

4.0 Interaction Design

UX RESEARCH

DESIGNism #9

**IF YOU WANT TO UNDERSTAND HOW
A LION HUNTS, DON'T GO TO THE
ZOO. GO TO THE JUNGLE.**

- Jim Stengel, CMO of P&G

SELLING UX TO CLIENTS

- Better products
- Cheaper to fix problems earlier
- Less risk
- Research brings insights
- Products that are easy make more \$\$
- User led products get to market quicker
- Ease of use is common -- the user is looking for this

PLANNING A SUCCESSFUL PRODUCT

To design a successful product you need to be able to answer each of the following:

What are the business requirements?

What are the user requirements?

What is the best design solution for both?

BUSINESS REQUIREMENTS

DESCRIPTION OF PROJECT
BUSINESS GOALS
TARGET USERS
BRAND GUIDELINES
MARKET STRATEGY
PROJECT ROADMAP
TECHNOLOGY REQUIREMENTS

USER REQUIREMENTS

ENVIRONMENTAL/CONTEXTUAL
FUNCTIONAL
USER CHARACTERISTICS
USER GOALS
USABILITY GOALS
USER EXPERIENCE GOALS

IT'S SIMPLE MATH

Business requirements
+ User requirements

Informed product design

UX RESEARCH TYPES

Market Research
User Research

STEP ONE

MARKET RESEARCH

Market research utilizes a collection of research methods to shed light on both consumer behavior and market competition.

CONTEXTUAL RESEARCH
COMPETITOR BENCHMARKING
BRAND MATRIX
SURVEYS
FOCUS GROUPS

CONTEXTUAL RESEARCH

Contextual research involves conducting research in the real world, in the places where your users conduct their everyday tasks.

- **OBSERVE DESIGN AESTHETICS**
- **OBSERVE USERS' NATURAL BEHAVIOR IN REAL ENVIRONMENT**
- **TAKE PHOTOS AND VIDEO**
- **GAIN UNDERSTANDING OF USERS' CONTEXT OF USE**
- **USE ANALYTICS FOR USER RESEARCH**

COMPETITOR BENCHMARKING

Compare competitors to each other and/or to your product using pre-established criteria.

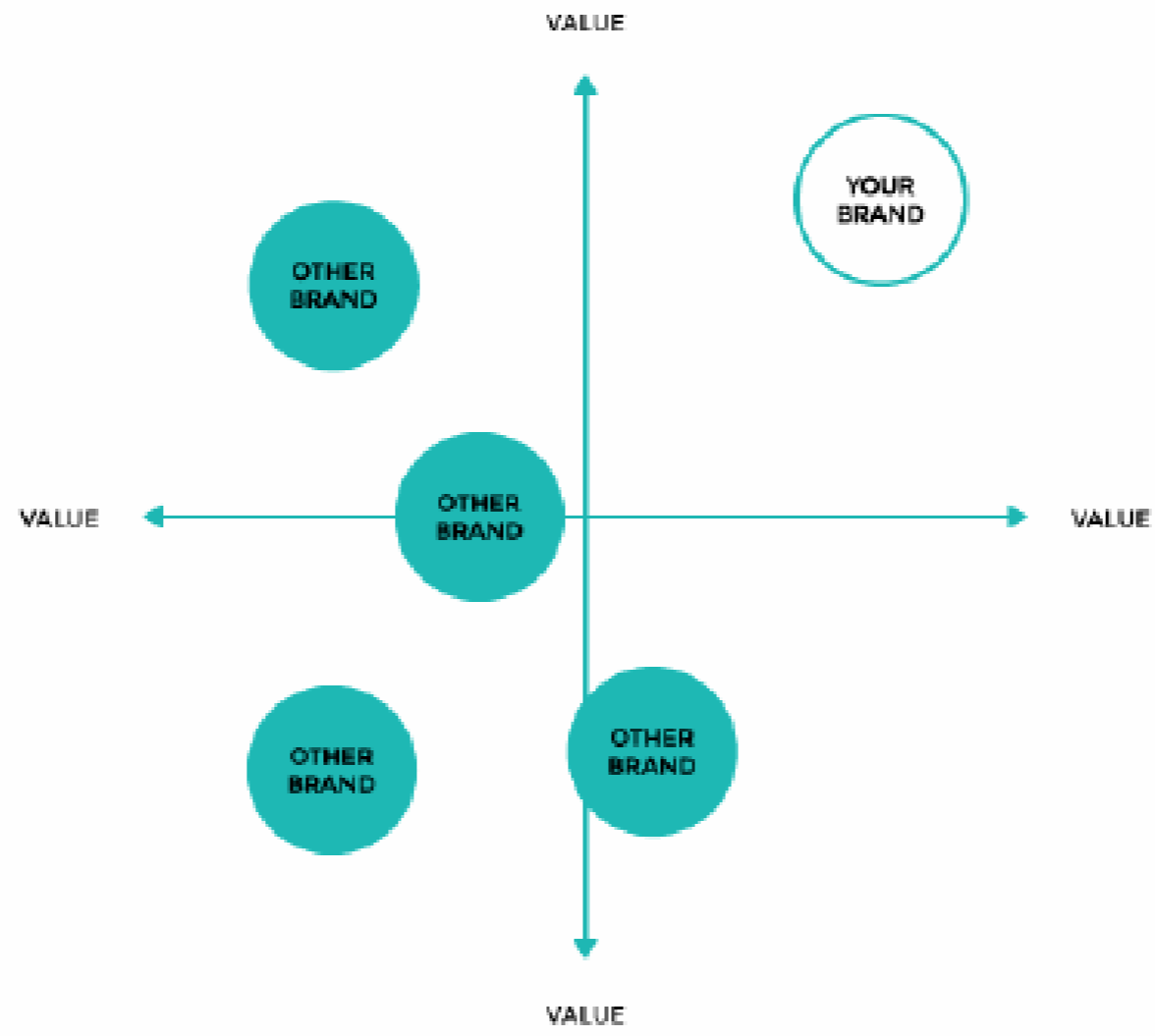
NOTE: These are often in the form of spreadsheets, screenshots, and detailed analyses.

- **DESIGN AESTHETICS**
- **CLARITY OF USER'S PROCESS**
- **EASE OF ACCESSING INFORMATION**
- **HOW ARE ERRORS DEALT WITH**
- **PRICES, PRODUCTS, SERVICES OFFERED**
- **STRENGTHS AND WEAKNESS, OVERALL EXPERIENCE**

BRAND MATRIX

Brand matrices allow designers and their clients to visualize a brand's values relative to its competition.

Two important criteria are chosen for the axes of the matrix. Distinctiveness is the ideal quality -- those brands that are closely clustered in the same area of the matrix will be less distinct.



SURVEYS

Popular method of data collection that are used to collect information such as opinions, preferences and ideas both online and offline.

- **OBJECTIVE QUESTIONS**
- **SUBJECTIVE QUESTIONS**
- **OPEN-ENDED QUESTIONS**

EXAMPLE OBJECTIVE QUESTION

“What is your job title?”

EXAMPLE SUBJECTIVE QUESTION

“Please rate the following areas on our website.”

EXAMPLE OPEN-ENDED QUESTION

“Please tell us how you think we can improve our website.”

YOUR TURN!

Default Report

+ Add Report

Response Summary

Total Started Survey: 2
Total Completed Survey: 2 (100%)

PAGE: 1

1. How easy was it to follow our Setting Up guide?

[Create Chart](#) [Download](#)

	Cake Walk	Easy	Meh	What the...	Help Me!	Rating Average	Response Count
Watching	50.0% (1)	0.0% (0)	0.0% (0)	50.0% (1)	0.0% (0)	2.50	2
Doing It Yourself	0.0% (0)	100.0% (1)	0.0% (0)	0.0% (0)	0.0% (0)	2.00	1
answered question							2
skipped question							0

2. Would you recommend this guide to others

[Create Chart](#) [Download](#)

	Response Percent	Response Count
Yes	50.0%	1
No	50.0%	1
answered question		2
skipped question		0

DESIGNism #10

**KNOW THE USER, AND YOU ARE NOT
THE USER.**

- Arnie Lund

STEP TWO

USER RESEARCH

User research methods give detailed insights into user needs and behaviors from both real and imagined users.

INTERVIEWS

PERSONAS

SCENARIOS OF USE

USABILITY TESTING

WEB ANALYTICS

USER GOALS

The point of user research is to understand and incorporate the user's goals into your product or service.

EXPERIENCE GOALS

How do they want to feel when using the product?

END GOALS

What do they want to achieve by using the product?

LIFE GOALS

Why is the user trying to accomplish the end goals?

KEY QUESTIONS TO CONSIDER

Who are my users?

What are my users trying to accomplish?

How do users think about what they are trying to do?

What kinds of experiences do my users like/dislike?

How should my product behave?

How will users interact with the product?

How will my product introduce itself to new users?

INTERVIEWS

There are four types of interviews:

- unstructured
- structured
- semi-structured
- focus groups

UNSTRUCTURED INTERVIEWS

Exploratory, in-depth conversations around a particular topic.

Questions posed by the interviewer are open, meaning there is no expected outcome.

PROS

GENERATE RICH COMPLEX DATA AND DEEP UNDERSTANDING

CONS

INCONSISTENT AND TIME CONSUMING

STRUCTURED INTERVIEWS

Questions are directed, short, and clearly worded.

Questions and answers are predetermined by the interviewer

PROS

STUDY IS STANDARDIZED AND CONSISTENT

CONS

QUESTIONS NEED TO BE SPECIFIC AND CAREFULLY CONSTRUCTED

SEMI-STRUCTURED INTERVIEWS

Combination of open and directed questions

The interviewer starts with scripted questions and then probes the interviewee further for new information

PROS

GENERATE STATISTICAL DATA AND DEEP UNDERSTANDING

CONS

NEED TO ORDER QUESTIONS CAREFULLY

FOCUS GROUPS

The key benefit of a focus group is the element of moderated group discussion, which can lead to both a better understanding of user's perceptions and attitudes.

PROS

TALK TO MORE USERS QUICKER

CONS

ONE PERSON TENDS TO DOMINATE FEEDBACK, OUT OF CONTEXT

NOTE: Select 6-12 participants from a target audience / consumer group.

CONDUCTING AN INTERVIEW

- Should be held in a neutral environment
- Pay close attention to body language (yours and theirs)
- Prepare a script and be diligent about following it
- Record so that you aren't taking notes while trying to talk to the user
- Don't dominate the conversation, silence is ok

CONDUCTING AN INTERVIEW

1. Introduce yourself and the aims of the interview (let them know the interview will be recorded -- get permission).
2. Do a warm-up session with easy non-threatening questions.
3. Conduct the main interview with pre-scripted questions, then ask one or two probing questions.
4. Thank the interviewee and switch off the recorder.

PRACTICE INTERVIEW

MOVIES & MUSIC

Spend 5 minutes interviewing each other -- know what your goals are before you begin

INTRODUCTION

DIRECT QUESTION

OPEN QUESTION

PROBE

ALTERNATIVE PROBE

WRAP - UP



WEB ANALYTICS

Web analytics is statistical information about user visits to websites that can tell us a range of information.

It is important in helping to judge the effectiveness of any changes to a website.

- **USER'S LOCATION**
- **CLICKSTREAMS (FLOW OF PAGES VIEWED)**
- **PERCENTAGE OF MOBILE USERS**
- **AVERAGE LENGTH OF TIME SPENT ON WEBSITE (OR PAGE)**

ANALYTICS TOOLS

google.com/analytics

flurry.com

alexa.com/toolbar

clicky.com

crazyegg.com

springmetrics.com

toolbar.google.com

statcounter.com

haveamint.com

woopra.com

- Find reports & more
- MY STUFF**
- Dashboards
 - Shortcuts
 - Intelligence Events
- STANDARD REPORTS**
- Real-Time
 - Audience**
 - Overview**
 - Demographics
 - Behavior
 - Technology
 - Mobile
 - Custom
 - Visitors Flow
 - Traffic Sources
 - Content
 - Conversions
- Help**
- The Visitors Overview Report
 - Comparing Metrics
 - Using the Interactive Table
 - Video: Add Advanced Segments

Audience Overview

Feb 1, 2013 - Mar 1, 2013
 Compare to: Jan 3, 2013 - Jan 31, 2013

Advanced Segments Email Export Add to Dashboard Shortcut

change in % of visits: +0.00%

Overview



1,912 people visited this site

<p>Visits</p> <p>-21.38% 2,210 vs 2,811</p>	<p>Unique Visitors</p> <p>-24.90% 1,912 vs 2,546</p>	<p>Pageviews</p> <p>0.75% 4,302 vs 4,270</p>
<p>Pages / Visit</p> <p>28.15% 1.95 vs 1.52</p>	<p>Avg. Visit Duration</p> <p>1.23% 00:01:33 vs 00:01:32</p>	<p>Bounce Rate</p> <p>-18.59% 62.04% vs 76.20%</p>
<p>% New Visits</p> <p>-5.21% 85.25% vs 89.93%</p>	<p>85.34% New Visitor 1,886 Visits</p> <p>14.66% Returning Visitor 324 Visits</p>	

USABILITY TESTING

Usability testing involves asking people to use something and observing what problems arise from using it.

You can test information architecture, navigation, flows, prototypes, competitors, etc.

Note: This should be used throughout the entire UX process, but especially in the beginning stages.

USABILITY TESTING

- USABILITY LAB TESTS**
- EYE TRACKING**
- USER PREFERRED CARD SORTING**
- USER SURVEYS OF EXISTING OR COMPETITOR PRODUCT**
- REMOTE USABILITY TESTING**



PERSONAS

Personas are short, vivid descriptions of a fictional character that represents a group of a product's users.

Used in order to help clients and designers visualize their audience when making decisions about design features, user experience, or content.

Note: Personas are not based on stereotypes, rather are based on your research findings.

CONSTRUCTING A PERSONA

1. Understand your product's users with research and statistics (analytics, customer data, surveys, social networks, and contextual research).
2. Examine your data for themes and patterns.
3. Distill those patterns into characters that embody your findings.
4. Bring the characters to life with biographical information and images



THE INFLUENCER

Julia

Age: 19-22, Sophomore, Journalism & Communications

Goals: Get a "Big City College" education, roommates, romantic experience, Build resume with internship, Take credit/level courses, Make new/different friends, Experience different cultures

Pain Points: Limited courses offered, Course Organization (too much or not enough), Advantages are hidden, Challenging to transfer credits

My internship provided me with the opportunity to work in Times Square. I just love all of the lights, action, and excitement!

Julia has been taking Spanish since high school and is excited to study abroad in Buenos Aires next spring. She's traveled a little in the past—to Great Britain for a vacation with her family and to Mexico for a mission trip—but this is her first time going abroad alone. Though she has other friends who also plan to study abroad, she wanted to go at a different time so she would be forced to make friends with the locals and truly immerse herself in the culture. She's heard from friends that the maturity level of some of the students plummets the moment they step on the plane to study abroad, she hopes they don't make her look like a "stupid American."

She's also heard that the dorms in Buenos Aires aren't great, which solidified her decision to do a homestay. However, she's concerned about commuting to classes, which she hopes to take at the NYU campus as well as a local university—if the credits transfer. She doesn't have a lot of extra cash and is interested in a work-study to pay for groceries and some travel around Argentina. Speaking Spanish on the job would also be great practice, but she isn't sure what sort of opportunities there are, or even if she's allowed to work.

Knowledge



Lifecycle



Activities and Interest



Influencers



WHAT TO INCLUDE IN A PERSONA

Name and gender

Images

Age

Biography

Location

Occupation

Salary

Attitude towards technology

Context of use

Key drivers

Key goals and needs

Anxieties

SCENARIOS

Scenarios are hypothetical stories about the use of a product or service, which are created in the initial research stage to inform your design.

A scenario is a specific task given to one or all of your personas, which details every step of their experience, providing insights into design requirements.

DESIGNism #11

**STUDYING AND QUESTIONING USERS
DOES NO GOOD IF YOU TELL THEM
THE ANSWERS.**

- Jakob Nielsen