

DATA SCIENCE

A field for the Fourth Industrial Revolution



WHAT IS?

Study of the different methods of data **collection**, **processing** and **analysis** that allow to understand, interpretation and prediction of phenomena.



It allows to describe **patterns**, **trends** or **behaviors** of data in large volumes of information.

Main activities in the data science

- Extract
- Cleaning
- Processing
- Experiencing
- Disclose

Data science is a field of knowledge **INTERDISCIPLINARY**

It characterizes the new technological era, where data provides inputs for decision-making.



** In Colombia, in the **2016-2018** period 69,616 people graduated in Systems Engineering, Telematics, Mathematics, Statistics and related fields.

Men **73.4%**

Women **26.6%**

The tools MORE USED

- Looker Studio (before Google Data Studio)
- Google Analytics
- Power BI
- Python
- Keras
- SQL
- Excel
- R

ACCORDING TO THE SURVEY GARTNER*

Data analytics and intelligence business are differentiating elements nowadays.

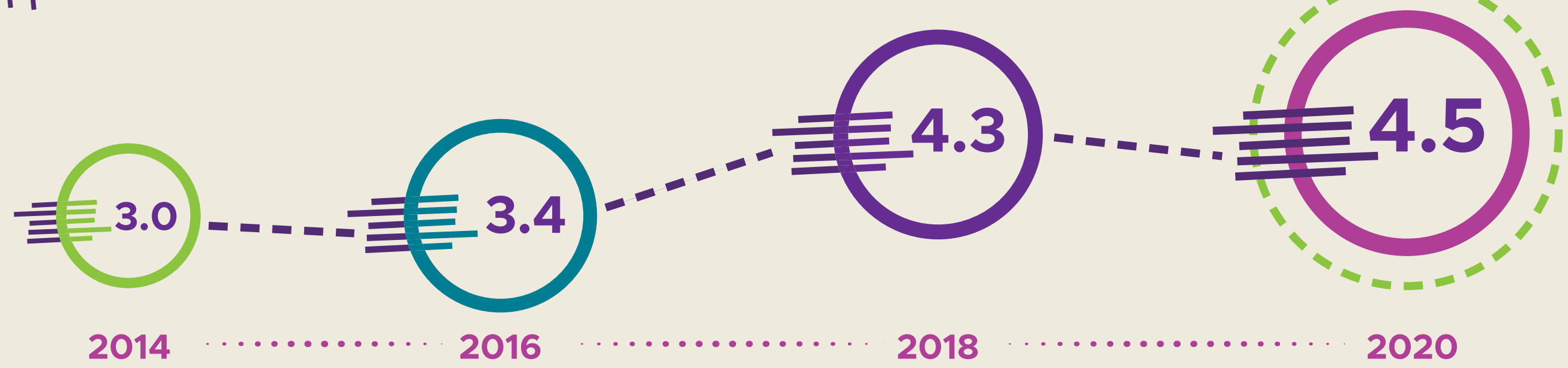
Data science is the soul of companies such as:



The MOST USED methodologies in data science are:

- CRISP-DM
- SEMMA
- KDD
- DATLAS

Growth of the world's population on the Internet (billions)



The world's Internet population is **growing significantly** year after year. As of **April 2020** the Internet reached **55%** of the world's population and now accounts for **4.57 billion** people, an increase of **5%** since January 2019

FACTS CURIOUS

- Twitter now exceeds **400 million** tweets a day
- IBM estimates that **90%** of data in today's world has been created in the last two years
- According to **U.S News & World Report Top** less than a third of the 100 best universities in United States offer degrees in Science of data.
- Google processes more than **24 Petabytes** per day
- Facebook has **10 million** photos new uploaded every hour
- Stored information **grows 4 times** and processing power of computers **grows 9 times** faster than the world economy

EVERY MINUTE A DAY

- Whatsapp: 41.666.667 messages
- Instagram: 437.222 posts
- Facebook: 147.000 photos
- Microsoft Teams: 52.083 users online
- Zoom: 208.333 meetings
- LinkedIn: 69.444 applications to offers labor

