

USABILITY BRIEFING - A PROCESS MODEL FOR COMPLEX BUILDINGS

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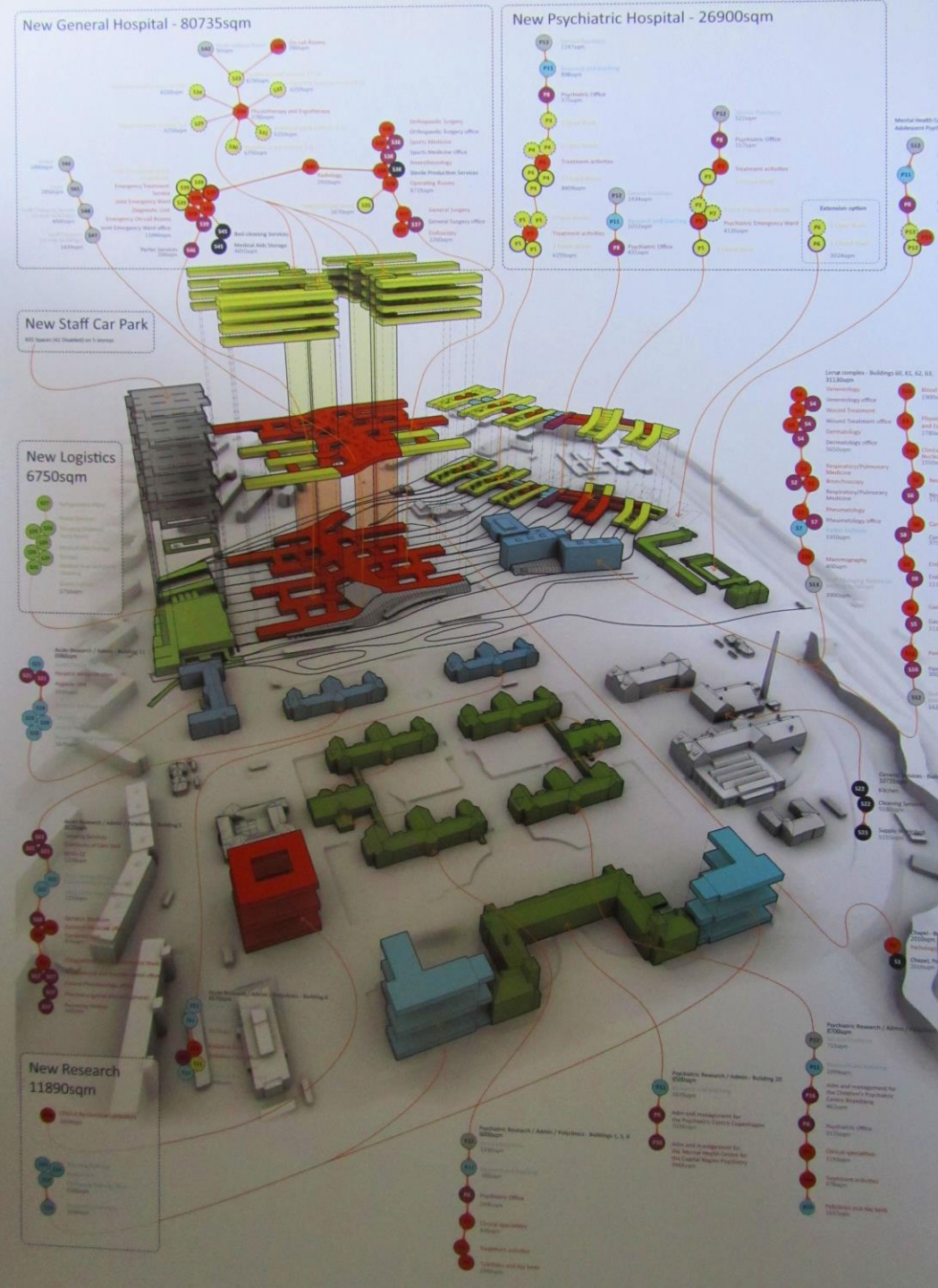
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Outline

- ▶ Background, Purpose, Approach, Reserach limitations
- ▶ State of the art: Theories
- ▶ Usability
- ▶ Briefing
- ▶ Usability briefing process model
- ▶ Examples from case studies
- ▶ Additional details
- ▶ Summary
- ▶ Questions

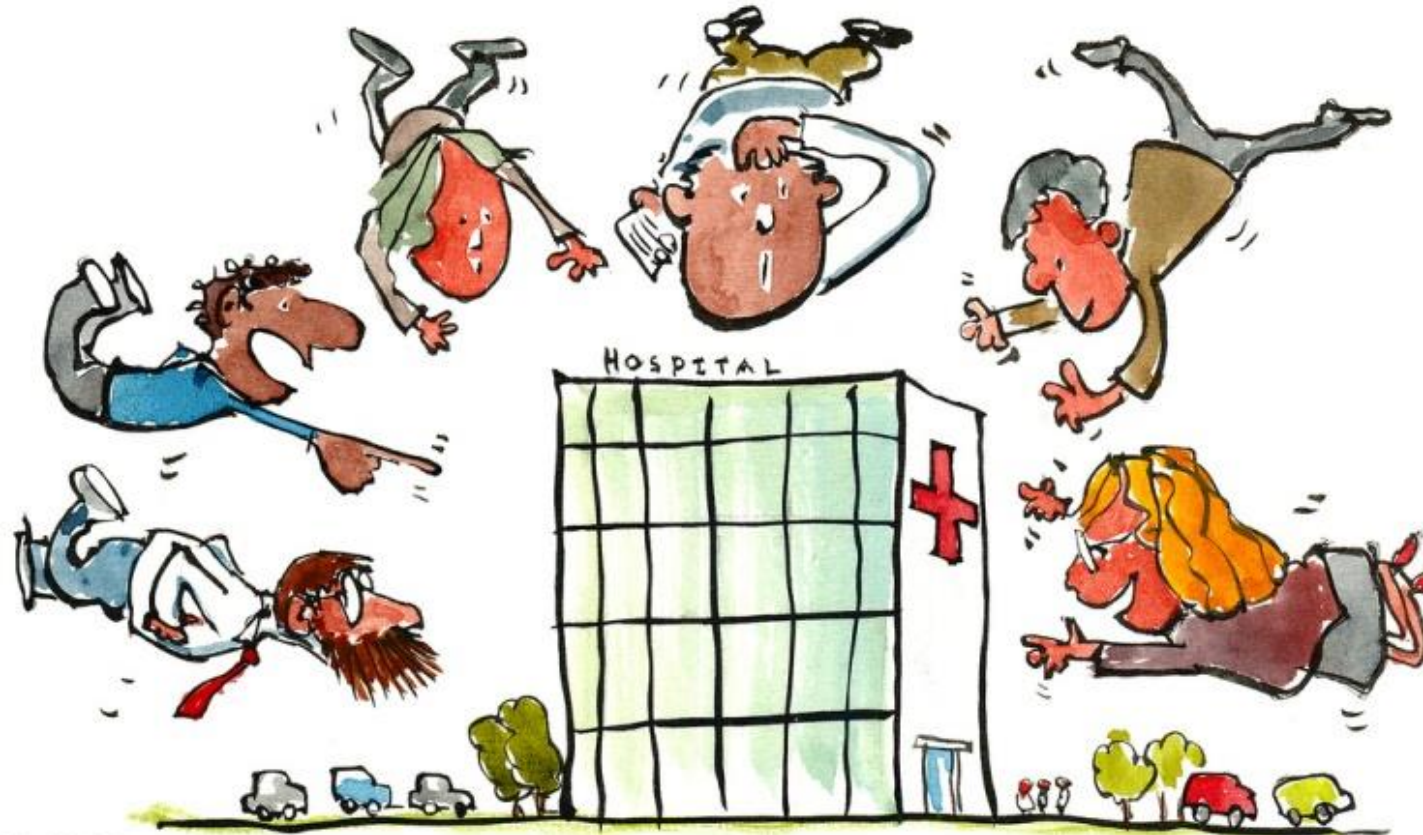
Background

- ▶ complex buildings
- ▶ hospitals
- ▶ many users, contradictory requirements



Background Usability, Purpose

- ▶ Usability research - evaluations
- ▶ PhD project “Usability briefing for hospitals” - methods for capturing user needs at hospitals, feed to design processes, satisfy the users’ needs, maximise the effectiveness of facilities.
- ▶ Purpose: better buildings



Approach

Results based on: 3 hospital cases (observation, interviews, participation)
literature, RIBA plan of work



Case 1, Denmark
Bispebjerg Hospital (BH)
2010-2012



Case 2, Denmark
Healthcare Innovation Lab
(HIL) Herlev Hospital
2010-2012



Case 3, Norway
Skt. Olavs Hospital (SOH)
2012-2013

Research limitations

- ▶ Model is theoretical - needs to be applied and further tested.
- ▶ empirical results -focus phase 1 and 2 (RIBA)
- ▶ only 3 hospital cases DK and NO

State of the art: Theories

Usability

Briefing

Evaluations,
POE, Usability
Appraisal

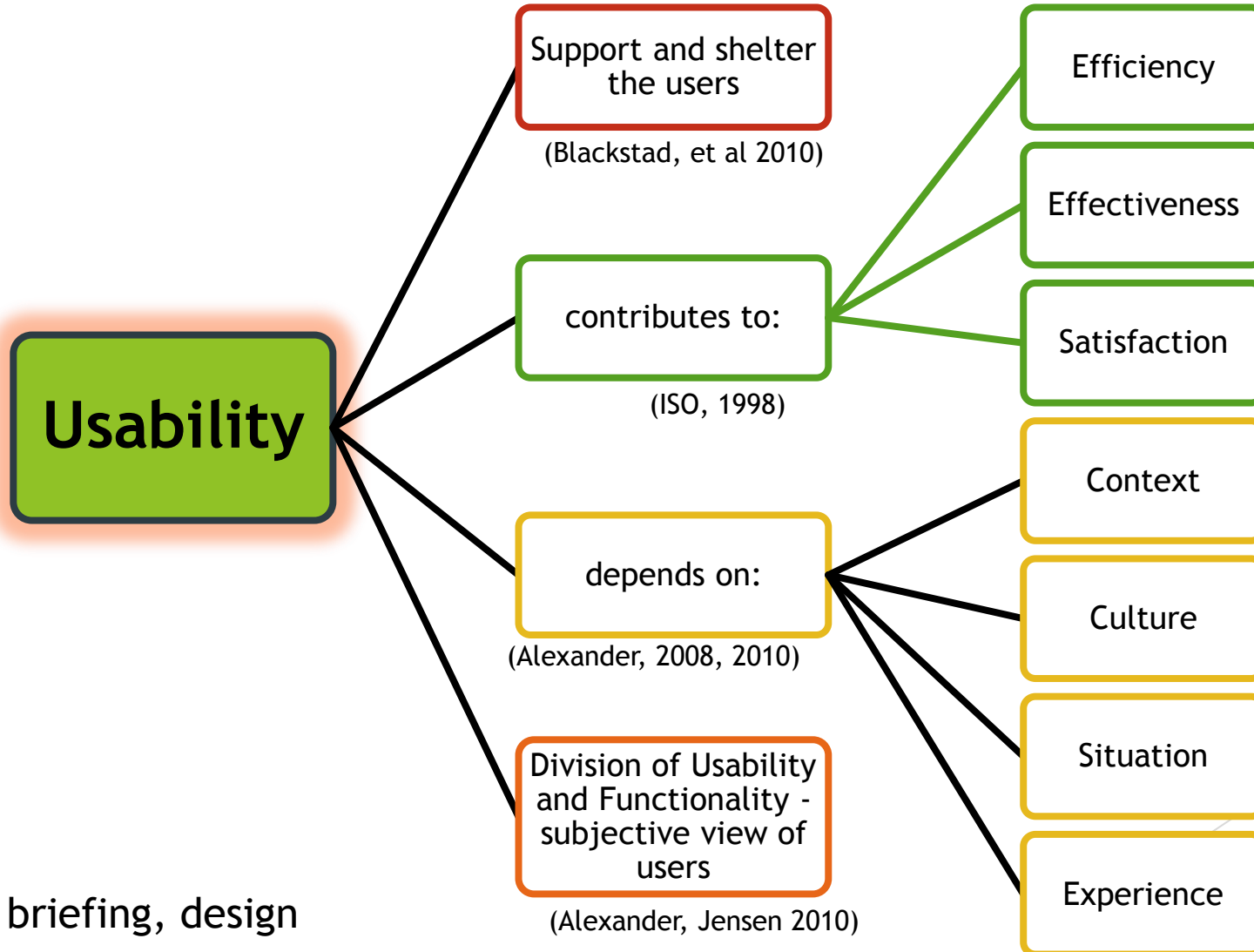
User
involvement

User driven
innovation,
lead users

Boundary
objects

Usability definition

Overview of usability concept, Fronczek-Munter (2011)



+my focus - briefing, design



Briefing -comparison

Traditional briefing	Usability briefing
Concerns new building/construction	Concerns all client/user needs in existing or future facilities
A definite phase at an initial stage of construction	A continuous process with changing focus in all the phases of building life cycle, including occupancy
An expert based information collection	A co-learning and dialogue process
Users mainly involved as data sources	Users actively involved as co-designers and part of a corporate change process
The result is a brief, i.e. a requirement specification	continuous vision collecting and requirement specs, with changing detail and focus

Revised and adapted from Jensen et al. (2011) and Jensen and Pedersen (2009)

Usability Briefing

RIBA planning phases 2013:

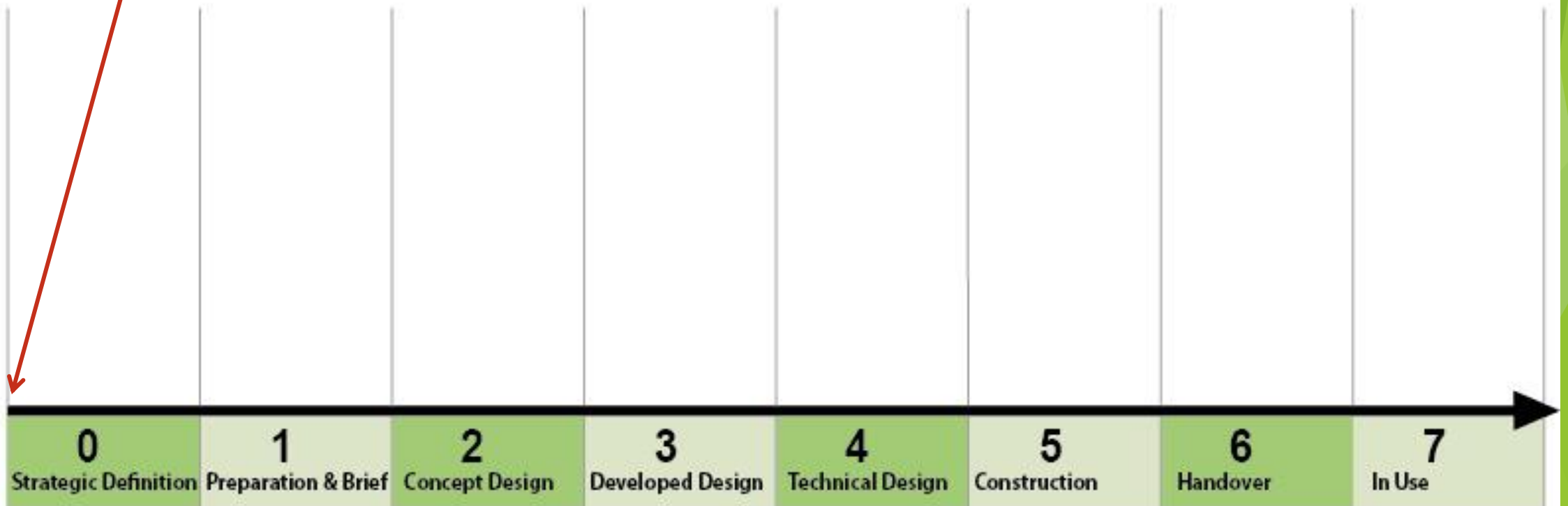
Activities:

Design

Evaluation methods

User Involvement focus

Briefing documents



Usability Briefing

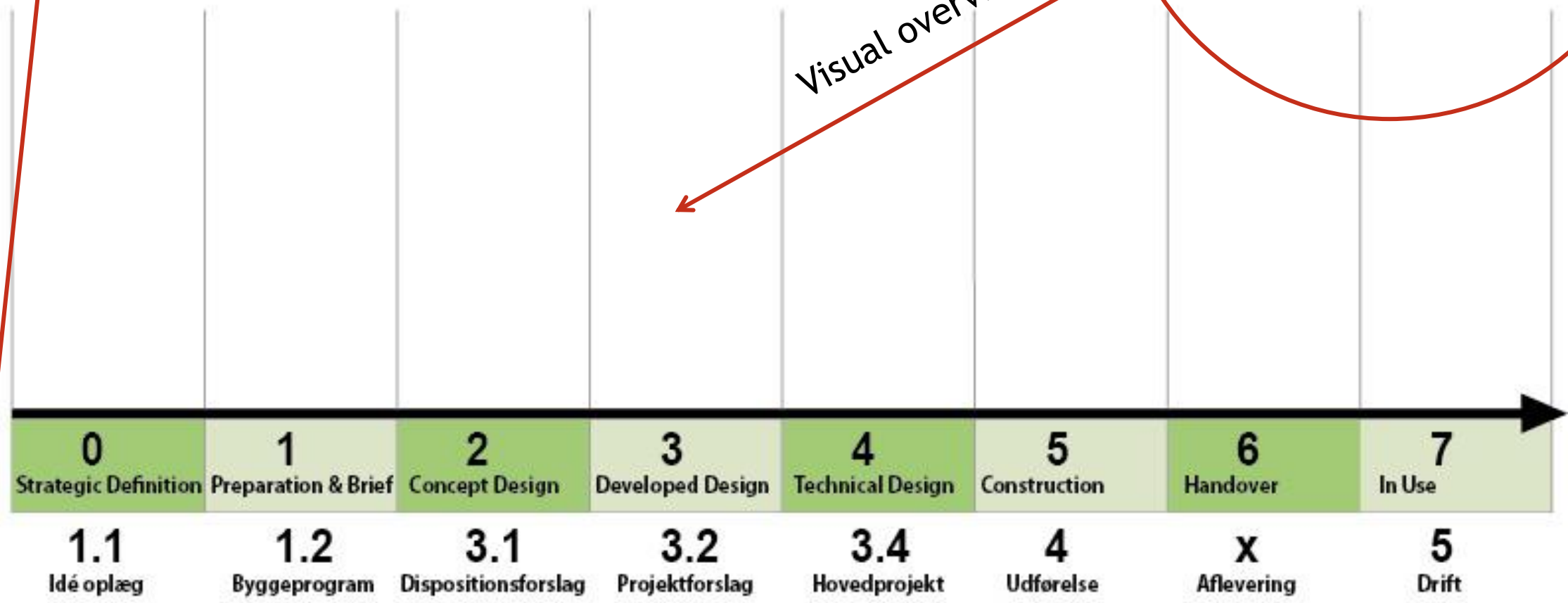
Danish organisations:
FRI, PAR

Activities:

- Design
- Evaluation methods
- User Involvement focus
- Briefing documents

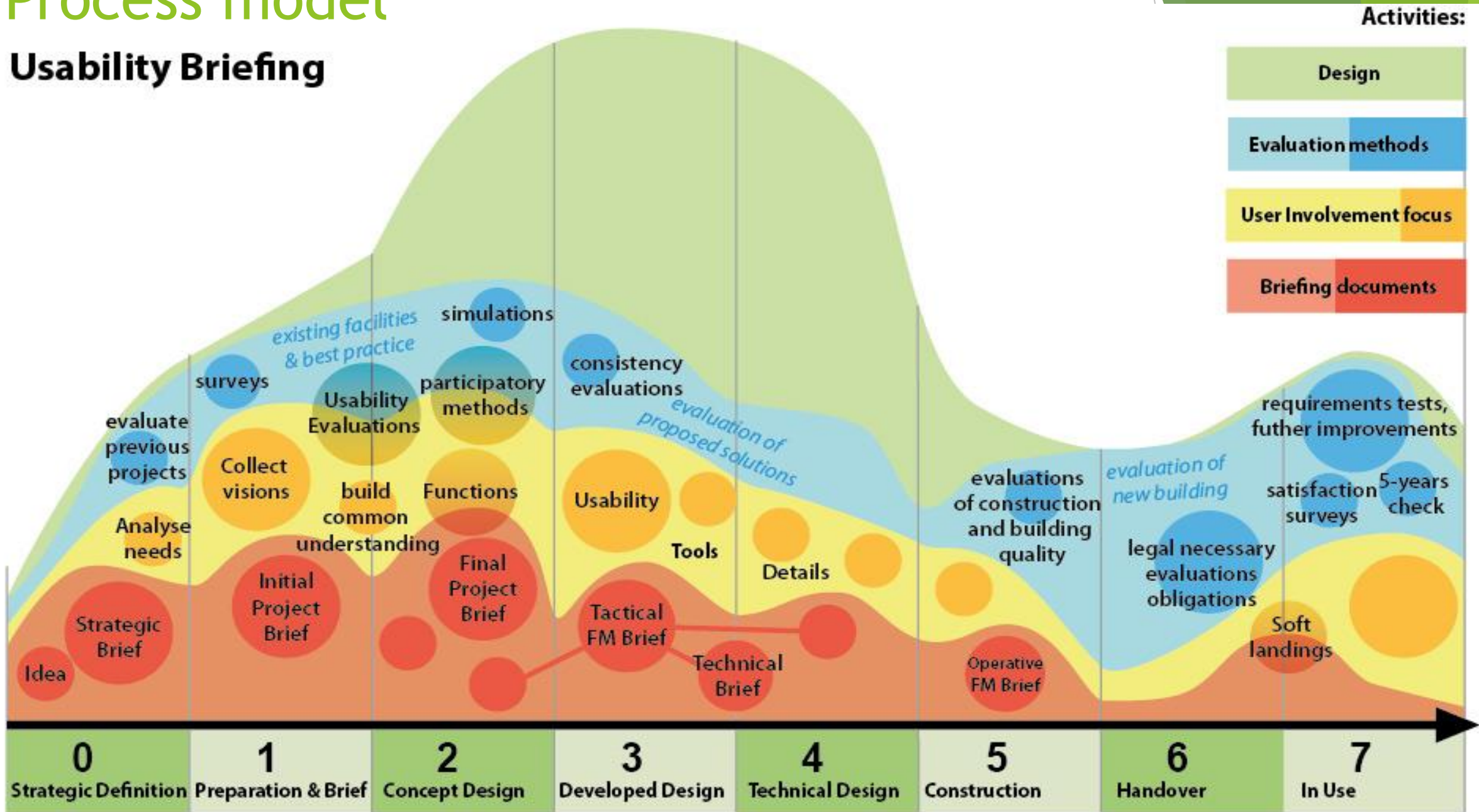
Visual overview

UK
DK

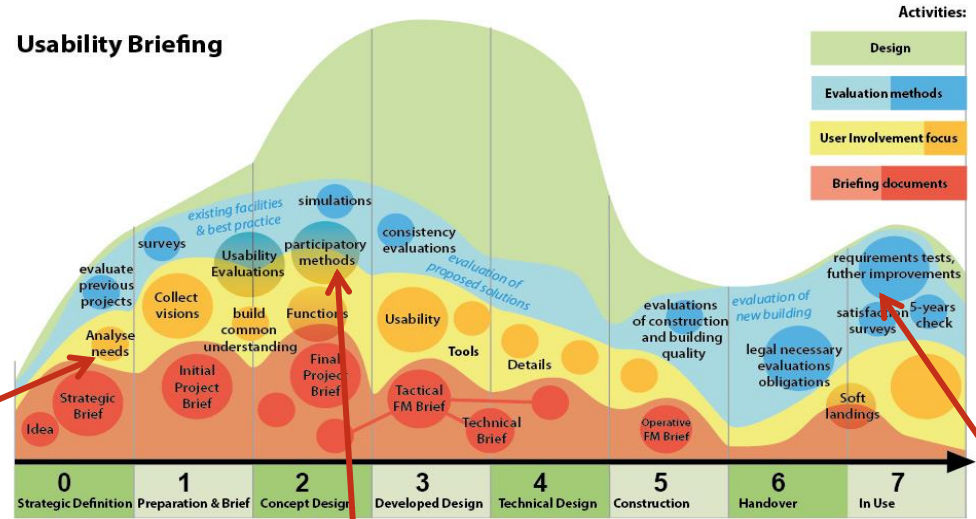


Process model

Usability Briefing



Examples from case studies



Case 1 (BH)

continuous user group



Case 2 (HIL)

Co-creation, methods



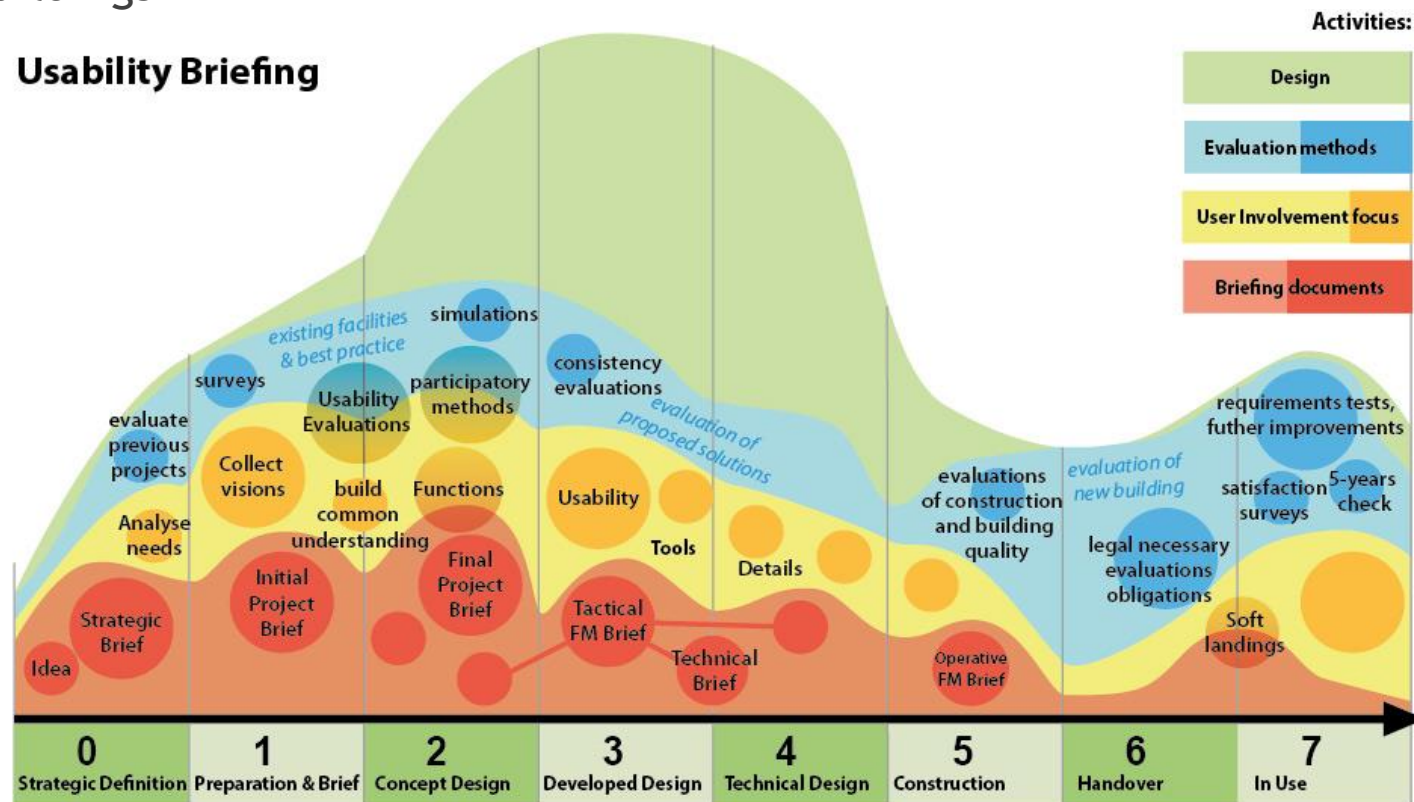
Case 3 (SOH)

Evaluation, USE tool



Summary



- ▶ Visual process model
- ▶ Combining 4 activities
- ▶ Continuous
- ▶ Better buildings



Questions, recommendations



Overview of selected additional variables in the usability briefing model

Phases	Phases 0-1 pre-design	Phases 2-5 design and construction	Phases 6-7 Handover and use
 Users	Lead users, patient organisations managers, top level users	Various users: main (patients, relatives, doctors, nurses, architects, secretaries) and secondary (facility managers, service, operational staff),	Various groups, continuous involvement
 Methods tools, boundary objects	Meetings, feasibility studies, document re-views, surveys - BUS, evaluations- PDE/POE, usability assessment - USEtool	Participatory workshops with users, co-designing, co-learning, design games, observation, evaluations of proposed solutions - simulations, AEDET, Healthcare Design Action Kit, commissioning	Soft landings - buildings operational manual and learning, satisfaction surveys, requirements tests and further improvements - WODI, DQM, POE, ST&M, ASTM standards
Focus	Visions, collect data, analyse needs, own existing facilities and best practice, common understanding, inspiration	usability, functionality, creativity, innovation, transforming visions to prioritised needs, from general to detailed and operational	Evaluations - tests and improvements, learning how to use the new facility
General results	Capturing needs and visions	Prioritising, innovation, requirement specification, inspiration for innovative design	Learning how to operate, documentations, improvements/ adjustments
Results as documents:	Strategic brief, Initial project brief	Final project brief, Tactical FM brief, Operative FM brief	Documentations, survey results, benchmarking data