# Research-driven Design

Research-driven design is essential for making informed communication choices.

#### **The Design Process**

- 1. Task Definition
- 2. Research
- 3. Ideation
- 4. Refinement
- 5. Solution

### The Value of Research in the Design Process

- Research helps you understand client's needs, preferences, and 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
  - Positions the designer in the role of a strategic consultant
  - Increases value of and compensation for work

## Research Types, Tactics, and Strategies

Research is a process of gathering, sorting, and processing information.

## **Research Types**

Quantitative + Qualitative - think quantities and qualities

- Quantitative measures objective, logical and numerical data
- Qualitative measures subjective data such as feeling 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 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 a project



#### **Research Tactics**

Actions or strategies carefully planned to achieve a specific end

Photo Ethnography - subjects record their daily experiences with still or video cameras

**Visual Ethnography** - a researcher records daily experiences of the subject with still or video cameras

**Observational Research** - systematic process of viewing and recording human behavior and cultural phenomena without questioning, communicating with, or interacting with the group being studied

**Demographics** - collections of statistical data that describe a group of people or a market segment that generally include information on a variety of quantifiable cultural, economic, and social characteristics

**Psychographics** - quantitative tactic used to measure subjective beliefs, opinions, and interests in order to understand the opinions and preferences of the group being studied

**Focus Groups** - small organized discussions led by a moderator whose goal is to gain insight into the participants view about a given topic

**Surveys & Questionnaires** - tactic for collecting quantitative information by asking participants a set of questions in a specific order

- Survey questions administered by a researcher
- Questionnaire participants answer the questions on their own

Web Analytics - web statistics collected by tracking user behavior online

Iterative Design - a cycle of prototyping, testing, and refining

**Personas** - fictional end user profiles developed to help identify user motivations, expectations, and goals

**Visualization** - rapid prototyping for communicating concepts easily; ex. sketches, computer renderings, models, and storyboards

**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** - aka usability 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.

### The Big6

A systematic process to find, use, apply, and evaluate information for specific needs and tasks.

- 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)