

School of Computer Science, Massey University 158.888: Information Technology Professional Project



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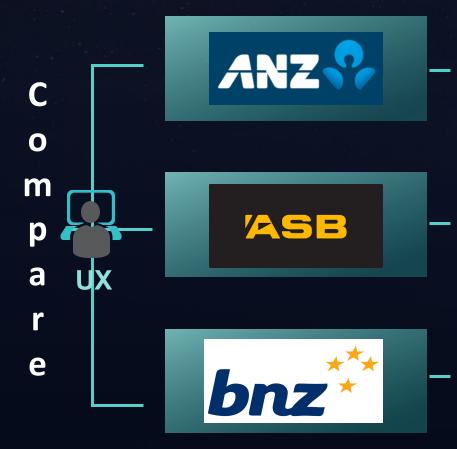


Introduction

3 Banking Websites in NZ

3 Aspects

Purpose



Integrated Assessment

Simplification Assessment

Al Application Assessment





Integrated assessment



The importance of Integrated assessment

Assessment gaps

Existing evaluations lack
 comprehensive UX perspective (Diniz
 et al., 2005; Miranda et al., 2006; Selz
 & Schubert, 1998).

 Importance of integrating UX for insights into user satisfaction("How", 2023)

Objective

UX considerations



website quality evaluation



Integrated assessment: framework

1 Assessment Model

2 Evaluation Scale

3 Data Collection Methods

4 Calculation Methods

- UX conceptual framework
- Literature review on quality evaluation methods

A new matrix model



Binary Scale

5-point Likert Scale

- Rich data set
- Accurate measurement

Survey

Experimental Evaluation

Content Analysis

Case Study

Expert Evaluation

Automatic Evaluation

- Efficiency
- Cost effectiveness

Simple scoring method without preferences

- Effectiveness
- Ease of implementation

Simple scoring method with preferences

PROMETHEE without preferences

PROMETHEE with preferences

PROSA



Integrated assessment: analysis and results

1. Principal Component Analysis (PCA)

Explained variance ratio of each component: [0.2512, 0.2106]

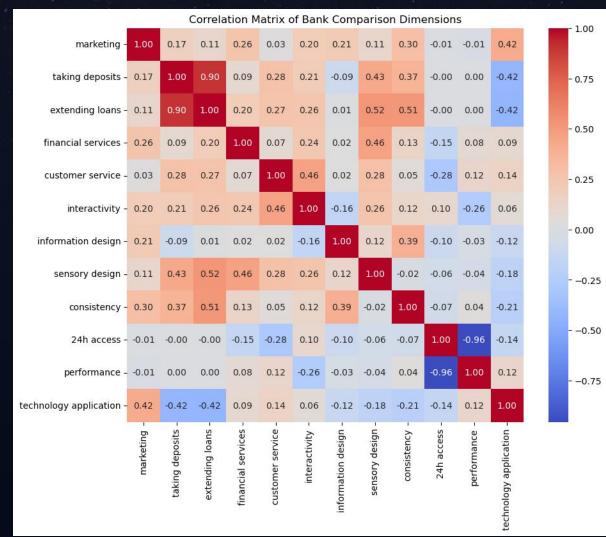
Explained variation ratio of each compensite [0.2012, 0.2100]		
Factors	PC1	PC2
Marketing	0.803981	-0.069416
taking deposits	0.037777	-0.297414
extending loans	0.050051	-0.440821
financial services	0.219276	-0.174618
customer service	0.08406	-0.081741
interactivity	0.125788	-0.148505
information design	0.109269	-0.144069
sensory design	0.115685	-0.411119
consistency	0.175985	-0.341144
accessibility	-0.092693	-0.083956
performance	0.076686	0.148557
Technology	0.45601	0.563831

- PCA was used to analyze which factors impact UX the most.
- The result shows that marketing functionality and technology are two main factors leading to UX difference.



Integrated assessment: analysis and results

2. Correlation Analysis



> Strong positive correlation

- "taking deposits" and "extending loans"
- correlation coefficient of 0.90
- offering deposit services tend to also provide quality
 loan services

> Strong negative correlation

- "performance" and "accessibility"
- correlation coefficient of -0.96
- 24-hour access may impact overall performance

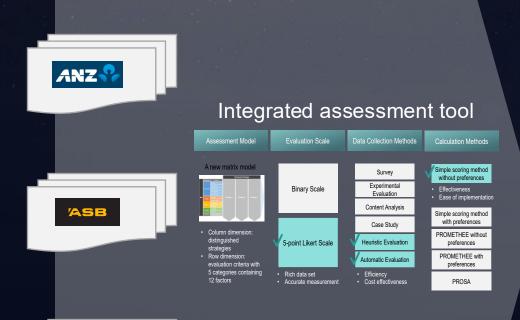


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Integrated assessment: analysis and results

3. Comparative Analysis

Evaluate and compare



Suggestions of improvements

Extending Loan Information De	Taking Deposits		
	Extending Loans	Maintain the advantage	
	Information Design		
	Sensory Design		
	Consistency		
	Accessibility		
Weaknesses	Financial Services	Include functionality for insurance quoting	
	Customer Service	Ensure portal is prominent and easy to find	
	Interactivity	comprehensive and clear structure design, and user-friendly interface elements design	
	Performance	Optimizing images	
Deficiencies	Marketing	add marketing product information on the homepage	
	Technology application	more cutting-edge technology applications	

Thank you