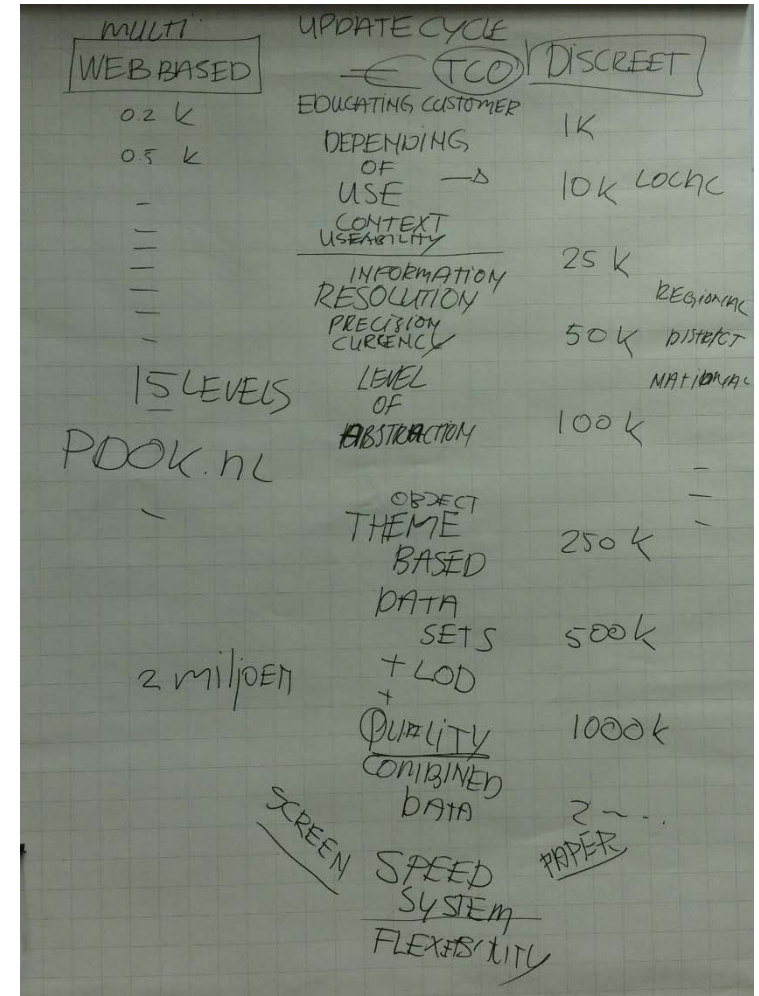


# Multi scale vs. Discrete scale

Breakout session 1

# Multi scale (webbased) vs. discrete

Webbased scales	Discrete scales
1:659	10K
1:1,300	25K
1:2,600	50K
5K	100K
10K	250K
21K	500K
42K	1M
84K	2M
169K	...
337K	
674K	
1,3M	



# Scale?

- Different levels of detail
- Different levels of abstraction
- Multiple resolutions
- Different scales for individual themes
- Natural aggregate levels instead of scale  
(Building, building block, neighbourhood, city, ...)



# 'Discrete scales will disappear in 5 years'

- No, webbased scales will disappear. In 2 years
- Modern users are not interested in scale but in speed and usability
- There will always be a (user) requirement for a discrete scale
- Preprocessing fixed scales will stay necessary
- On-the-fly generalisation / scale appropriate representation / dynamic representation is not fast enough for the user
- Fixed discrete scales are needed to provide a common, familiar and recognizable reference for discussion between areas of expertise
- The concept of scale changes, as will the way of cartographic thinking

‘Webbased is 10% of the costs as opposed to discrete maps’

- This probably only counts for the Netherlands
- The majority of the cost is not in generalisation but in data acquisition
- The cost of ownership of source data shifts to local authorities
- Only one database needs updating for webbased
- The generalisation process for webbased is less intensive than for discrete levels

# Discussion

- How to define the right symbol if the scale is unknown?
- Printing on a certain scale might discard content
- Current discrete scales are chosen for a reason, they are fit for purpose
- If no displacement takes place problems with consistency might occur as objects are omitted.

# Future of the concept of scale

- People zoom in and out and create their own scale based on usage
- Theme based datasets with a possibility of mixing different levels of detail based on user needs
- One database providing all necessary levels of abstraction