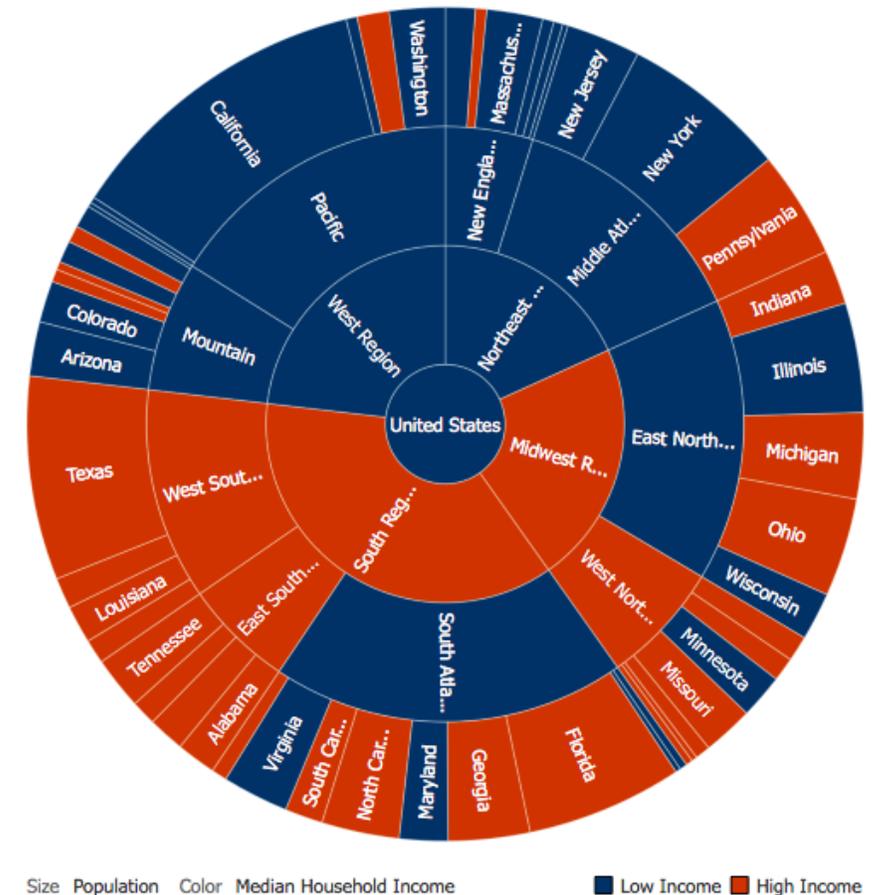

DATA VISUALIZATION

INTRODUCTION

DATA VISUALIZATION VS. INFOGRAPHICS

Data Visualization

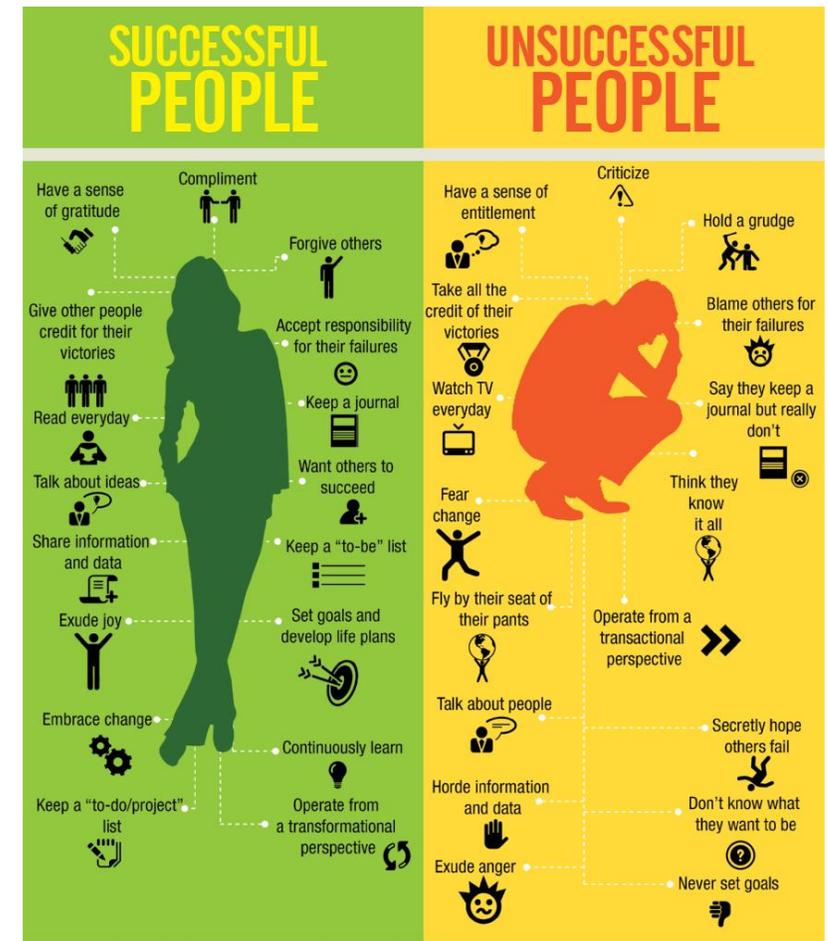
- A **method**, as well as an item (**objective**)
- Typically focuses on the **quantifiable**
- Used to make sense of the data or to make it **accessible** (datasets can be massive and unwieldy)
- May be generated **automatically**
- The look and feel are less important than the **insights conveyed by the data**



DATA VISUALIZATION VS. INFOGRAPHICS

Infographics

- Created for **story-telling** purposes (**subjective**)
- Intended for a **specific** audience
- **Self-contained** and discrete
- **Graphic design** aspect is key
- **Cannot** usually be re-used with other data
- Can incorporate **unquantifiable** information



HISTORICAL CHARTS

Data visualization is not confined to the recent past: charts have been used for many years to help **communicate information** and **tell stories**.

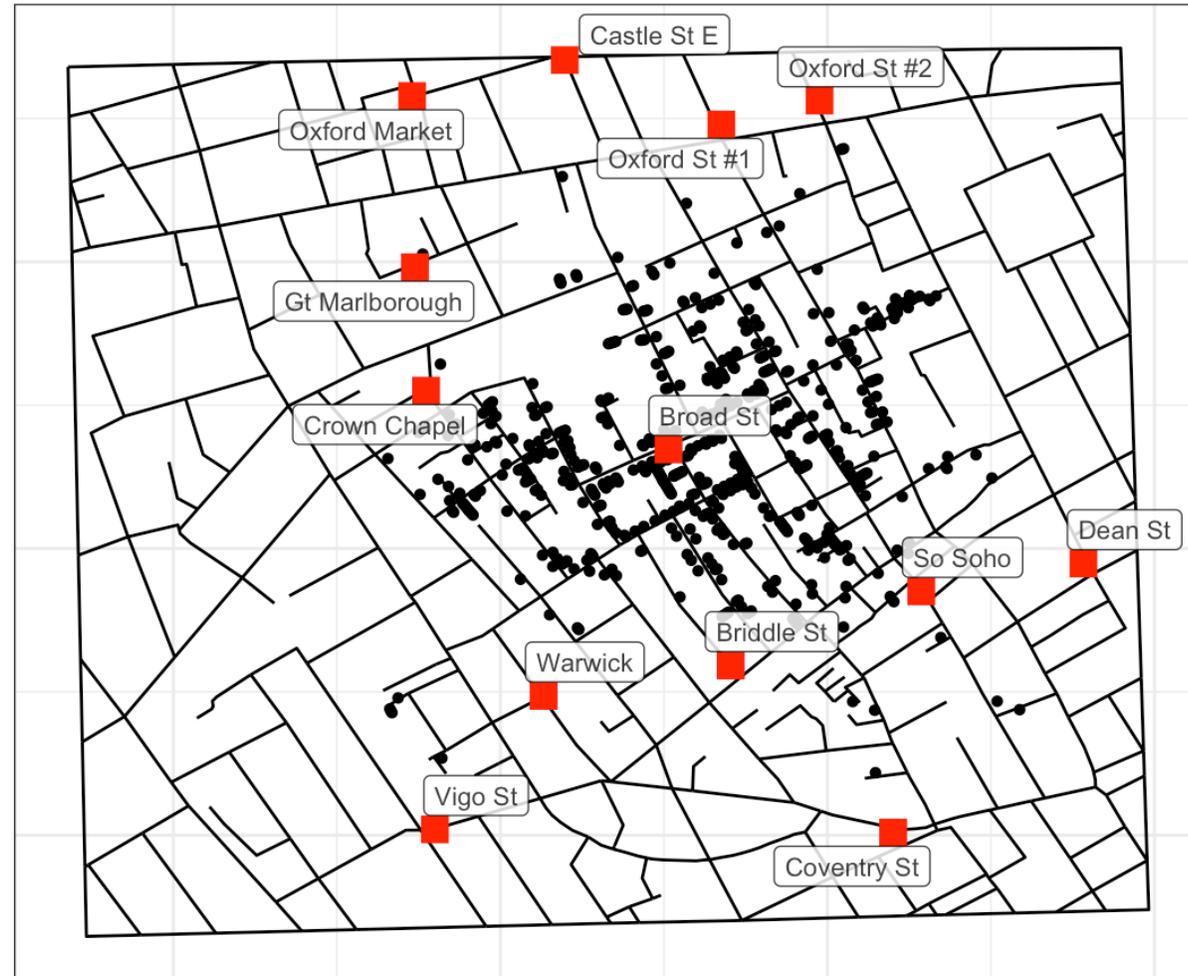
Due to the absence of technical tools, a lot of thought had to go into the design and creation of these visualizations.

Consequently, there is a lot we can (and **should**) learn to bring into the development of charts from a **design and storytelling perspective**.

London's Cholera Outbreak of 1854

Physician John Snow links the outbreak to a contaminated well by plotting number of cases on a map, jump-starting the science of epidemiology.

John Snow's London Cholera Outbreak Map (1854)

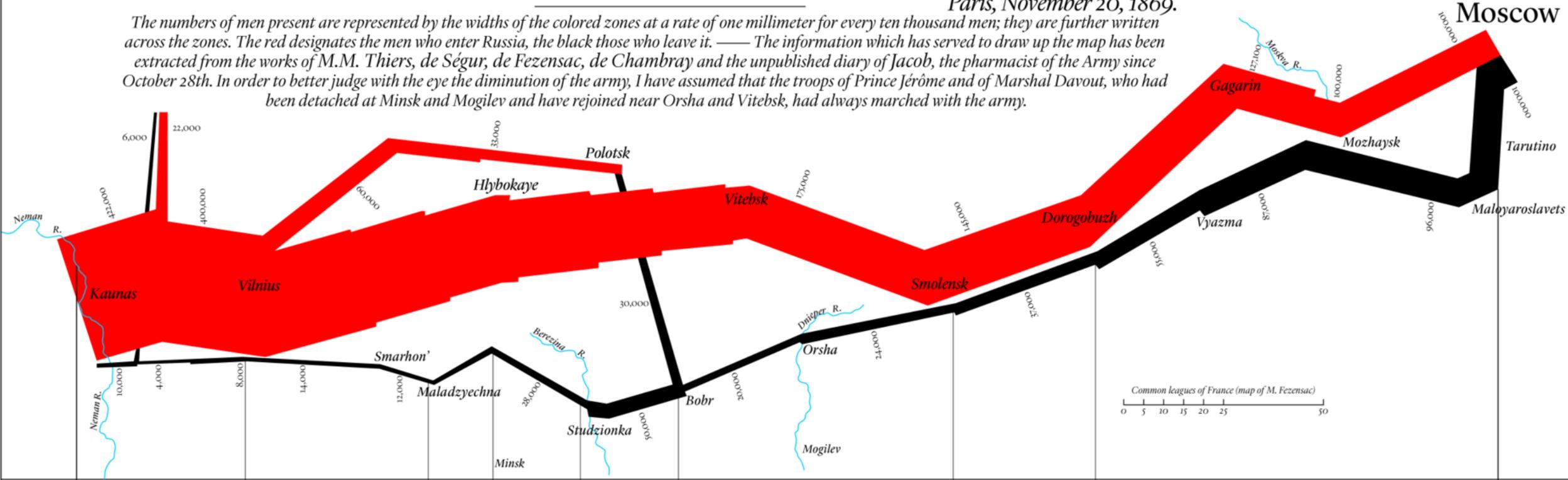


Figurative Map of the successive losses in men of the French Army in the Russian campaign 1812 ~ 1813

Drawn by M. Minard, Inspector General of Bridges and Roads (retired).

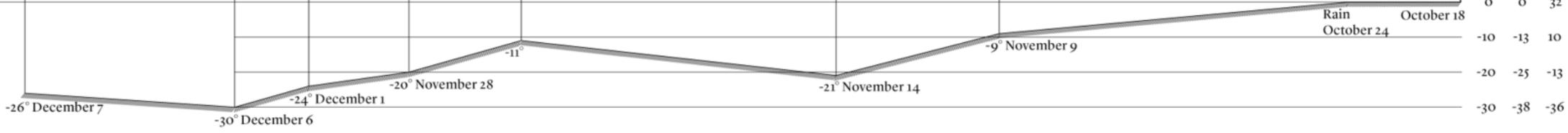
Paris, November 20, 1869.

The numbers of men present are represented by the widths of the colored zones at a rate of one millimeter for every ten thousand men; they are further written across the zones. The red designates the men who enter Russia, the black those who leave it. — The information which has served to draw up the map has been extracted from the works of M.M. Thiers, de Ségur, de Fezensac, de Chambray and the unpublished diary of Jacob, the pharmacist of the Army since October 28th. In order to better judge with the eye the diminution of the army, I have assumed that the troops of Prince Jérôme and of Marshal Davout, who had been detached at Minsk and Mogilev and have rejoined near Orsha and Vitebsk, had always marched with the army.



GRAPHIC TABLE of the temperature in degrees below zero of the Réaumur thermometer.

The Cossacks pass the frozen Neman at a gallop.



Minard's March to Moscow

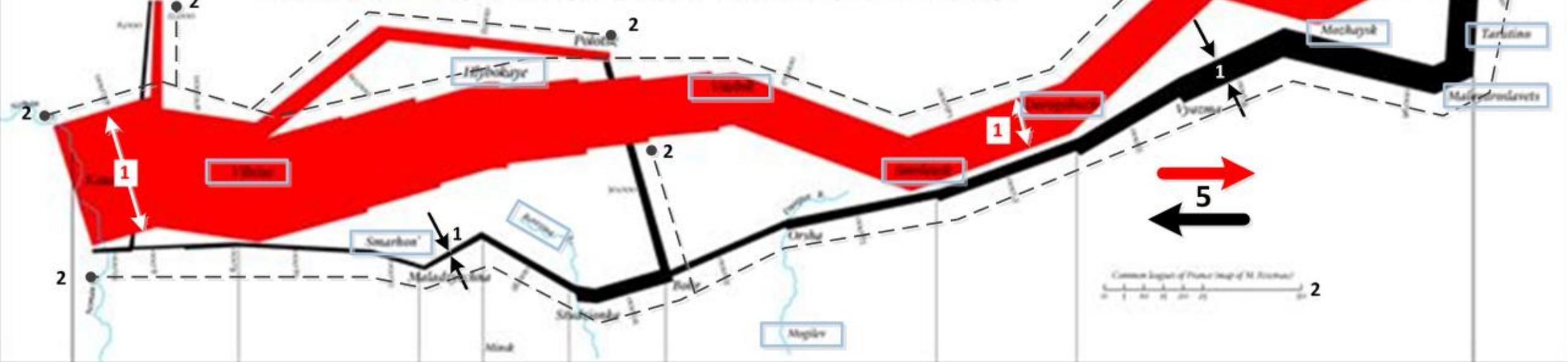
- 1. Number of troops
- 2. Distance
- 3. Temperature
- 4. Location
- 5. Direction of travel
- 6. Location relative to dates

Russian campaign 1812 ~ 1813

Roads (retired). Paris, November 20, 1869.

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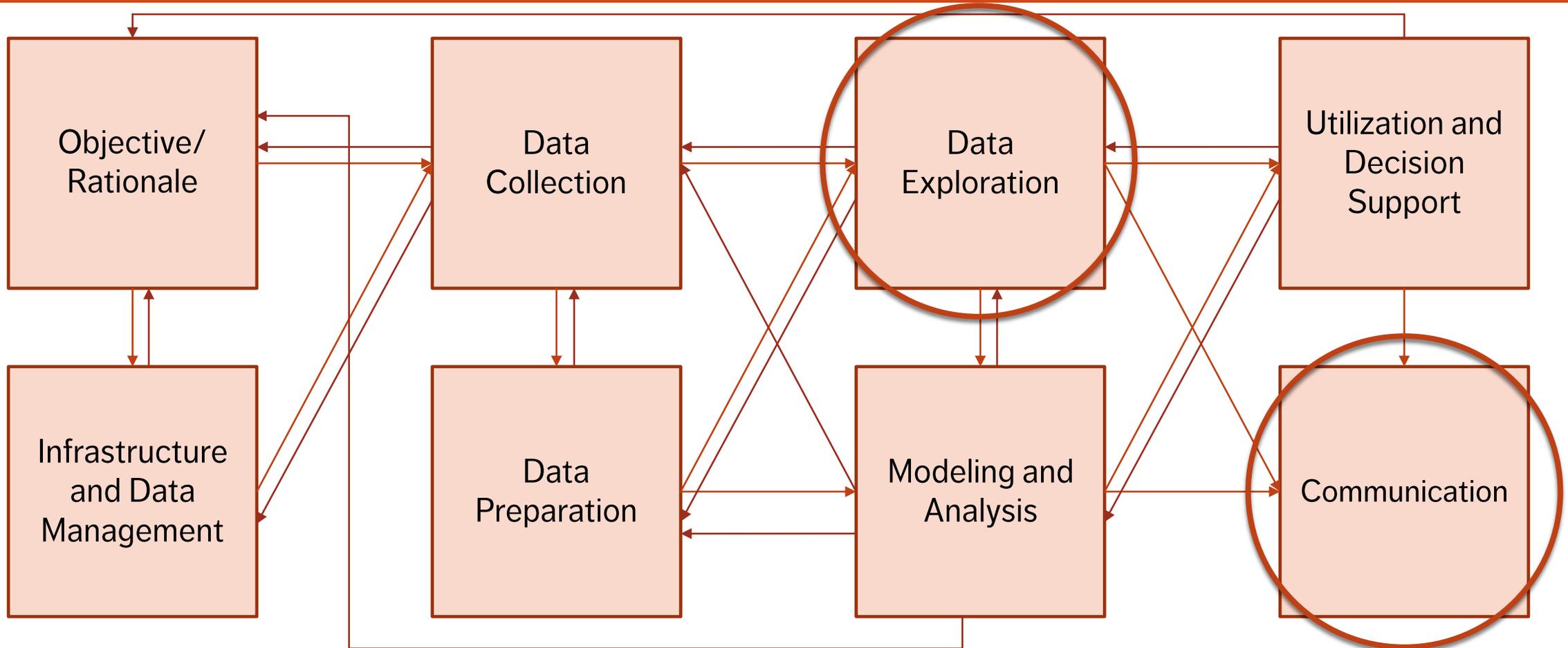


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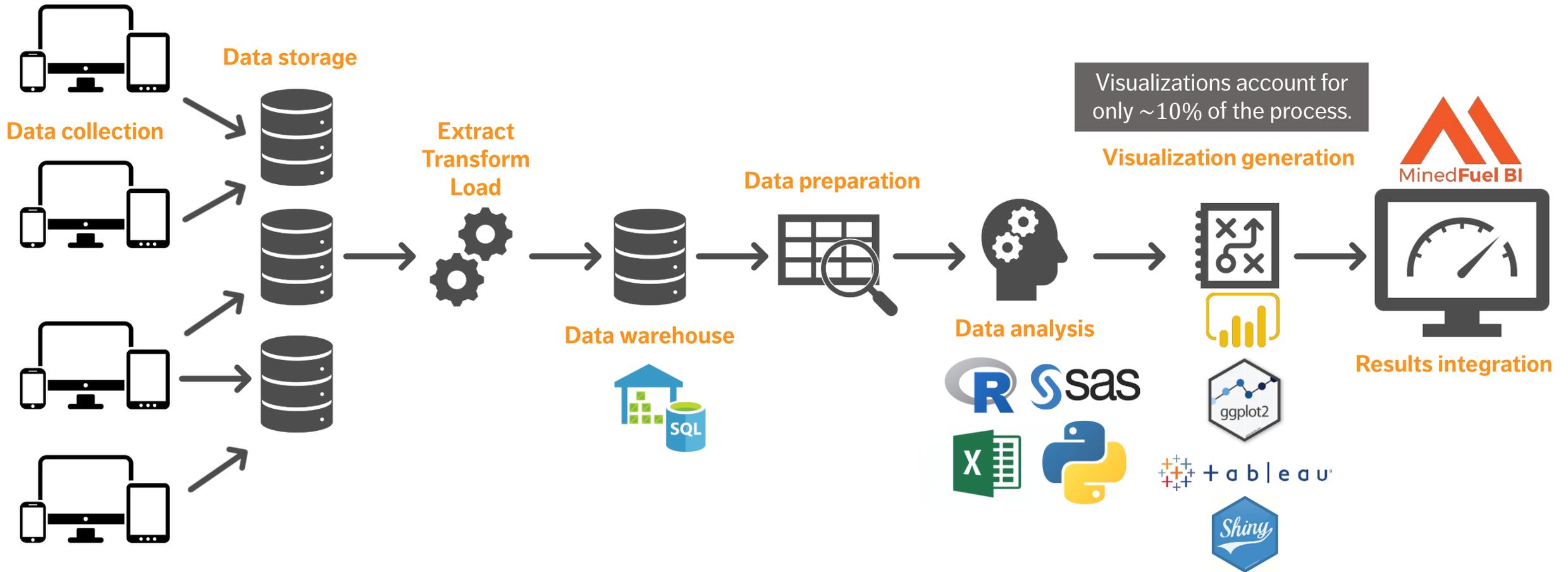


Minard's March to Moscow

THE (MESSY) ANALYSIS PROCESS



DATA ENVIRONMENT



DATA VISUALIZATION

INTRODUCTION