

# Breakoutsession No. 08

Recap

# Plan for Today

- there will be a question/item on each slide
- raise your hand if you know the answer
- and what is it good for?
  - recap of some important topics
  - preparation for the exam
  - Gummi Bears

# Question 1

## Why is sketching useful?

- **Early** ideation
- **Think** through ideas
- **Force** you to visualize how things come together
- **Communicate** ideas to others to inspire new designs
- **Active** brainstorming

# Question 2

## What are Buxton's Sketch Properties?

- Quick
- Timely
- Inexpensive
- Disposable
- Plentiful
- Clear vocabulary
- Distinct gesture
- Minimal detail
- Appropriate degree of refinement
- Suggest and explore rather than confirm
- Ambiguity

# Question 3

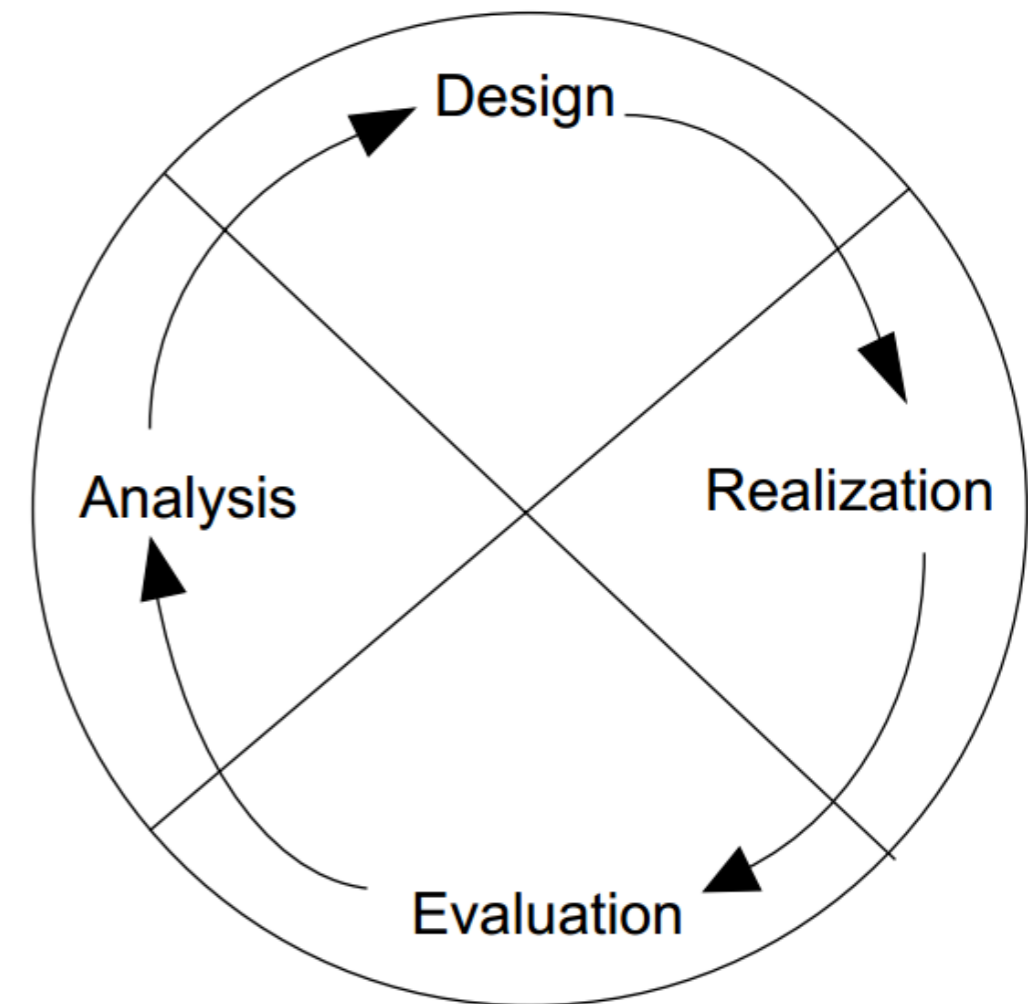
What are the main approaches to IxD?

- User Centered Design (UCD)
- Genius Design
- Systems Design
- Activity Centered Design

# Question 5

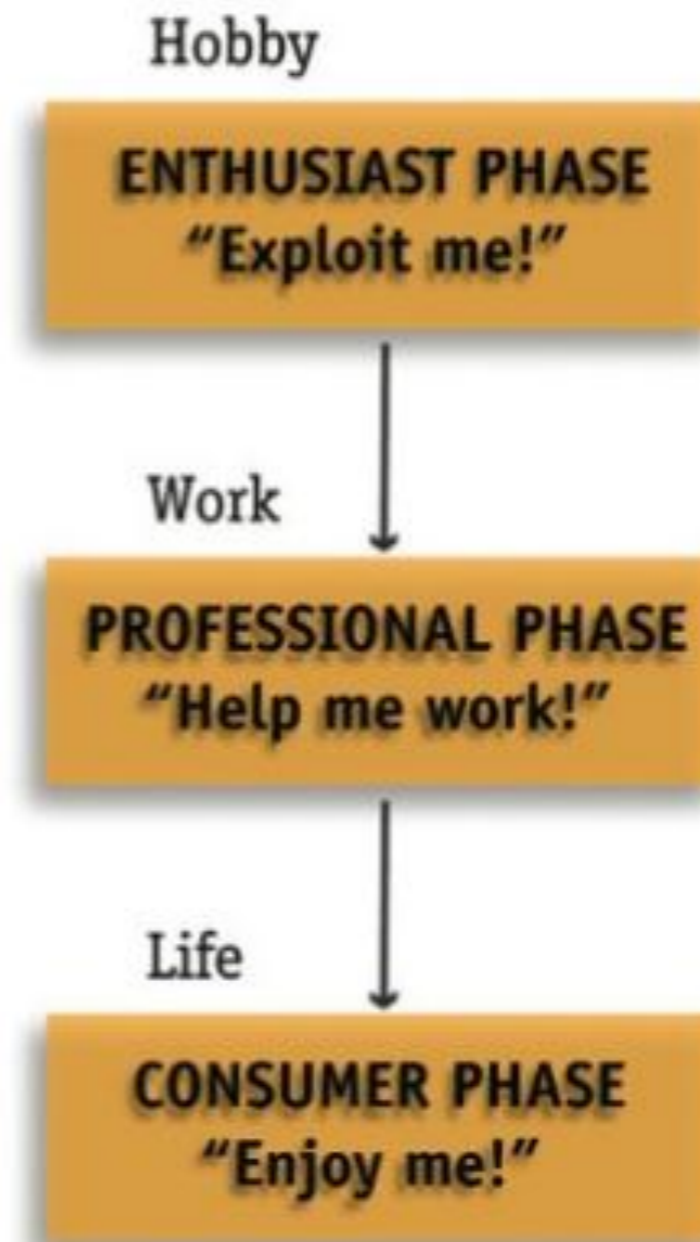
What are the basic activities of UCD?

- Identifying needs and establishing requirements
- Developing alternative designs
- Building interactive versions of the designs
- Evaluating designs



# Question 6

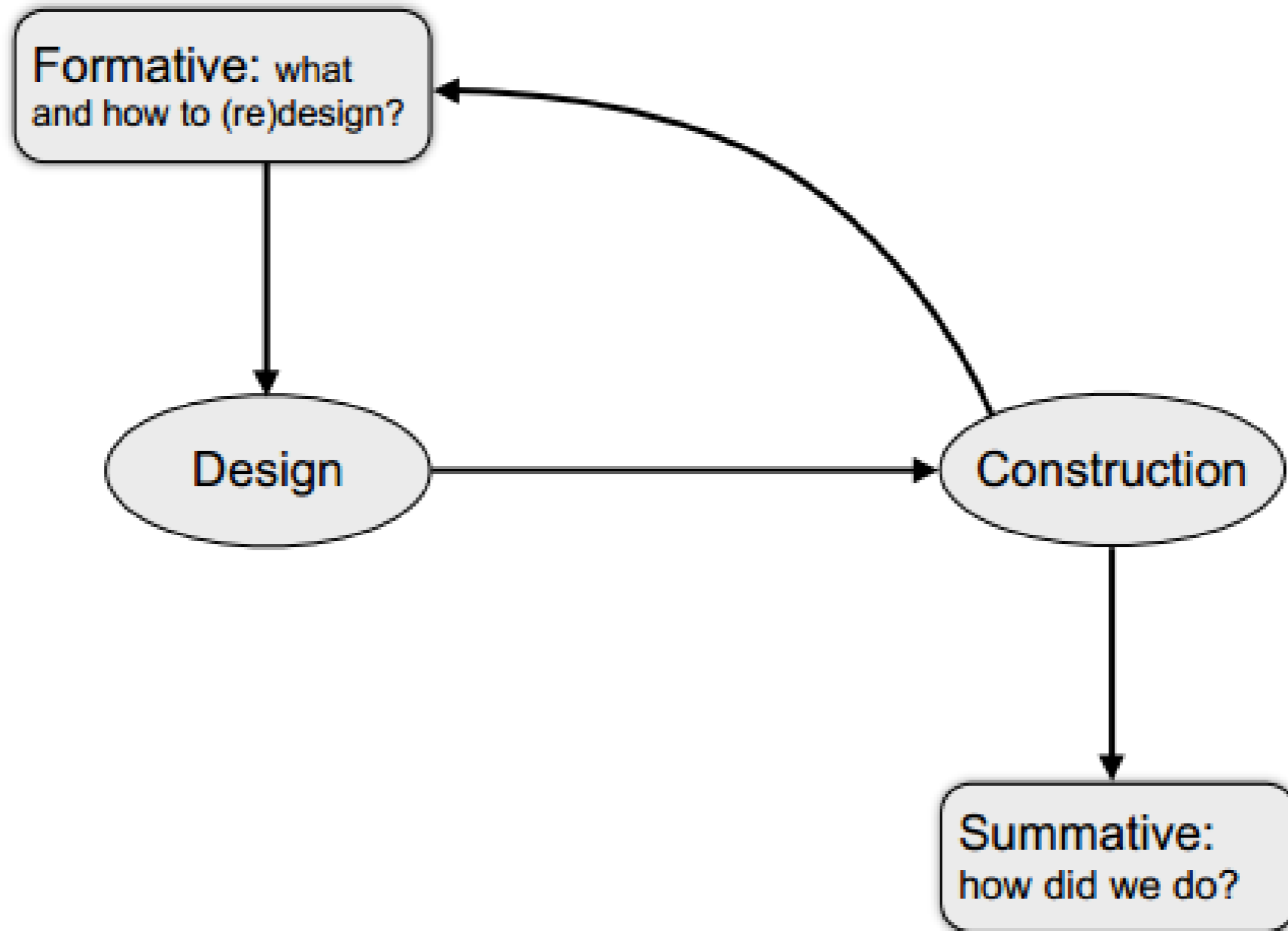
What are the typical consumer phases of the adaption of a new product group?



Moggridge, B. Designing Interactions, MIT Press, 2006.

# Question 7

Describe the terms 'formative' and 'summative' in the context of evaluation.



M. Scriven: The methodology of evaluation, 1967



# Question 8

What is your understanding of Heuristic Evaluation?

#	Review Checklist	Yes No N/A	Comments
1.1	Does every display begin with a title or header that describes screen contents?	<input type="radio"/> <input type="radio"/> <input type="radio"/>	
1.2	Is there a consistent icon design scheme and stylistic treatment across the system?	<input type="radio"/> <input type="radio"/> <input type="radio"/>	
1.3	Is a single, selected icon clearly visible when surrounded by unselected icons?	<input type="radio"/> <input type="radio"/> <input type="radio"/>	
1.4	Do menu instructions, prompts, and error messages appear in the same place(s) on each menu?	<input type="radio"/> <input type="radio"/> <input type="radio"/>	
1.5	In multipage data entry screens, is each page labeled to show its relation to others?	<input type="radio"/> <input type="radio"/> <input type="radio"/>	
1.6	If overwrite and insert mode are both available, is there a visible indication of which one the user is in?	<input type="radio"/> <input type="radio"/> <input type="radio"/>	
1.7	If pop-up windows are used to display error messages, do they allow the user to see the field in error?	<input type="radio"/> <input type="radio"/> <input type="radio"/>	
1.8	Is there some form of system feedback for every operator action?	<input type="radio"/> <input type="radio"/> <input type="radio"/>	
1.9	After the user completes an action (or group of actions), does the feedback indicate that the next group of actions can be started?	<input type="radio"/> <input type="radio"/> <input type="radio"/>	
1.10	Is there visual feedback in menus or dialog boxes about which choices are selectable?	<input type="radio"/> <input type="radio"/> <input type="radio"/>	
1.11	Is there visual feedback in menus or dialog boxes about which choice the cursor is on now?	<input type="radio"/> <input type="radio"/> <input type="radio"/>	



# Question 10

Which law of IxD might have been helpful in the design process of the pie menu?

- Fitts' Law

# Question 11

What's the formula for Fitts' Law?

$$\text{Time} \longrightarrow T = a + b \cdot \log_2 \left( 2 \frac{D}{W} \right)$$

↑  
Coefficients  
a: Intercept  
b: Slope

Distance  
↓  
↑  
Width

# Question 12

Describe the Aesthetic-Usability Effect.

- Aesthetic designs look easier to use and have a higher probability of being used, whether or not they actually are easier to use.

# Question 13

What's this:  $T = b * \log_2(n+1)$

- Hick's Law
- Describes the time it takes to make a decision depending on the number of choices provided

# Question 14

Who's that:

- Donald Norman
- Basic Book “The Design of Everyday Things”
- Feedback, Mapping, Affordances, ...

# Question 15

What does the word 'affordance' mean according to Don Norman respectively James Gibson?

An affordance is a property, or multiple properties, of an object that provides some indication of how to interact with that object or with a feature on that object.



# Question 16

Name three different kinds of prototypes we discussed during the lecture!

- Paper Prototypes
- Video Prototypes
- Hardware Prototypes

# Question 17

## What is Shadowing?

- Tag along with people to observe and understand their day-to-day routines, interactions, and contexts
- reveal design opportunities and show how a product might affect or complement user's behavior

# Question 18

What is a controlled experiment? Is it an analytical or an empirical kind of evaluation?

- Answering specific, often quantitative, questions
- Selected participants carry out well-defined tasks
- Specific values are measured and compared
- Example: Comparing input/output devices
- Empirical Evaluation

# Question 19

There are two kinds of variables in controlled experiments. Name and explain both.

- Variables are manipulated and measured
- The conditions of the experiment are set by **independent** variables
- The **dependent** variables are the values that can be measured

# Question 20

What is visual clutter?

- Clutter creates visual noise and makes an application hard to use

# Question 21

What can an interaction designer use to reduce visual clutter?

Proximity

Grouping

# Question 22

Who is considered to be the inventor of the computer mouse?

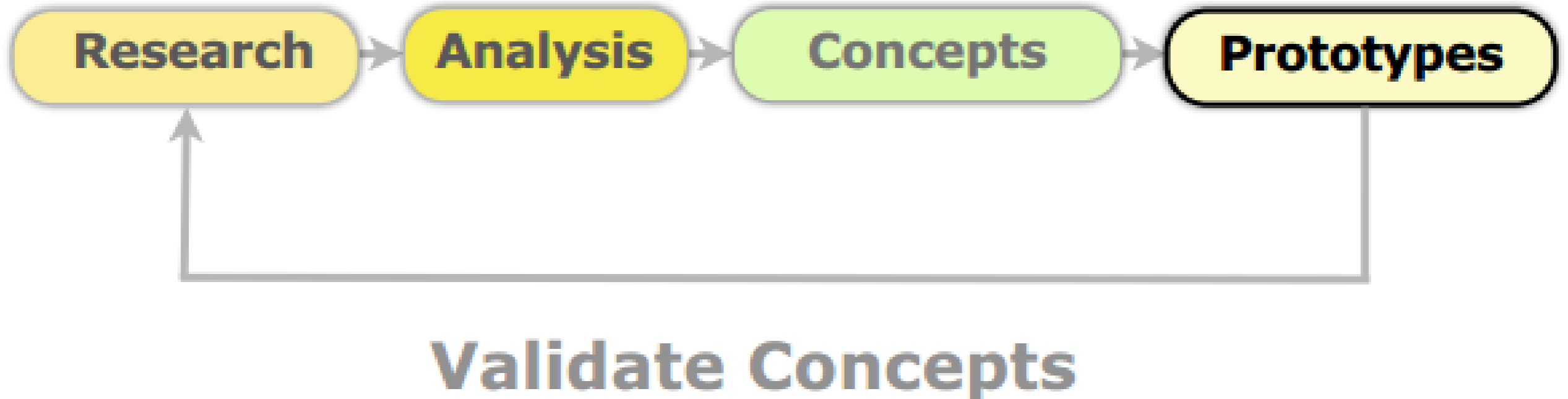
## Remembering Doug Engelbart



*Doug Engelbart (1925-2013) pictured here circa 1998 [Photo credit: Getty]*

# Question 23

What is important about the process of how the computer mouse was developed?





# Question 23

What are the three questions that an Interaction Designer needs to answer?

## INTERACTION DESIGN



# Question 24

A paradigm is an example that serves as a pattern for the way people think about something. The basic question is: What is a computer?

- Intelligence (smart, does things for me)
- Tool (direct manipulation)
- Media (look and browse)
- Life (Virus, Evolution)
- Vehicle (Standards, Infrastructure)
- Fashion (Design, Style)

3) Nennen und erklären Sie kurz (1-2 Sätze) drei Charakteristika eines Service laut D. Saffer (6 Punkte).

- **Intangible:** Although services are often populated with objects, the service itself is ephemeral, customers can't see or touch the service itself-only the physical embodiments
- **Provider Ownership:** Customers who use a service may come away from it with an owned object such as a cup of coffee or used car, but they don't own the service itself.
- **Co-Created:** Services aren't made by the service provider alone; they require the involvement and engagement of the customers as well.
- **Flexible:** Each new situation or customer requires that the service adapt to it
- **Time Based:** Each new situation or customer requires that the service adapt to it
- **Active:** Services are created by human labor and are thus difficult to scale.
- **Fluctuating demand:** Services are created by human labor and are thus difficult to scale.

# Sketch Books

- 5% Bonus possible for Sketchbooks
- Please hand in the books today
- we will look through them quickly
- you can pick them up at 3:30pm in my office (Amalienstraße 17, 2. Stock)

# Klausur

- **Termin:** Montag, 28.07.2014, 14-16 Uhr
- **Frist zur Anmeldung:** Montag, 21.07.2014
- **Ort:** Theresienstraße 41, Raum C 123
- closed book, also keine Hilfsmittel zugelassen
  
- **Abmeldefrist:** 23.07.2014