INTERACTION DESIGN

beyond human-computer interaction

SHARP • ROGERS • PREECE

5th Edition

CHAPTER 10
DATA SCALE

Introduction

- ***Data at scale***, or as it is often called ***big data***, describes all kinds of data including data-bases of numbers, images of people, things and places, footage of conversations recorded, videos, texts, and environmentally sensed data (such as air quality).

Approaches to Collecting and Analyzing Data

1. ***Scraping and "Second Source" Data*** :One way to extract data is by "scraping" it from the web (assuming that this is allowed by the application). Once the data is scraped, it can be entered into a spreadsheet for study and analyzed using data science tools

2. ***Collecting Personal Data:*** meetings organized to enable people to come together to share and discuss their various self-tracking projects.

3. ***Crowdsourcing Data:*** Increasingly, people crowdsource information or work together using online technologies to collect and share data. researchers from all over the world come together to work on large problems,

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4. ***Sentiment analysis*** is a technique that is used to infer the effect of what a group of people or a crowd is feeling or saying.

5. ***Social network analysis (SNA)*** is a method based on social network theory for analyzing and evaluating the strength of social ties within a network.

6. ***Combining Multiple Sources of Data*** A number of researchers have started collecting data from multiple sources by combining automatic sensing and subjective reporting.

Visualizing and Exploring Data

- Being able to take meaning from data involves being able to see it and understand the way that it is represented and its context. What kind of data is it? What is the data about? Why was it collected? Why was it analyzed and represented in a particular way? The skills needed to understand and interpret visualizations are referred to as **visual literacy.**

Ethical Design Concerns

- Ethical design principles suggest ways that UX designers can create designs and interaction processes that make clear how data is being used.