Introduction to

Design Research & Writing Methods

Develop successful solutions with research-driven design.

Research & Writing Methods for Designers

- The Design Process
- Where Research Fits In
- How Research Benefits You
- Types of Research
- Research Strategies
- Research Tactics
- Mapping a Strategic Direction
- The Big6: A Problem Solving Model
- Tips

The Design Process

Step 1: Task Definition

Step 2: **Research**

the process of gathering, sorting, and processing information

Step 3: Ideation Ideation of ideas or concepts Sketching Mock-ups

Step 4: **Refinement** Step 5: Solution

Defining the Task

What are we doing?

What should the finished project be?

Why is this needed? Project goals?

Who are we doing it for?

Target audience?

Materials? Deadline? Budget? other Limitations?

Task Definition

The Design Process

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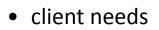
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Step 4: **Refinement** Step 5: Solution

Research

Helps You Understand

Context



- preferences
- market

- It can support a concept
- Advocate for an aesthetic
- Measure the effectiveness of a solution

Research

Adds Value to Design Solutions by helping you to:

- Craft more effective messages
- Improve communication with target audience
- Assess project development
- Justify design decisions

It also helps to:

- Postion the designer in the role of a strategic consultant
- Increase value of and compensation for work

Research Types

• Quantitative + Qualitative Research think Quantities and Qualities

Quantitative - measures objective, logical and numerical data

Qualitative - measures subjective data such as feelings and opinions



 Primary + Secondary Research refer to proximity and specificity of source

Primary - original research for project

Secondary - potentially relevant research completed for a different project

• Formative + Summative Research

is categorized based on when and how it is used

Formative - exploratory research done at the beginning of a project

Summative - conclusive research done at the end of project

Research Tactics

actions or strategies carefully planned to achieve a specific end

- Photo and Visual Ethnography research gathered by daily photo or video documentation
- Observational Research gathered by observing human behavior without interacting with the group being studied
- Demographics statistical data used to identify quantifiable group characteristics
- Psychographics quantitative tactic used to measure subjective characteristics
- Focus Groups small organized discussions led by a moderator
- Surveys & Questionnaires the collection of data by asking questions in a specific order
- Web Analytics web statistics collected by tracking user behavior online
- Iterative Design a cycle of prototyping, testing, and refining
- Personas fictional end users profiles developed to help identify user motivations, expectations, and goals
- Visualzation rapid prototyping for communicating concepts
- Color Theory / Color Predictions studying basic color psychology and color trends to aid color decisions



Research Strategies

employ one or more research tactics for data collection and evaluation

- Competitor Analysis process of evaluating the strengths and weaknesses of an organization's competitors
- Literature Review a comprehensive investigation of all documents, publications, articles, and books regarding a specific area of study
- Ethnographic Research research focused on the link between human behaviors and culture
- Marketing Research a form of sociology that focuses on the understanding of human behavior as it applies to a market-based economy
- User Testing employs a variety of techniques designed to measure a product's ability to satisfy the needs of the end user
- Visual Exploration primary research used to solve problems of form and communication that usually includes multiple variations of color, imagery, typography, and structure



Mapping a Strategic Direction

you won't arrive at your destination if you don't know how to get there

Graphic design researchers gather and use information to solve specific visual communication problems

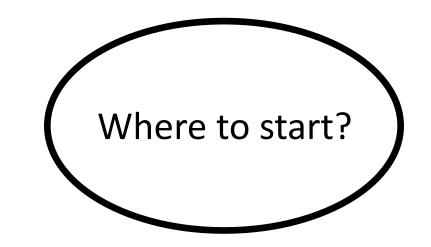
Developing a research strategy creates a roadmap for gathering, applying, and assessing design decisions

Where to start?

Review the task definition for clues

- Who is your client?
- How are their competitors solving similar problems?
- Who is the target audience?
- What is the project goal?
- Ask yourself what other information you need.

All of these questions provide clues to the types of research you require.



1. Task Definition

- Define the information problem
- Identify information needed

2. Information Seeking Strategies

- Determine all possible sources
- Select the best sources

3. Location and Access

- Locate sources (intellectually and physically)
- Find information within sources

4. Use of Information

- Engage (e.g., read, hear, view, touch)
- Extract relevant information

5. Synthesis

- Organize from multiple sources
- Present the information

6. Evaluation

- Judge the product (effectiveness)
- Judge the process (efficiency)



Tips

Remember

- Research is essential for successful design problem solving and writing.
- Research can be light or heavy depending on the scope of your work.

Learn How

- to capture the information you need
 - read slowly, take good notes, and include citations
 - read in a comfortable space free of distractions
- Carefully consider sources and determine what information to accept as legimate.
- Chart out a Research Strategy
- Find the information you need
 - Databates such as WorldCat.org
 - Libraries and Museums for hands on access to a variety of materials, and librarians