
Welcome to

Text mining and Sentiment analysis

Day 2



ABOUT INSTRUCTOR - Abhinav Singh

2016		
	CloudxLab	Building platform for practicing Big Data Technologies
2015	Byjus	#1 Edtech application in India on PlayStore
2015		
2013	Specadel	Developed platform for disrupting indian education
2012		
	HashCube	Developed #1 Sudoku Game on Facebook
2009		



What is text mining?

How will you find out causes of cancer?

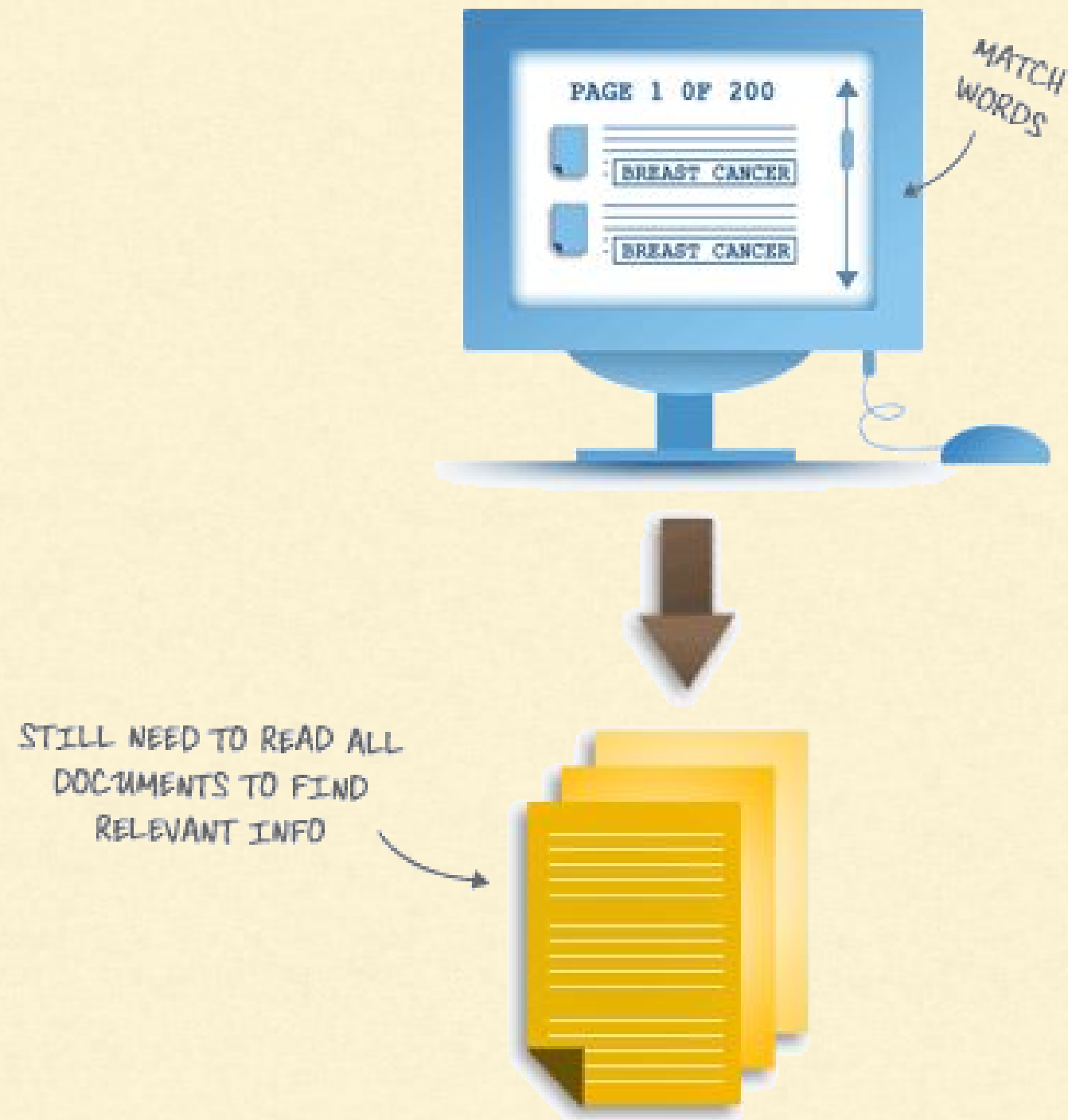
Traditional way



Filter journals by keyword “cancer”

Read about causes in filtered journals

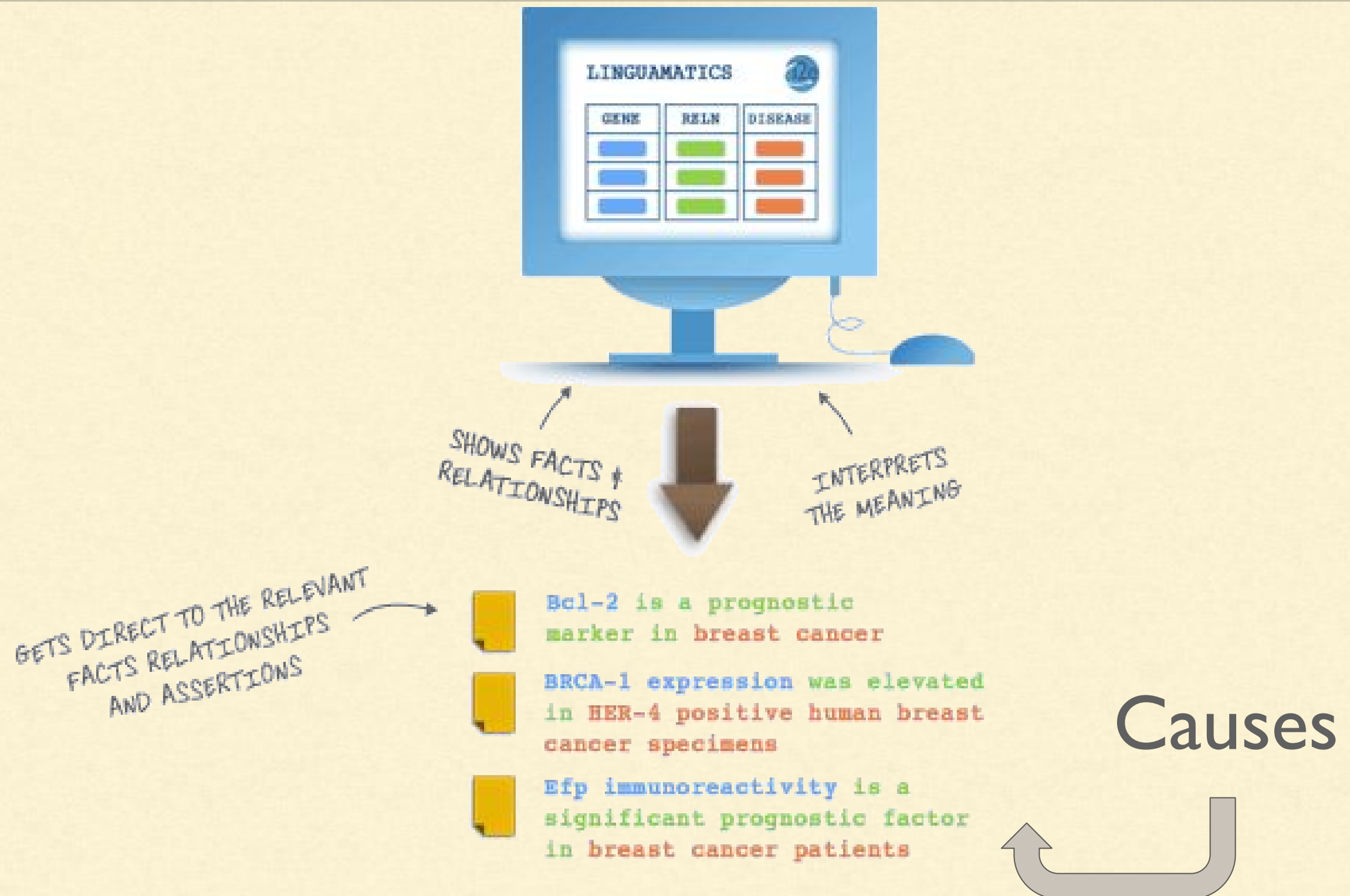
Problem?



With text mining

Text mining software reads and analyzes these documents on your behalf

Final Result



Text mining

Text mining, also referred to as text data mining, roughly equivalent to text analytics, refers to the process of deriving high-quality information from text

Text mining applications

- Information Retrieval - Finding keywords in the collection or database
- Natural language processing - Interaction between computer and human. Example Sentiment analysis
- Information Extraction - Automatically extracting information from machine readable documents like in our previous example.

Text mining - Word Clouds



Obama's 2011 State of the Union speech

Text mining - Word Clouds



Obama's 2014 State of the Union speech

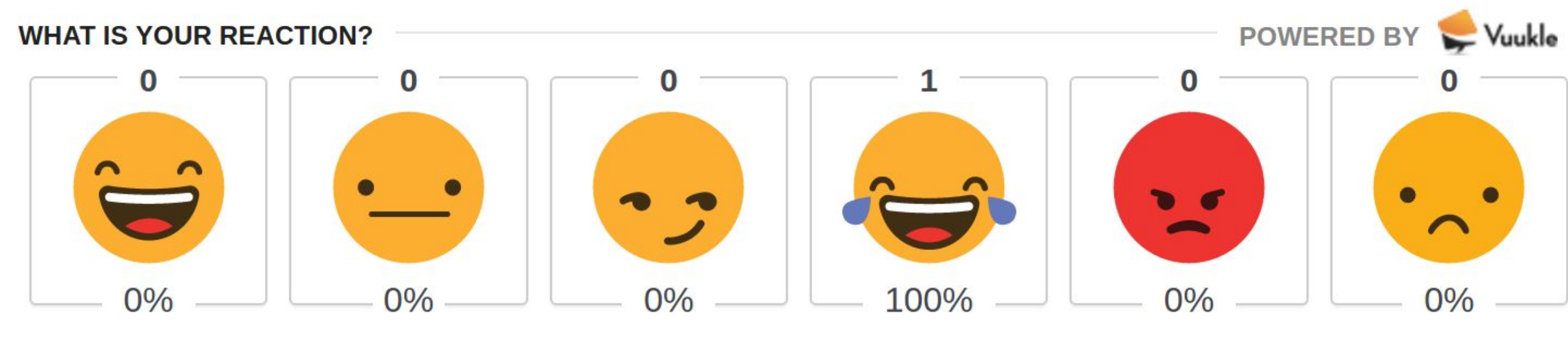
Word Clouds

- Word clouds can identify trends and patterns that would otherwise be unclear or difficult to see in a tabular format.
- Frequently used keywords stand out better in a word cloud
- An effective method for analyzing text-data
- Are easy to understand

Word Clouds - Applications

- Finding trending topic on Twitter, Facebook & Quora
- Finding key / main words from the corpus

Sentiment Analysis



Sentiment Analysis

Sentiment analysis aims to determine the attitude of a speaker or a writer with respect to some topic or the overall contextual polarity of a document

Sentiment Analysis Applications

- Computing customer satisfaction metrics (How happy or sad your customers are with your product or services)
- Forecasting share market based on sentiment of users on social media
- Finding out promoters and detractors (NPS)

Hands-on

- Building word cloud from Twitter tweets
- Sentiment analysis on the extracted tweets

Hands-on

- Create a Twitter app and get credentials from twitter like consumer key and access token
- Go to Equiskill lab <http://lab1.equiskill.com>
- Login with your credentials if required
- Set your working directory to text_mining
`setwd("R_introduction/text_mining")`
- Open "text_mining.R"

Quizzes

Quiz 1 -

<https://abhinav50.typeform.com/to/V4GqzQ>

Quiz 2-

<https://abhinav50.typeform.com/to/B7BquV>

Quizzes

Quiz 3 -

<https://abhinav50.typeform.com/to/ipjGTc>

Quiz 4-

<https://abhinav50.typeform.com/to/EgS3gT>

Quizzes

Quiz 5 -

<https://abhinav50.typeform.com/to/OL2Dgq>

Quiz 6-

<https://abhinav50.typeform.com/to/qXqjjA>