

A LOOK AT THE USAGE AND USABILITY OF ELECTRONIC DATABASES WITH SPECIFIC REFERENCE TO LAW DATABASES

PRESENTER: MR TSEPO CONSTABLE

LIBRARY TECHNOLOGY WEEK

17 SEPTEMBER 2013

OUTLINE

PART 1: USABILITY

- What is usability?
- Components of usability
- Usability testing
- Advantages of usability testing
- Methods of usability testing
- Unisa usability laboratory

PART 2: USAGE

- Electronic database usage
- Electronic law database usage statistics
- Importance of usage statistics

CONCLUSION



INTRODUCTION

“Unisa, has been identified as one of the top e-Book users around the world and the developer (from The Netherlands) would like to come to SA to conduct a usability test with you”

E-mail by Heather Wills (SWETS)

Dated: 18 June 2013



PART 1

USABILITY

Usability

❖ What is usability?

- IT discipline
- Also known as "user friendly"

"Usability = system acceptability whose goal is to ensure if systems have all necessary features to satisfy all their intended functions" (Nielsen,1993:24)

- Usability is making systems much easier to use

Usability ...cont.

➤ ISO BS EN ISO 9241 defines usability as:

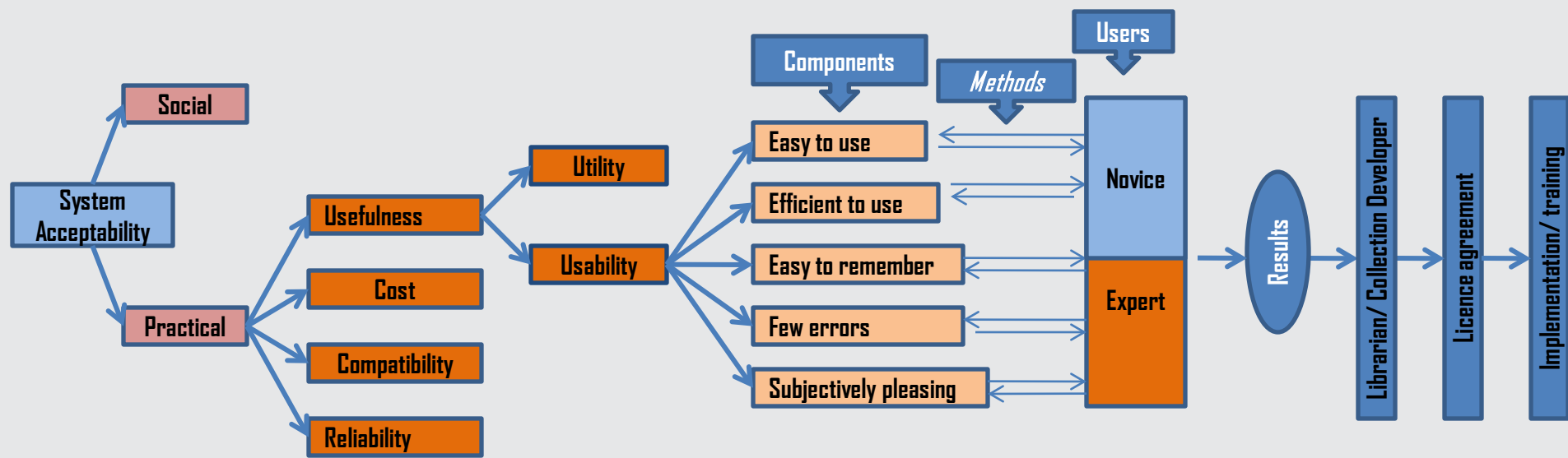
“the extent to which a product can be used by **specified users** to achieve **specified goals** with **effectiveness, efficiency**, and **satisfaction** in a specified context of use” (Travis,2005)

Usability ...cont.

❖ Components of usability

Nielsen (1993) describes the five main attributes of usability:

- **Learnability** - easy to learn so that the user can quickly start using the system
- **Efficiency** - efficient to use = high level of productivity
- **Memorability** - easy to remember
- **Errors** - low error rate, so that users make few errors during the use of the system, and so that if they do make errors, they can easily rectify them
- **Satisfaction** - pleasant to use, so that users are subjectively satisfied when using it



A model of the attributes of system acceptability (Nielsen, 1993) * Modified by Constable (2013)

Usability Testing

- Bruschi (2011) defines usability testing as the process of testing a system's user interface with the users themselves
- Usability testing is a technique for ensuring that the intended users of a system can carry out the intended tasks efficiently, effectively and satisfactorily
- Pretorius (2010) defines usability testing as a technique used in user-centred design (ISO 13407): User-centred design is characterised by active involvement of users and a clear understanding of user and task requirements
- Usability testing is usually conducted before the system is made available, so that any problems or issues identified can be addressed

Advantages of usability testing

- Assists the developers in identifying faults/errors/bugs, in order to effect changes or modifications to the system
- Good product/system before it is released to the market
- Use of all types of testing/methods that validate the functionality of the system
- Saves on development costs
- Increases user satisfaction
- Develops trust in the company (Pretorius, 2010)

Methods of usability testing



Methods of usability testing ...cont.

❖ Testing (<http://www.usabilityhome.com/>)

- [Coaching Method](#)
- [Co-discovery Learning](#)
- [Performance Measurement](#)
- [Question-asking Protocol](#)
- [Remote Testing](#)
- [Retrospective Testing](#)
- [Shadowing Method](#)
- [Teaching Method](#)
- [Thinking Aloud Protocol](#)

Methods of usability testing ...cont.

❖ Inspection

- [Cognitive Walkthroughs](#)
- [Feature Inspection](#)
- [Heuristic Evaluation](#)
- [Pluralistic Walkthrough](#)
- [Perspective-based Inspection](#)

Methods of usability testing ...cont.

❖ Inquiry

- [Field Observation](#)
- [Focus Groups](#)
- [Interviews](#)
- [Logging Actual Use](#)
- [Proactive Field Study](#)
- [Questionnaires](#)

Unisa usability laboratory

Marco Pretorius (Unisa: School of Computing- Usability Manager & Researcher)

- World class usability laboratory
- Exists within the School of Computing
- Has an Observer room
- Has a Participant room
- These 2 are separated by a one-way mirror
- Tobii 1750 eye tracker
- Audio and Video Recording equipment
- Event logging, eye tracking software

Available for research and professional usability consulting

<http://osprey.unisa.ac.za/facilities.htm>



PART 2

USAGE

Electronic Database Usage

- More and more users rely on electronic databases
- Increasing percentage of library budget is allocated to electronic database subscriptions
- They offer great benefits
- Benefits offered cannot be realised if the databases are unusable

Electronic law database usage statistics

- Libraries need statistics to justify expenditure and make the case for continued support
- Usage statistics [low ✓ high]
- Discussion on specific law databases, e.g.
 - Westlaw ** JSTOR
 - HeinOnline ** ProQuest (abstract)
 - Lexis Nexis

Importance of usage statistics

AALL (2012):

- Statistical analysis has the potential to save money and it shows whether money is spent efficiently and appropriately, based on evidence
- Tells us what gets used in the library

CONCLUSION

LAW OF THE LEAST ASTONISHMENT

"the program/database should act in a way that least astonishes the user"

Usability testing of databases should be conducted by librarians more frequently

CONTACT DETAILS

Mr. T.F. Constable

Personal Librarian: College of Law

Tel: 012 429 8827

Cell: 072 3489 608

E-mail: tsepoc@unisa.ac.za