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   Titolo   Data visualization [[electronic resource]] : a successful design process ; a structured design approach to equip you with the knowledge of how to successfully accomplish any data visualization challenge efficiently and effectively / / Andy Kirk

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   Edizione   [1st edition]

   Descrizione fisica   1 online resource (206 p.)

   Collana   Community experience distilled

   Disciplina   005.74

   Soggetti   Information visualization
                     Software visualization

   Lingua di pubblicazione   Inglese

   Formato   Materiale a stampa

   Livello bibliografico   Monografia

   Note generali   Includes index.

   Nota di contenuto   Cover; Copyright; Credits; About the Author; About the Reviewers; www.PacktPub.com; Table of Contents; Preface; Chapter 1: The Context of Data Visualization; Exploiting the digital age; Visualization as a discovery tool; The bedrock of visualization knowledge; Defining data visualization; Visualization skills for the masses; The data visualization methodology; Visualization design objectives; Strive for form and function; Justifying the selection of everything we do; Creating accessibility through intuitive design; Never deceive the receiver; Summary
   Chapter 2: Setting the Purpose and Identifying Key FactorsClarifying the purpose of your project; The reason for existing; The intended effect; Establishing intent - the visualization's function; When the function is to explain; When the function is to explore; When the function is to exhibit data; Establishing intent - the visualization's tone; Pragmatic and analytical; Emotive and abstract; Key factors surrounding a visualization project; The ""eight hats"" of data visualization design; The initiator; The data scientist; The journalist; The computer scientist; The designer
   The cognitive scientistThe communicator; The project manager; Summary; Chapter 3: Demonstrating Editorial Focus and Learning

About Your Data; The importance of editorial focus; Preparing and familiarizing yourself with your data; Refining your editorial focus; Using visual analysis to find stories; An example of finding and telling stories; Summary; Chapter 4: Conceiving and Reasoning Visualization Design Options; Data visualization design is all about choices; Some helpful tips; The visualization anatomy - data representation; Choosing the correct visualization method

Considering the physical properties of our dataDetermining the degree of accuracy in interpretation; Creating an appropriate design metaphor; Choosing the final solution; The visualization anatomy - data presentation; The use of color; Creating interactivity; Annotation; Arrangement; Summary; Chapter 5: Taxonomy of Data Visualization Methods; Data visualization methods; Choosing the appropriate chart type; Comparing categories; Dot plot; Bar chart (or column chart); Floating bar (or Gantt chart); Pixelated bar chart; Histogram; Slopegraph (or bumps chart or table chart); Radial chart

Glyph chartSankey diagram; Area size chart; Small multiples (or trellis chart); Word cloud; Assessing hierarchies and part-to-whole relationships; Pie chart; Stacked bar chart (or stacked column chart); Square pie (or unit chart or waffle chart); Tree map; Circle packing diagram; Bubble hierarchy; Tree hierarchy; Showing changes over time; Line chart; Sparklines; Area chart; Horizon chart; Stacked area chart; Stream graph; Candlestick chart (or box and whiskers plot, OHLC chart); Barcode chart; Flow map; Plotting connections and relationships; Scatter plot; Bubble plot; Scatter plot matrix

Heatmap (or matrix chart)

Sommario/riassunto

A comprehensive yet quick guide to the best approaches to designing data visualizations, with real examples and illustrative diagrams. Whatever the desired outcome ensure success by following this expert design process. This book is for anyone who has responsibility for, or is interested in trying to find innovative and effective ways to visually analyze and communicate data. There is no skill, no knowledge and no role-based pre-requisites or expectations of anyone reading this book.