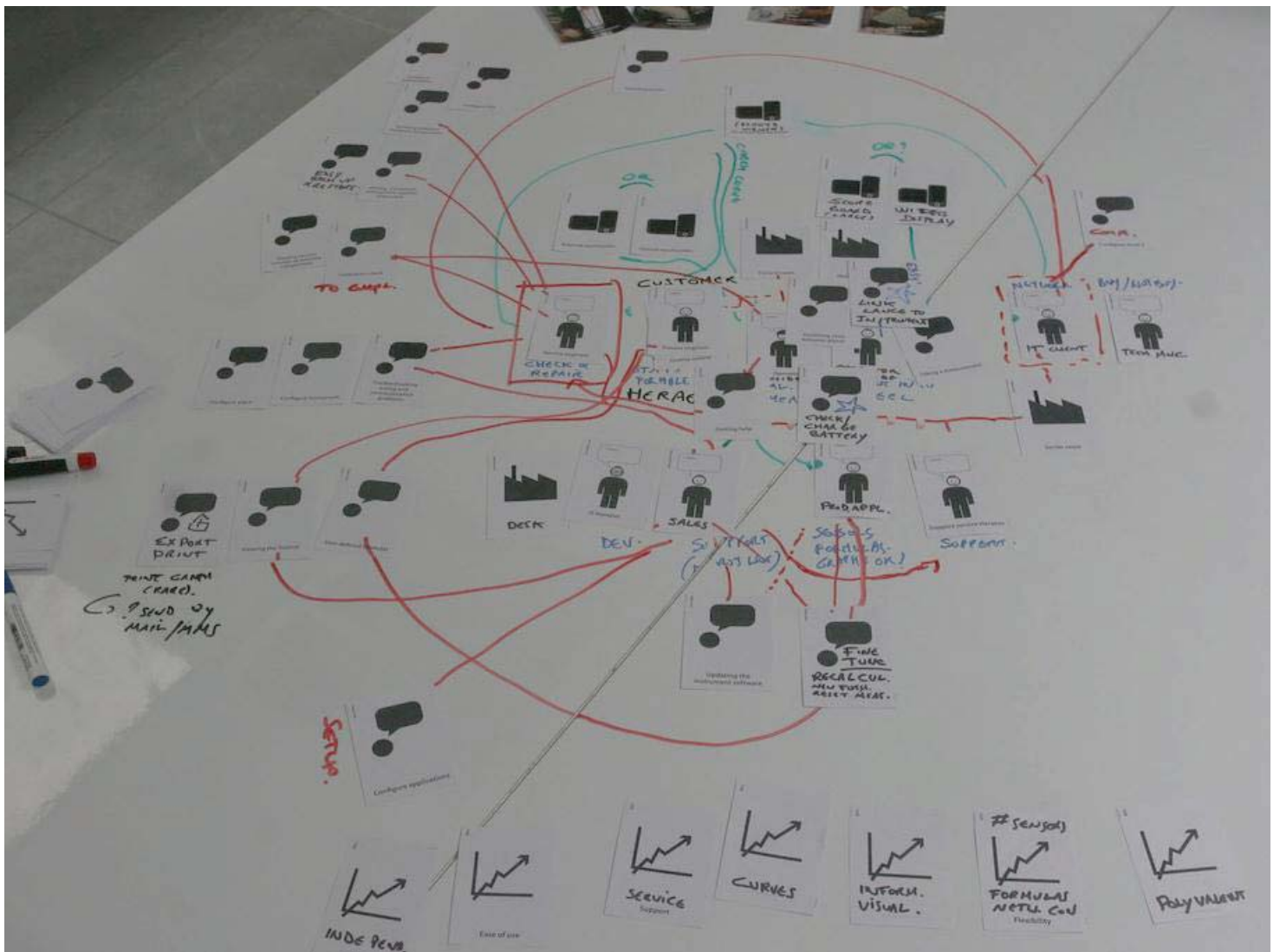
## High-impact, low-effort visualisations

- Each deliverable must play a role in the design value chain
- Lightweight stories, sketches, cartoons, storyboards, videos
- Concise briefs, specifications, design rationale





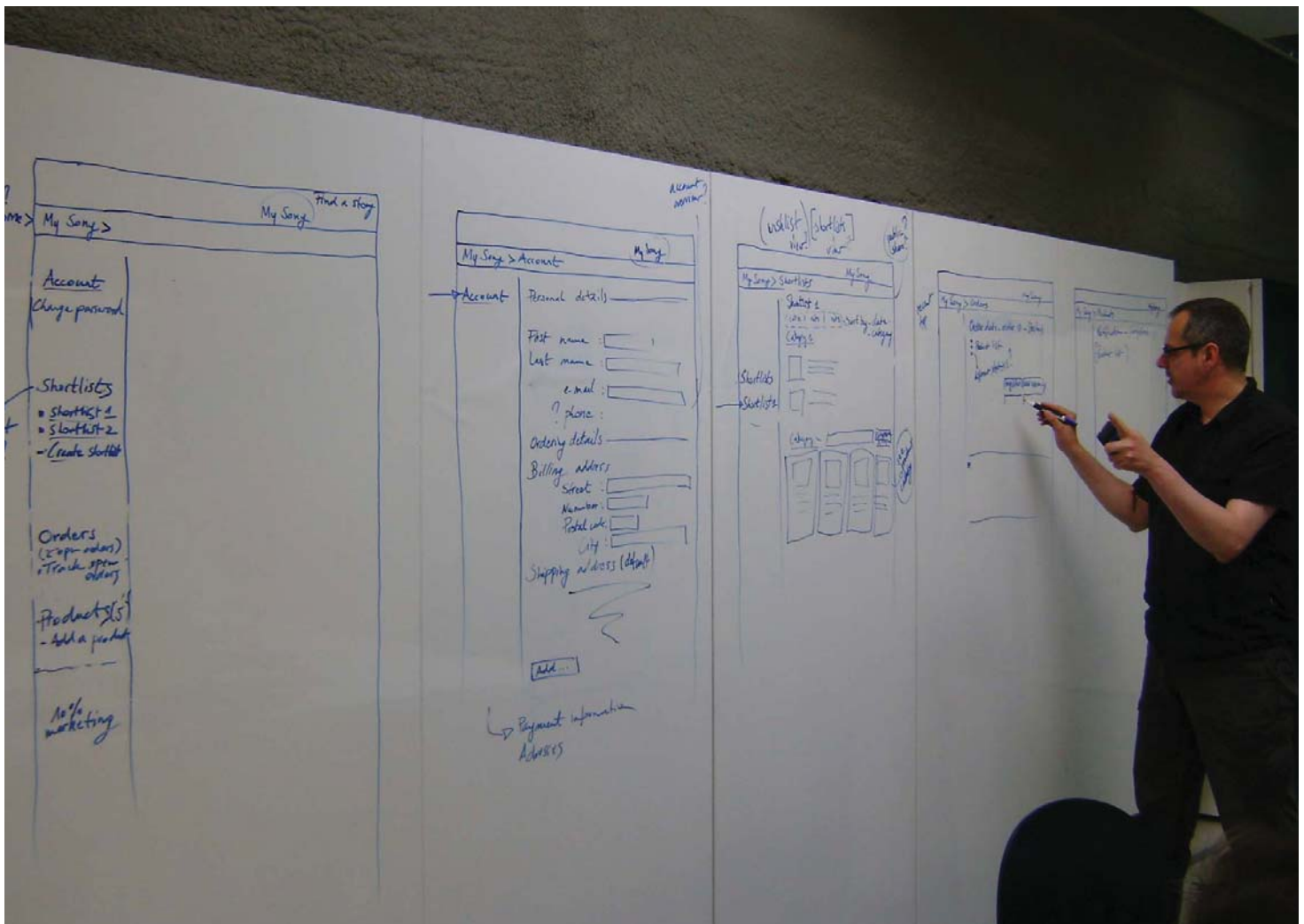
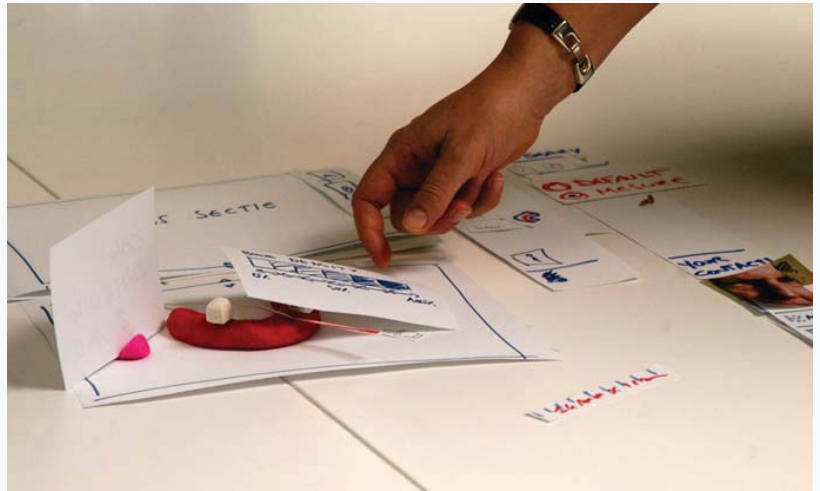
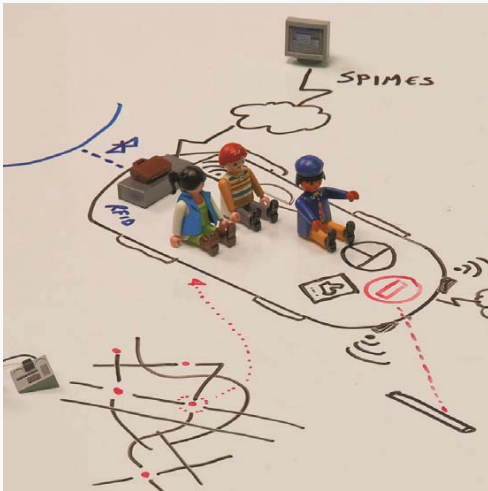
Framing - a tangible thinking workshop



# Presenting ideas - rapid prototyping

## ■ Prototype material

- Post-its, large paper (flip chart), thick markers
- Lego, Playmobil, wood blocks, ...
- Modelling clay, pipe cleaners, ...





# SD Worx

The hand-drawn diagram on the left is a conceptual map with a central box labeled 'centrale werkwijze'. Arrows point from this center to various surrounding boxes and labels: 'zoeken & selecties' (top left), 'informatie & annotatie' (top right), 'gegevens & functies' (middle left), 'doelen & draai' (middle right), 'simulatie & beheer' (bottom left), and 'berichten & waarschuwingen' (bottom right). Other labels include 'zoeken & filteren', 'browsen', 'werken', 'sessies', and '[taakbalk]'. The screenshot on the right shows the 'Spanex X - v. 1.0' software interface. It features a top navigation bar with 'Spanex n.v.' and a 'Dozier' dropdown. The main area is titled 'Historiek Contract - 01-03-2007' and contains several sections: 'Contractenmerken' (with fields for 'Arbeidsvereenkomst', 'Uitgevoerd beroep', 'Functie', 'Categorie wetsverzekering', and 'Risicoklasse arbeidsongevallen'), 'Datum' (with fields for 'Datum in dienst', 'Aankomstdatum', 'Einddatum proefperiode', and 'Datum uit dienst'), 'RSZ-voorzieningen' (with fields for 'Afhankende berekeningen RSZ', 'Speciale inhouding', 'Loon startbaanovereenkomst en nog wat tekst', 'Uitkering', and 'Duur uitkering'), 'Tewerkstelling' (with fields for 'Plaats tewerkstelling', 'Soort tewerkstelling', 'Aldeling', and 'Vestigingsnummer'), 'Bedrijfsvoorziening' (with fields for 'Regime', 'Fiscaal regime', and 'Fiche 281'), and 'Loon' (with fields for 'Loon geldig vanaf', 'Looncategorie', 'Bruto loon', and '% Toepassen bruto'). A sidebar on the right shows a 'Praktijk' section with a list of dates and a 'Historiek' section with a list of dates and times. At the bottom, there is a calendar view for the year 2007.

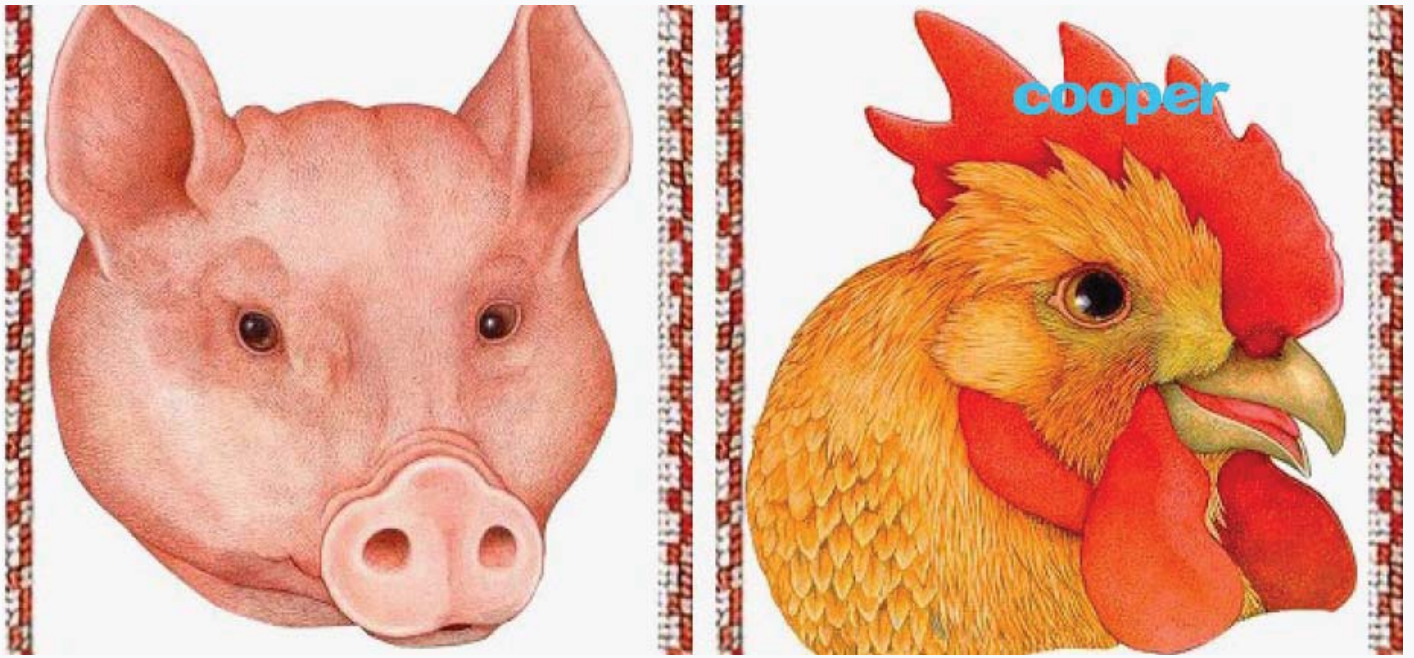
ah

# Sony

The hand-drawn diagram on the left is a conceptual map with a central box labeled 'Sony'. Arrows point from this center to various surrounding boxes and labels: 'wep?' (top left), 'Columns scene' (top right), 'funder' (middle left), 'com' (middle right), 'editorials' (bottom left), and 'other sites search' (bottom right). The screenshot on the right shows the Sony website. It features a top navigation bar with 'Sony' and a 'make believe special offer' dropdown. The main area is titled 'Compact cameras' and contains several sections: 'Simple to use' (with a large image of a Sony Cyber-shot camera), 'T Series' (with a description of the camera's features), 'W Series' (with a description of the camera's features), 'T Series' (with a description of the camera's features), 'S Series' (with a description of the camera's features), and 'H Series' (with a description of the camera's features). A sidebar on the right shows a 'Products' section with a list of camera models and a 'Support' section with a list of support topics. At the bottom, there is a 'Need help choosing?' section with a list of questions and a 'Know what you want?' section with a list of features.

ah





What the interaction  
designer should tell the  
software engineer

# What the software engineer should tell the interaction designer



It's very easy to talk about user interfaces,  
as it is about the weather.

“Do or do not; there is no try.”

Yoda's wisdom

“On s'engage et puis on voit”

Napoléon Bonaparte