



# Purposeful Data Collection

An analysis of publications on  
digital user research

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# Characteristics of digital library users



- Multi-local
- Multi-lingual
- Multi-time-zones
- digital user research must take place online  
(to be where the user is)

# Methods used in user research – a study by Denise Troll-Covey



Method	Purpose	Quantity
survey	need assessment + perception	"most of the DLF respondents"
focus group	use + need assessment + quality + satisfaction	"more than half of the DLF respondents"
thinking-aloud	test usability	"half of the DLF respondents"
log file analysis	use	"most of the DLF respondents"

# Research questions



- Which methods do we use for studying our users in digital libraries?
- What are our purposes?
- What is the relationship between purpose and result?

# Content analysis on user research for digital library services



- Sampling criteria for publications:
  - publications contain applied user research in a digital library environment and examine only online services
  - publications post-date 1998
  - no unpublished conference contributions
  - no slides-only conference presentations

# Content analysis on user research for digital library services



- Sources:
  - DABI (German journal database)
  - E-LIS (OA-Repository for LIS)
  - DissOnline + ProQuest Dissertation Abstracts (German thesis repository + international database for US/Canadian theses)
  - LISA (international database for LIS)

# Content analysis on user research for digital library services III



- Types and numbers of publications
  - 44 articles
  - 13 thesis
  - 13 conference papers
- Article status
  - 52 % peer-reviewed articles
  - 34% non-peer-reviewed, source: DABI
  - 14% non-peer- reviewed, source: E-LIS

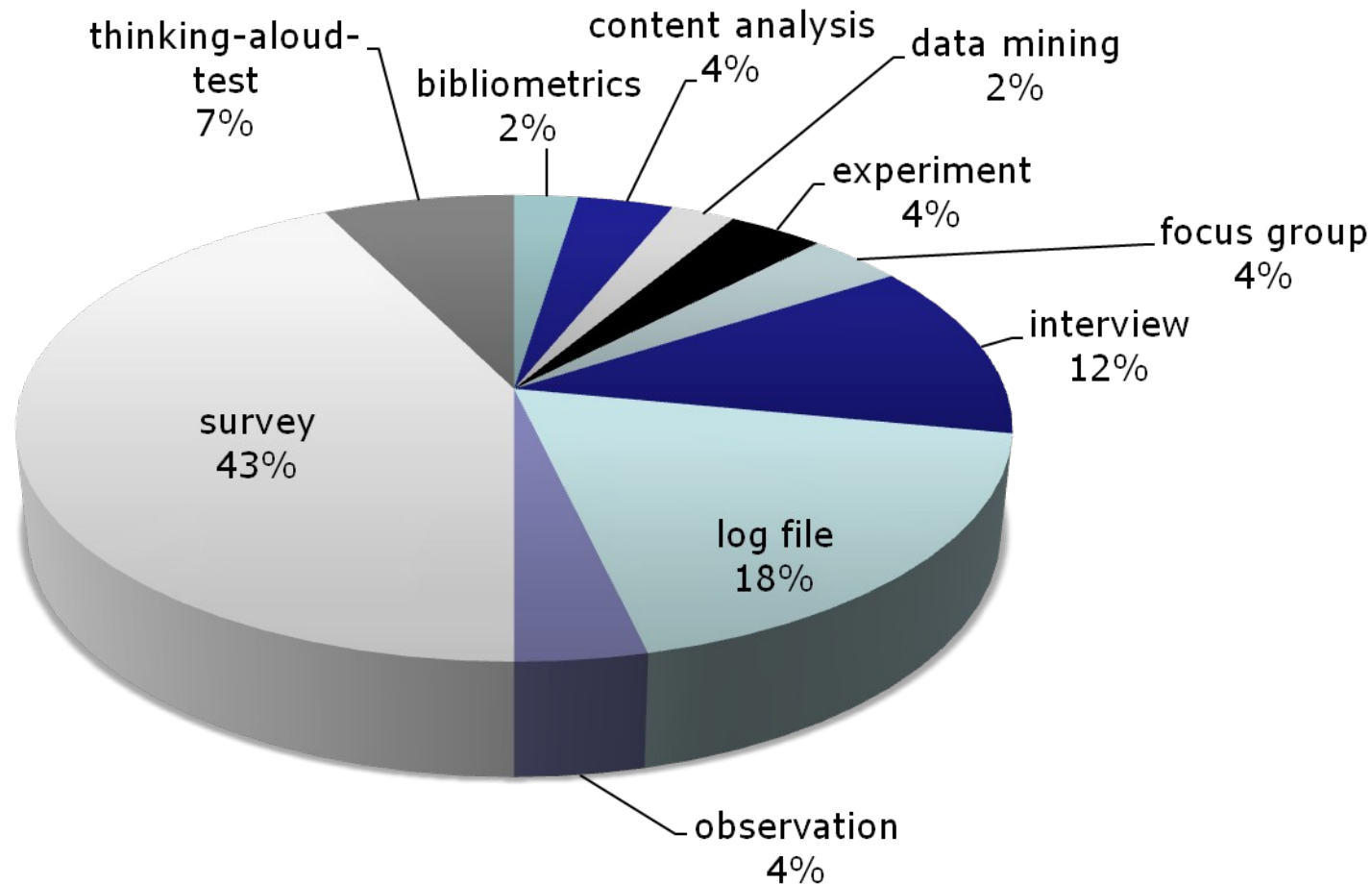
# How do we study our users?



- Who does online user research: 36% students; 31% librarians; 26% LIS school faculty and staff; 7% external.
- ca. 55% of all research on digital library environments already takes place online; 45% takes place offline (in a local environment)



# Methods used for online user research studies

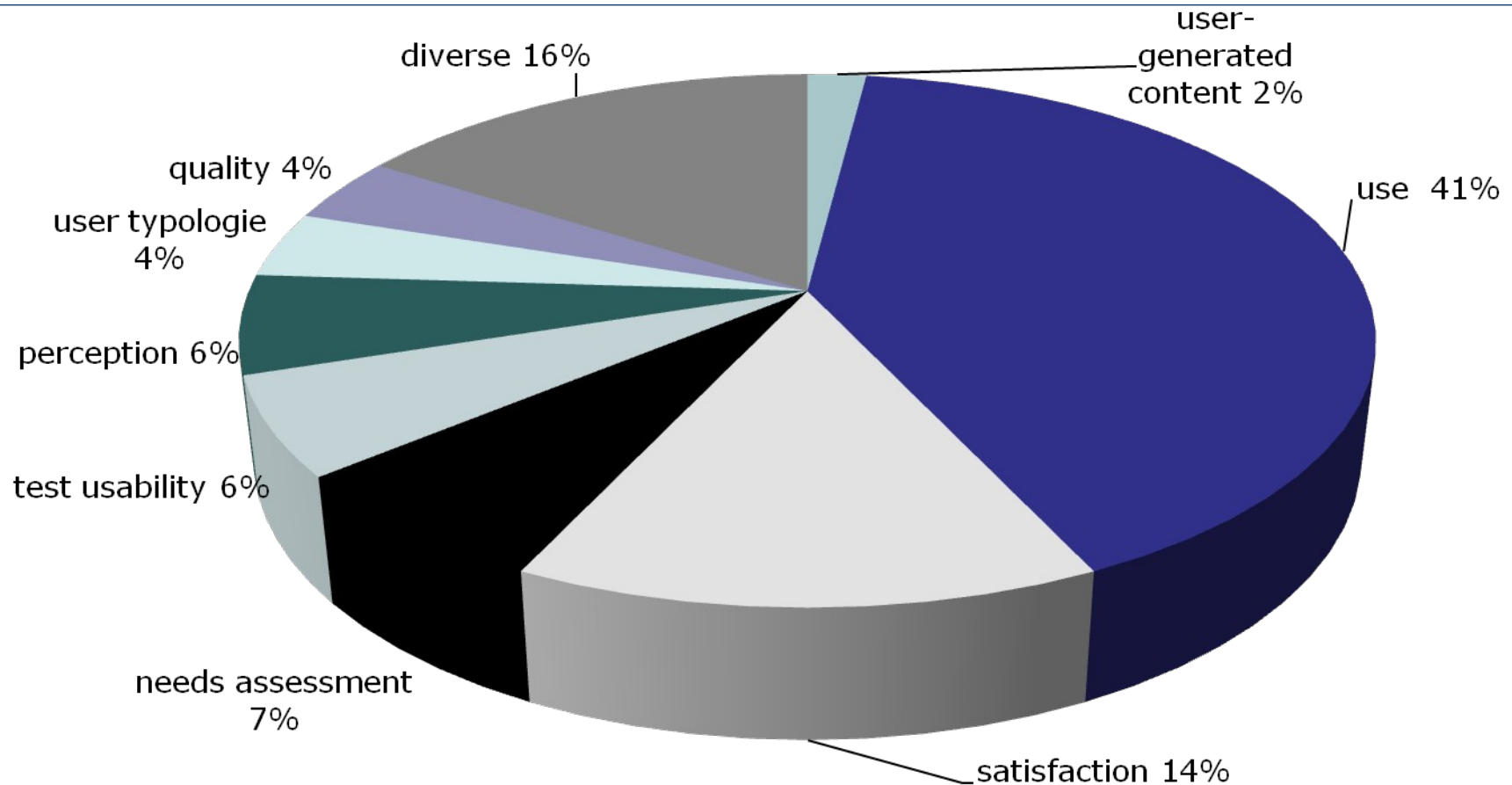


# The 8 most frequently cited purposes



1. use: how do people use our system?
2. satisfaction (degree of)
3. perception: immediate reaction / opinion
4. needs assessment: trends; what do people need in the future
5. user typology: who are our users?
6. user-generated content
7. test usability / functionality
8. quality

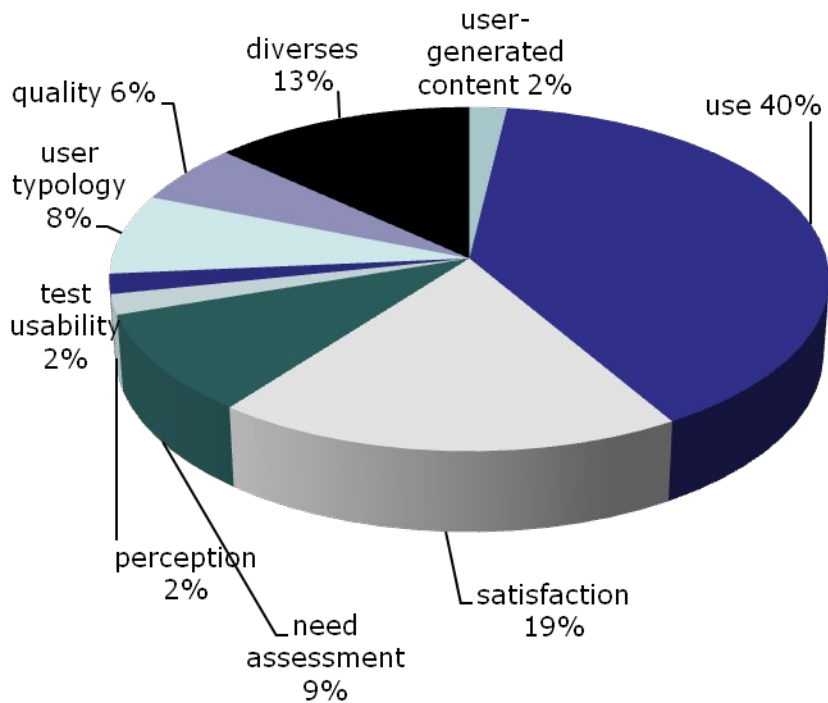
# Percentage distribution of purpose



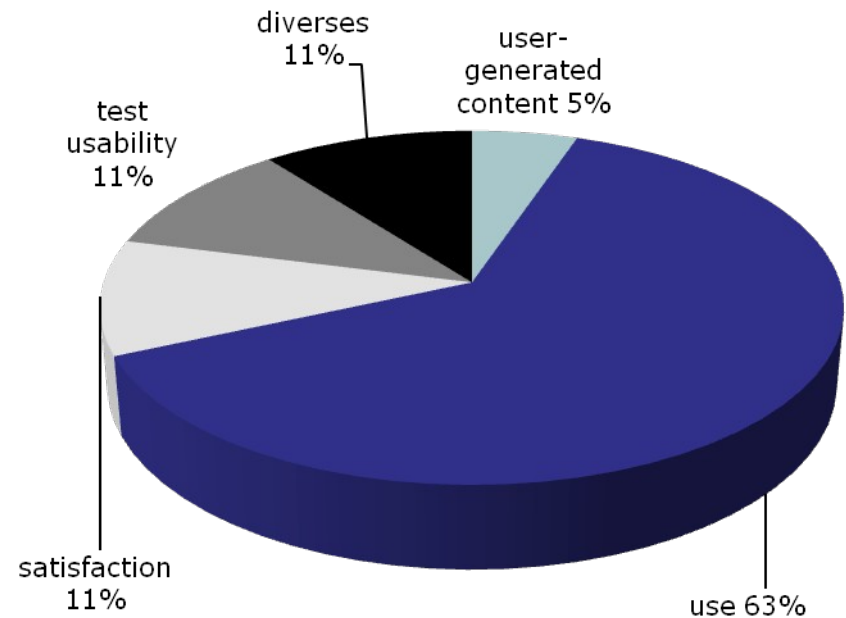
# Methods used for purposes



## survey



## log file analysis



# Relation purpose and result



- purpose  $\neq$  result
  - problems with sampling
  - problems with research design
  - clear mismatch between what was said to be the purpose and what the researcher actually did

# Relation purpose and result



- Some approaches seem inadequate:
  - ask people what they need and offer closed-answer-set that mirrors our preferences
  - a usage indicator for digital library material was only the number of printed articles per journal in a year

# Limitations of current studies



- Research on **satisfaction**: is it enough to ask users directly: “are you satisfied with the e-book collection?”
- Research on **use**: is it enough to collect static data on use or is there a need for dynamic patterns of users’ behavior?
- Research gap: **claimed behavior** versus actual behavior

# The “green standard” of online user research



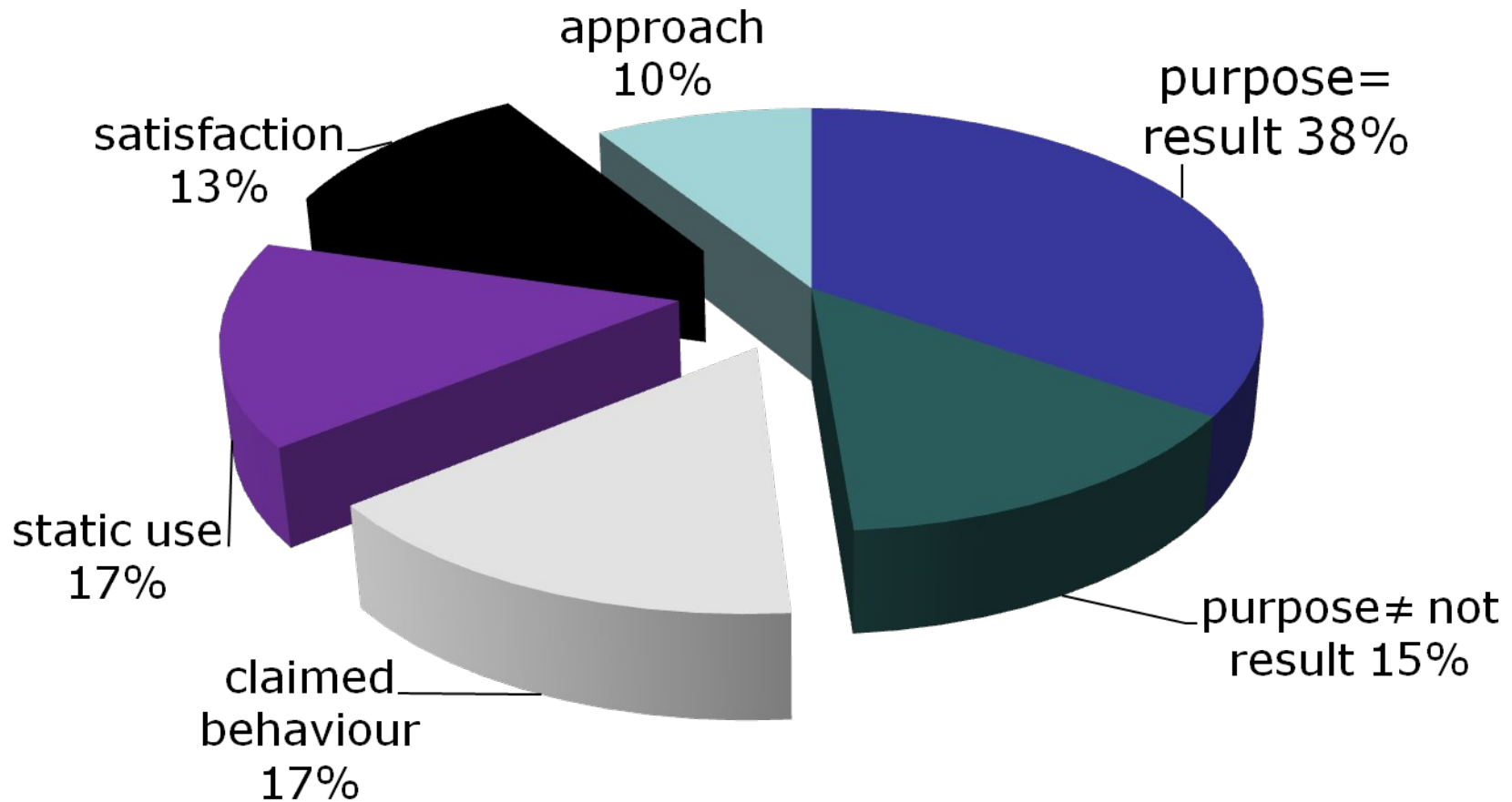
- we define satisfaction, behavior and use the way we currently analyze it and
- we agree that we get sufficiently purposeful data with the methods we are now using
- In other words, we accept that claimed behavior suffices.



“green standard” of online user research



# Relation purpose and result



# The “gold standard” of online user research



- we define use, behavior and satisfaction in a more complex way
- we see a mismatch between what we are analyzing now and what we should analyze
- we develop methods for gathering purposeful data in order to study users online



We are moving towards an ideal way of doing online user research: the “gold standard”



- Troll Covey, Denise. "Usage and Usability Assessment: Library Practices and Concerns." Washington, DC: Council on Library and Information Resources, 2002
- All analyzed publications are listed under:  
<http://www.elke.greifeneder.de/UserResearch>

# THANK YOU!

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