

Usability / User Experience Questionnaires

- SUMI Software Usability Measurement Inventory
- SUS System Usability Scale
- CSUQ Computer System Usability Questionnaire
- QUIS The Questionnaire for User Interaction Satisfaction
- NASA TLX
- AttrakDiff
- Microsoft Product Reaction cards

SUMI: Software Usability Measurement Inventory

- Consists of 50 statements to which the user has to reply that they either Agree, Don't Know, or Disagree
- Matches partly the ISO 9241 standard on Usability
- Software oriented
- Commercial licenses
- Validation: unknown

SUMI: Software Usability Measurement Inventory

		Disagree	Undecided	Agree
		↓	↓	↓
1	This software responds too slowly to inputs.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	I would recommend this software to my colleagues.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	The instructions and prompts are helpful.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	The software has at some time stopped unexpectedly.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	Learning to operate this software initially is full of problems.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	I sometimes don't know what to do next with this software.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7	I enjoy my sessions with this software.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8	I find that the help information given by this software is not very useful.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9	If this software stops, it is not easy to restart it.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10	It takes too long to learn the software commands.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11	I sometimes wonder if I'm using the right command.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12	Working with this software is satisfying.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13	The way that system information is presented is clear and understandable.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

SUS System Usability Scale

- 10 statements with 5 response options (Likert scale)
- originally created as a "quick and dirty" method, but still widely used
- Free to use
- Lots of benchmarks around for comparing results
- Validity is claimed, also that it correlates well to other questionnaires.

Participant ID: _____

Date: ____/____/____

System Usability Scale

Instructions: For each of the following statements, mark one box that best describes your reactions to the website *today*.

	Strongly Disagree				Strongly Agree
1. I think that I would like to use this website frequently.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. I found this website unnecessarily complex.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. I thought this website was easy to use.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. I think that I would need assistance to be able to use this website.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. I found the various functions in this website were well integrated.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. I thought there was too much inconsistency in this website.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. I would imagine that most people would learn to use this website very quickly.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. I found this website very cumbersome/awkward to use.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. I felt very confident using this website.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. I needed to learn a lot of things before I could get going with this website.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please provide any comments about this website:

Sammanräkning av SUS-score

$i = 1 - 10$

Strongly disagree $x(i) = 1$

Strongly agree $x(i) = 5$

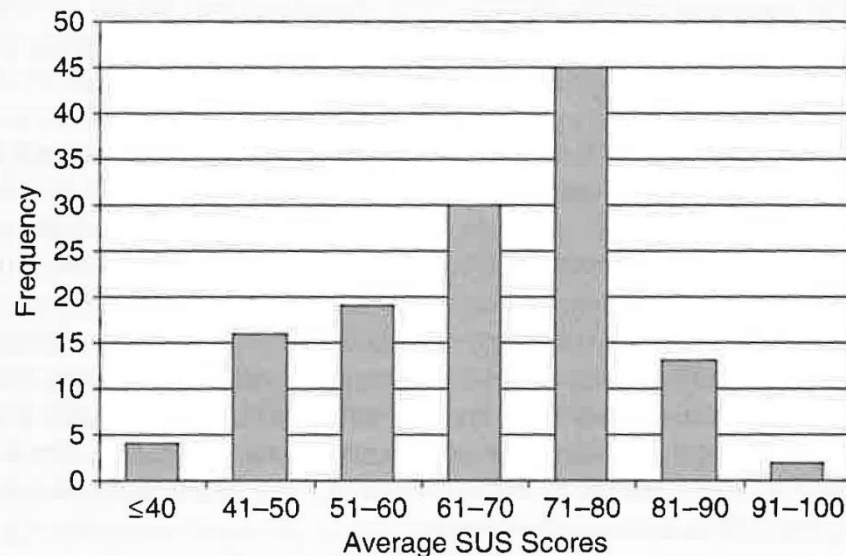
$\text{SumPos} = \sum (x(i) - 1)$ för $i = 1, 3, 5, 7, 9$

$\text{SumNeg} = \sum (5 - x(i))$ för $i = 2, 4, 6, 8, 10$

$\text{Score} = (\text{SumPos} + \text{SumNeg}) * 1.25$

WHAT IS A GOOD (OR BAD) SUS SCORE?

After reporting an average of the post-session ratings from a particular study, usability professionals very often hear the question “So, is that good or bad?” It’s hard to answer that without having some points for comparison. So we did a review of a large number of published usability studies (using the ACM Digital Library and web search tools) and found 50 studies that reported average SUS scores across a total of 129 different conditions. The studies covered a wide range of subjects, including websites, applications, computer hardware, mobile devices, and voice systems. They were conducted in various parts of the world, including the United States, Germany, Switzerland, the United Kingdom, and New Zealand. The distribution of the average SUS scores from these 129 conditions is shown here.



Each of these studies had at least five participants; the maximum number was 81. The average SUS score from the 129 conditions was 66 percent and the median was 69 percent. The 25th percentile was 57 percent and the 75th percentile was 77 percent. (More details can be found on our website at www.MeasuringUserExperience.com.) These numbers would tend to suggest that you can think of an average SUS score under about 60 percent as relatively poor, while one over about 80 percent could be considered pretty good. But don’t forget to consider the confidence interval for any average SUS score that you calculate.

QUIS The Questionnaire for User Interaction Satisfaction

- Exist in many versions. Latest is 7.0
- License fee (?)
- The long version consists of around 100 items
- 9-point rating scale, in form of semantic differential
- Validation studies claimed to have been performed

QUIS The Questionnaire for User Interaction Satisfaction

Example from part 5 Terminology & system information:

5.4 Messages which appear on screen:	confusing							clear		
	1	2	3	4	5	6	7	8	9	NA

5.4.1 Instructions for commands or choice:	confusing							clear		
	1	2	3	4	5	6	7	8	9	NA

CSUQ Computer System Usability Questionnaire

- 19 items
- 7-point Likert scale
- Validation: correlates well with others, such as SUS
- No licensing required
- “System” & “Task” are often replaced by other more appropriate terms.

CSUQ

Overall Reaction to the Website		1	2	3	4	5	6	7	NA	
1. Overall, I am satisfied with how easy it is to use this website	strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	strongly agree	<input type="radio"/>
2. It was simple to use this website	strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	strongly agree	<input type="radio"/>
3. I can effectively complete my work using this website	strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	strongly agree	<input type="radio"/>
4. I am able to complete my work quickly using this website	strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	strongly agree	<input type="radio"/>
5. I am able to efficiently complete my work using this website	strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	strongly agree	<input type="radio"/>
6. I feel comfortable using this website	strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	strongly agree	<input type="radio"/>
7. It was easy to learn to use this website	strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	strongly agree	<input type="radio"/>
8. I believe I became productive quickly using this website	strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	strongly agree	<input type="radio"/>
9. The website gives error messages that clearly tell me how to fix problems	strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	strongly agree	<input type="radio"/>
10. Whenever I make a mistake using the website, I recover easily and quickly	strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	strongly agree	<input type="radio"/>
11. The information (such as online help, on-page messages, and other documentation) provided with this website is clear	strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	strongly agree	<input type="radio"/>
12. It is easy to find the information I need	strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	strongly agree	<input type="radio"/>
13. The information provided by the website is easy to understand	strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	strongly agree	<input type="radio"/>
14. The information is effective in helping me complete the tasks and scenarios	strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	strongly agree	<input type="radio"/>
15. The organization of information on the website pages is clear	strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	strongly agree	<input type="radio"/>
16. The interface of this website is pleasant	strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	strongly agree	<input type="radio"/>
17. I like using the interface of this website	strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	strongly agree	<input type="radio"/>
18. This website has all the functions and capabilities I expect it to have	strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	strongly agree	<input type="radio"/>
19. Overall, I am satisfied with this website	strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	strongly agree	<input type="radio"/>

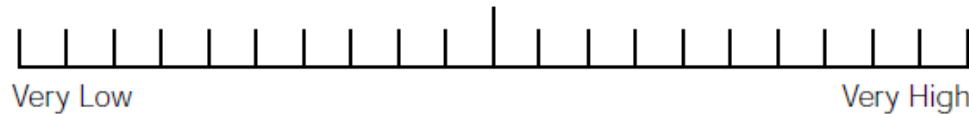
NASA TLX

- Assessment of workload rather than overall usability
- Overall workload score based on 6 subscales:
 - Mental Demands
 - Physical Demands
 - Temporal Demands
 - Own Performance
 - Effort
 - Frustration
- 7-point (alternatively 21-point) scales
- Free, and widely used

NASA TLX

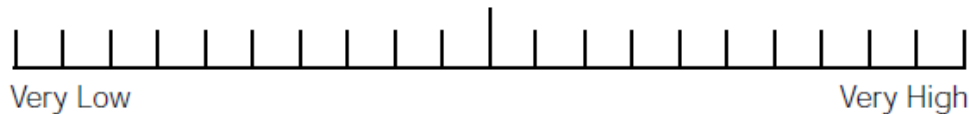
Mental Demand

How mentally demanding was the task?



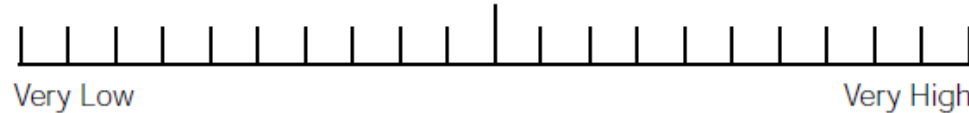
Physical Demand

How physically demanding was the task?



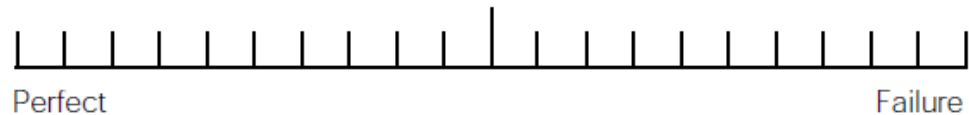
Temporal Demand

How hurried or rushed was the pace of the task?



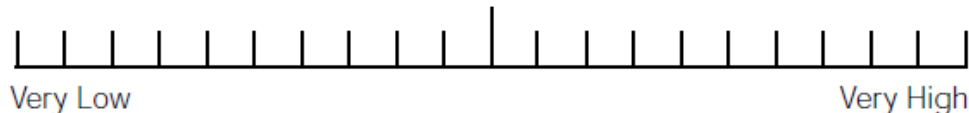
Performance

How successful were you in accomplishing what you were asked to do?



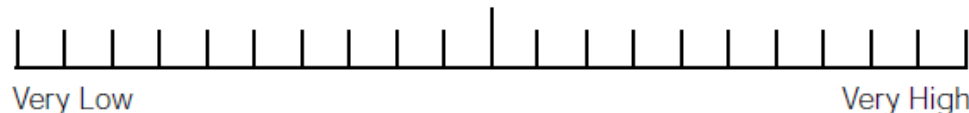
Effort

How hard did you have to work to accomplish your level of performance?



Frustration

How insecure, discouraged, irritated, stressed, and annoyed were you?



AttrakDiff

User perception of..

- pragmatic quality
- hedonic quality
- attractiveness




Hassenzahl, M. (2004).
**The interplay of beauty,
goodness and usability in
interactive products**
In: Human Computer
Interaction, 19, p. 319–349

<http://www.attrakdiff.de/index-en.html>

AttrakDiff

Frågekonstruktion, Semantisk differential:

Deutsch | **English**

Assessment of Sportbook

With the help of the word pairs please enter what you consider the most appropriate description for Sportbook.

Please click one item in every line.

stylish	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	tacky
predictable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	unpredictable
cheap	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	premium
alienating	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	integrating
brings me closer to people	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	separates me from people
unpresentable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	presentable
rejecting	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	inviting
unimaginative	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	creative
good	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	bad

<http://www.attrakdiff.de/index-en.html>

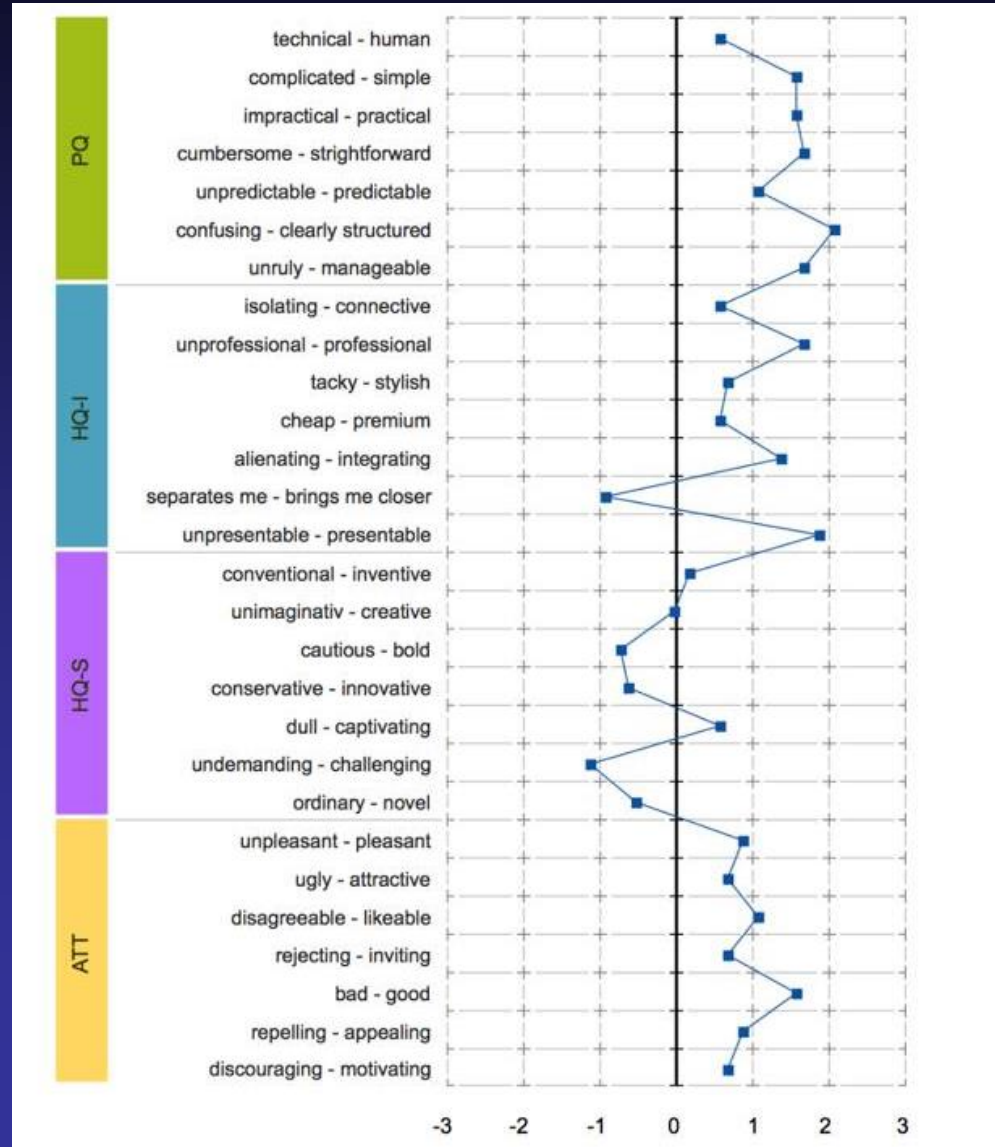
AttrakDiff

Pragmatic Quality (PQ): focus on usability and utility in relation to the user's tasks.

Hedonic Quality (HQ):

- Stimulation (HQ-S): to which degree the system offers novel and interesting features and interaction techniques.
- Identity (HQ-I): to what extent the user can identify himself with the system

Attractiveness (ATT)



Microsoft Product Reaction cards:

Välj ut de kort som bäst beskriver upplevelsen

The Complete Set of 118 Product Reaction Cards				
Accessible	Creative	Fast	Meaningful	Slow
Advanced	Customizable	Flexible	Motivating	Sophisticated
Annoying	Cutting edge	Fragile	Not secure	Stable
Appealing	Dated	Fresh	Not valuable	Sterile
Approachable	Desirable	Friendly	Novel	Stimulating
Attractive	Difficult	Frustrating	Old	Straightforward
Boring	Disconnected	Fun	Optimistic	Stressful
Business-like	Disruptive	Gets in the way	Ordinary	Time-consuming
Busy	Distracting	Hard to use	Organized	Time-saving
Calm	Dull	Helpful	Overbearing	Too technical
Clean	Easy to use	High quality	Overwhelming	Trustworthy
Clear	Effective	Impersonal	Patronizing	Unapproachable
Collaborative	Efficient	Impressive	Personal	Unattractive
Comfortable	Effortless	Incomprehensible	Poor quality	Uncontrollable
Compatible	Empowering	Inconsistent	Powerful	Unconventional
Compelling	Energetic	Ineffective	Predictable	Understandable
Complex	Engaging	Innovative	Professional	Undesirable
Comprehensive	Entertaining	Inspiring	Relevant	Unpredictable
Confident	Enthusiastic	Integrated	Reliable	Unrefined
Confusing	Essential	Intimidating	Responsive	Usable
Connected	Exceptional	Intuitive	Rigid	Useful
Consistent	Exciting	Inviting	Satisfying	Valuable
Controllable	Expected	Irrelevant	Secure	
Convenient	Familiar	Low maintenance	Simplistic	