

Data Analytics with NumPy and Pandas [Python]

PyKutch 2016

Chetan Khatri

Principal Engineer Data & Machine Learning
Nazara Games

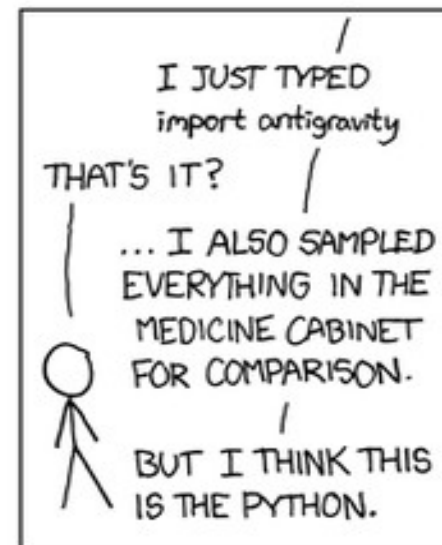
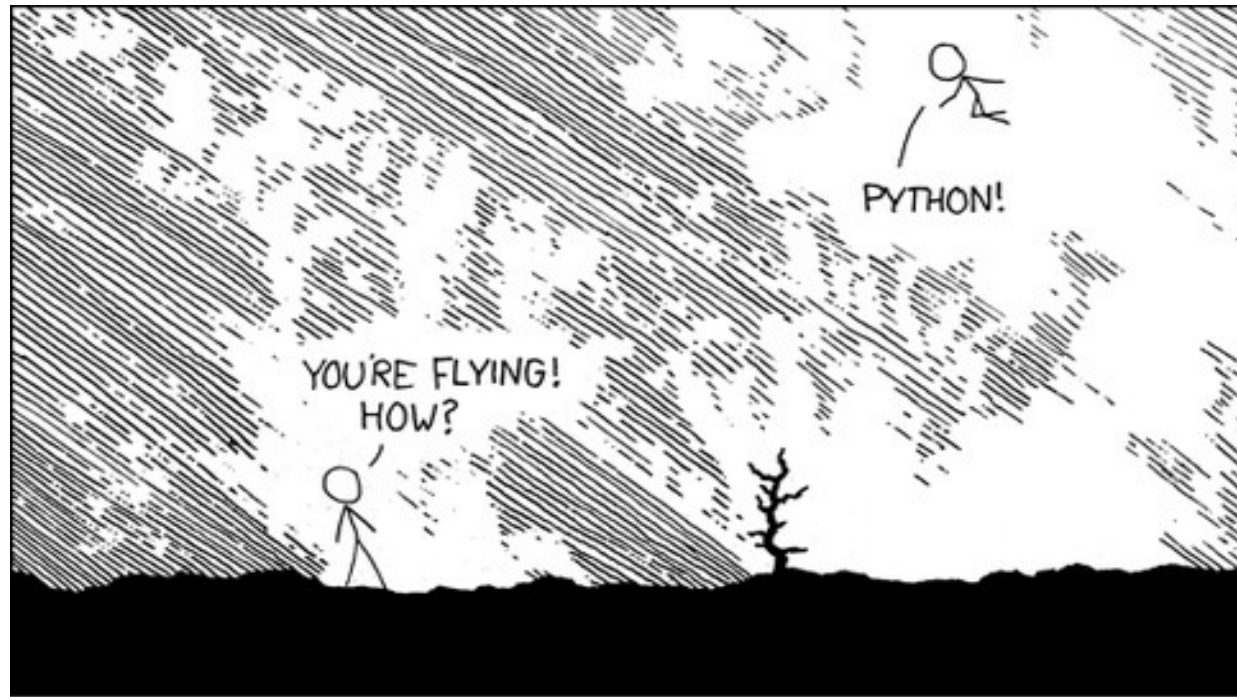


“Data is the new crude oil”



Buzzwords

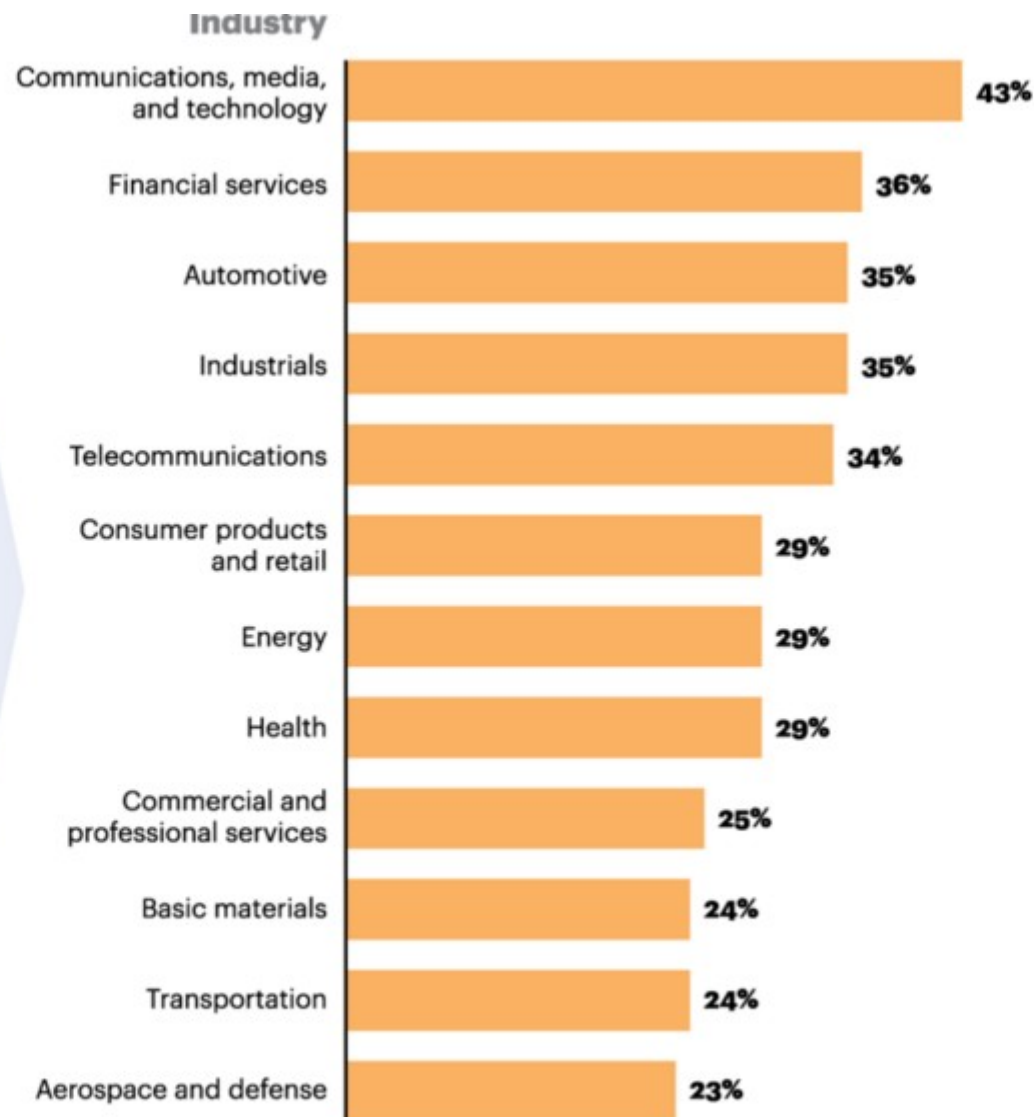
- Big Data
- Data Science
- Data Scientist
- Data Analytics
- Machine Learning
- Deep Learning
- Internet of Things (IoT)



Opportunities

- Finance
- Marketing
- Telco
- Education
- Research
- Healthcare
- All of them, everybody do Data Analytics!

Opportunities



Expected
five-year
growth in
need for
talent

33%

Source: A.T. Kearney 2015 LEAP (Leadership Excellence in Analytic Practices) talent study

Data Analytics – Opportunities



Data Analytics – Opportunities



DATA IS GETTING ...

Data Analytics – Opportunities

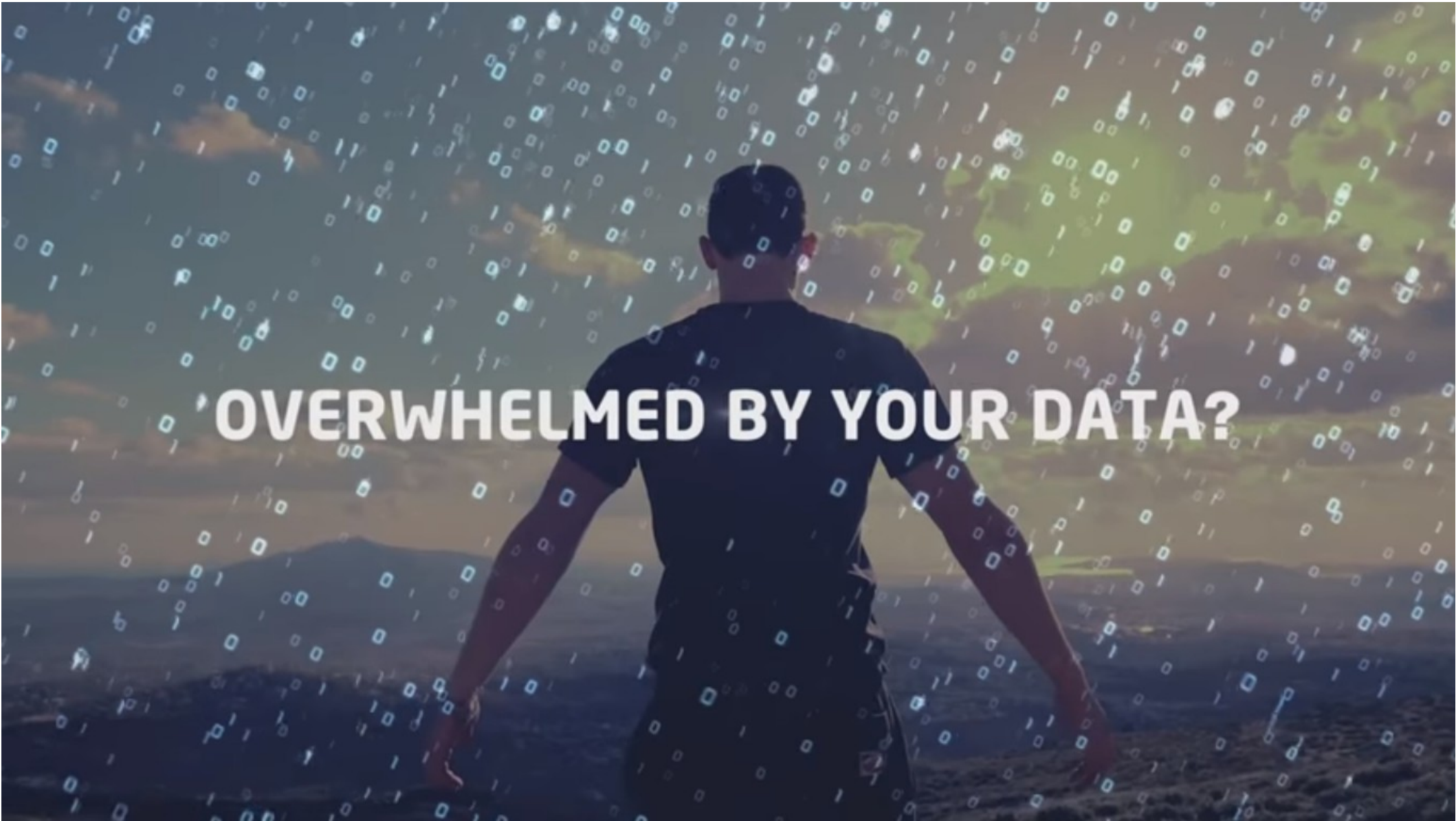
A woman with dark hair in a bun, wearing a black and red athletic tank top and white earphones, is running on a paved path. She is looking down at her left wrist, which has a grey smartwatch. The background shows a coastal landscape with waves crashing against rocks under a grey, overcast sky. The text "MORE AND MORE ..." is overlaid in large, white, bold, sans-serif capital letters across the center of the image.

MORE AND MORE ...

Data Analytics – Opportunities



Data Analytics – Opportunities

A person is seen from behind, standing in a field of falling binary code (0s and 1s). The person's arms are outstretched, and they appear to be looking up at the falling code. The background is a hazy, mountainous landscape. The text "OVERWHELMED BY YOUR DATA?" is overlaid in the center of the image.

OVERWHELMED BY YOUR DATA?

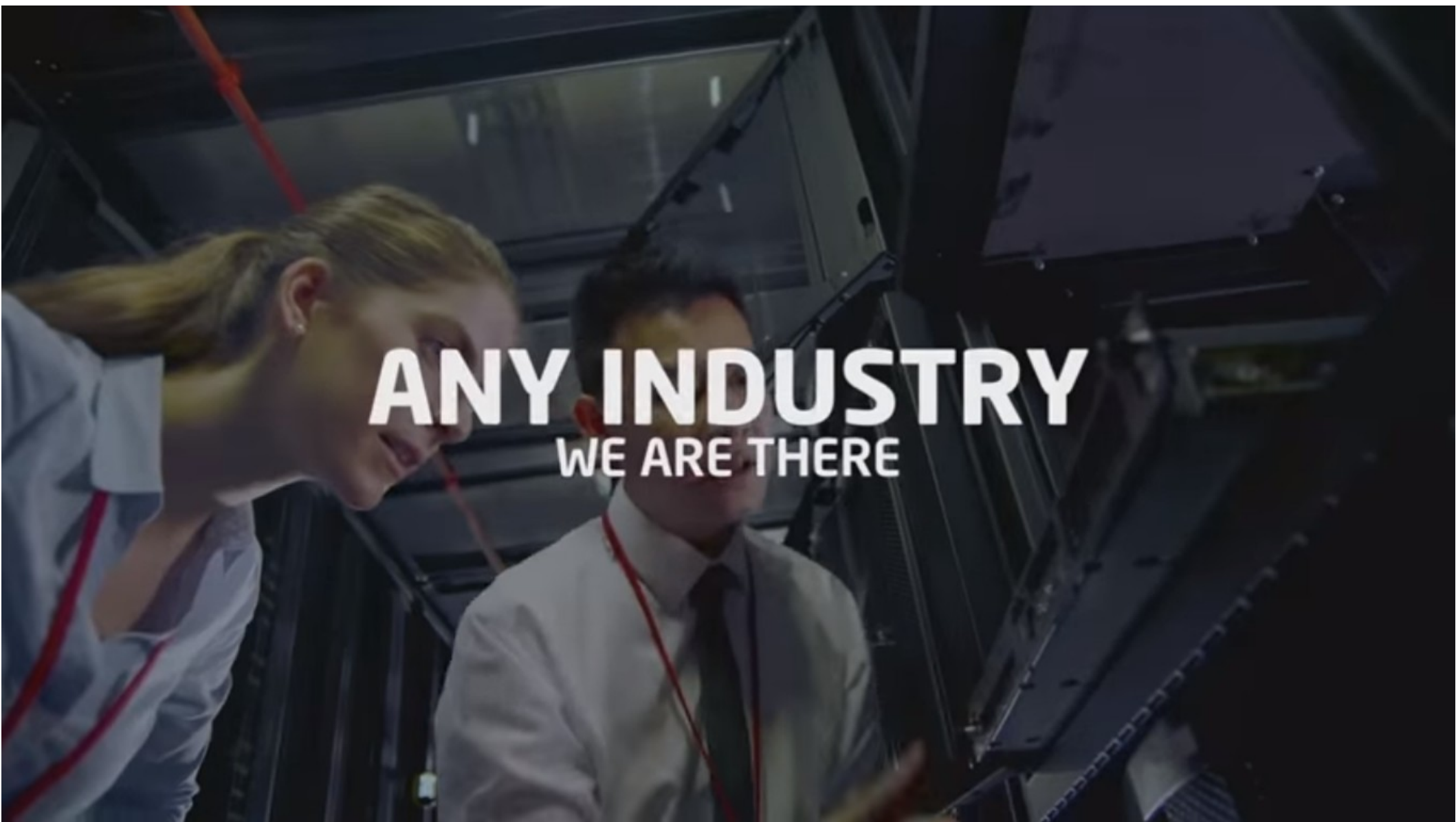
Data Analytics – Opportunities

We can help you analyze your data
WITHIN SECONDS

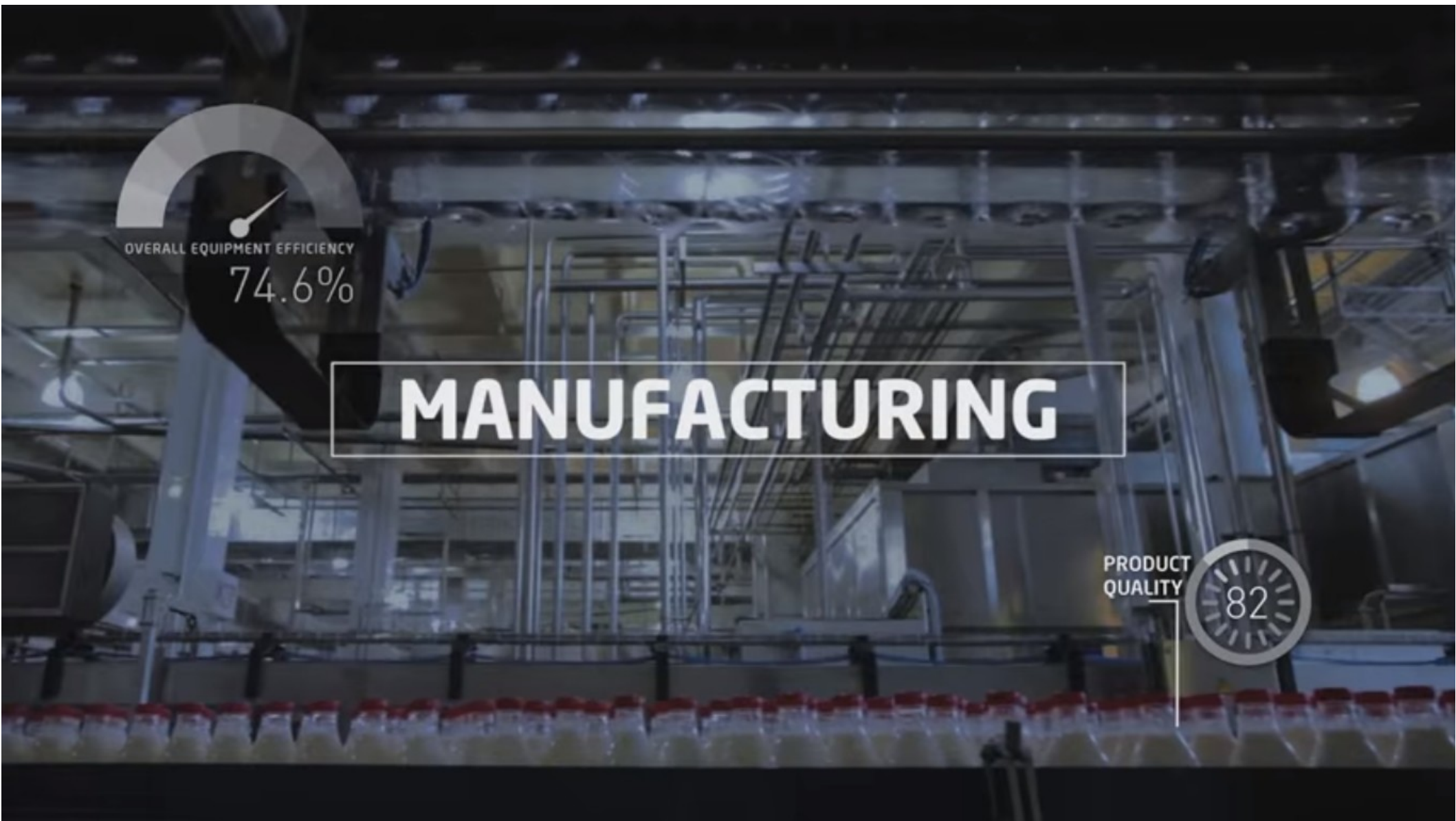
Data Analytics – Opportunities



Data Analytics – Opportunities



Data Analytics – Opportunities




Data Analytics – Opportunities



Data Analytics – Opportunities



Data Analytics – Opportunities

A photograph of three men in business attire (shirts and ties) sitting around a table in a dimly lit office. They are looking at documents and talking. In the background, there are large screens displaying financial charts and data. A semi-transparent white box with a thin black border is centered over the image, containing the text 'FINANCIAL SERVICES' in bold white capital letters.

FINANCIAL SERVICES

Data Analytics – Opportunities

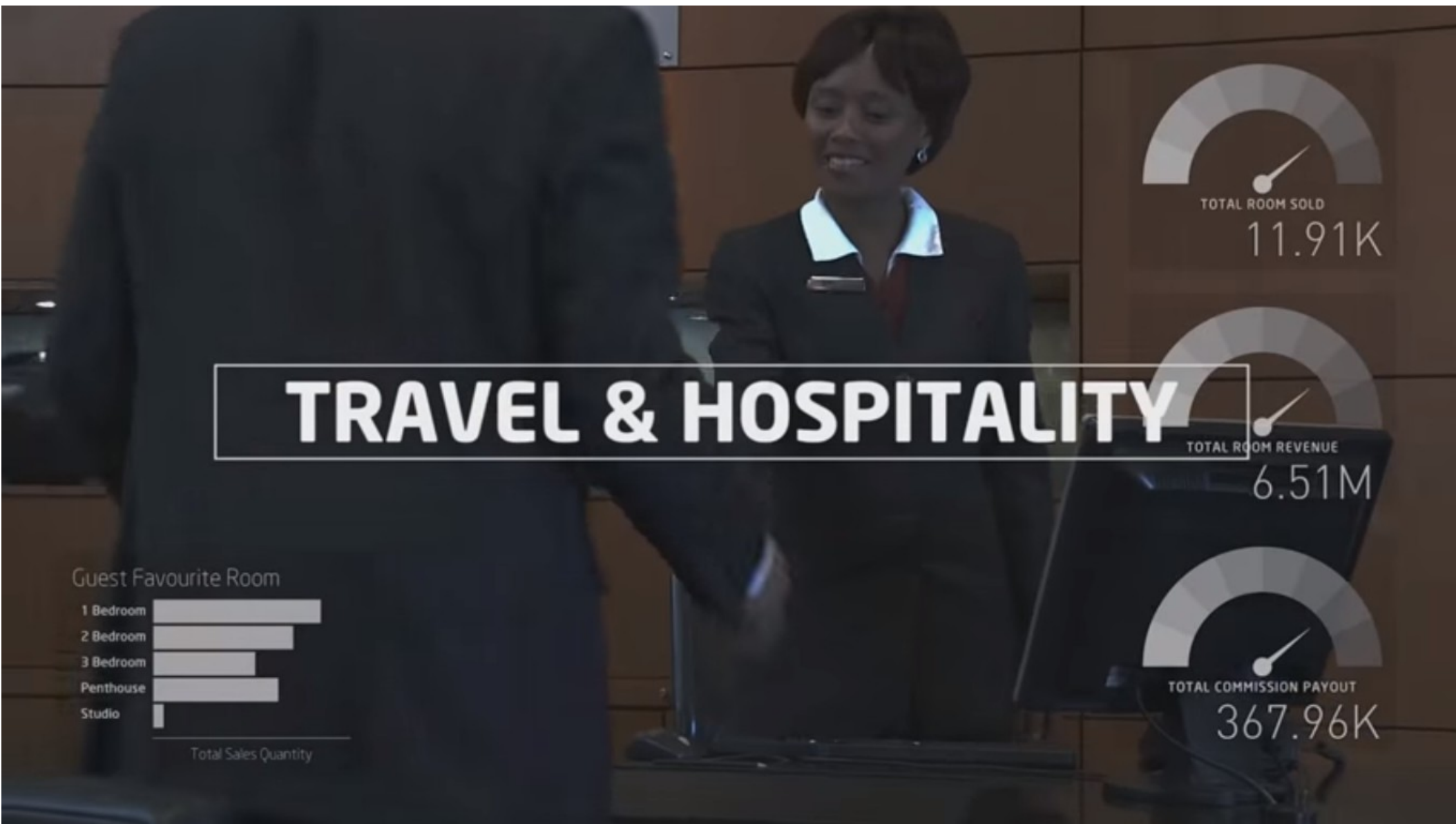


Data Analytics – Opportunities

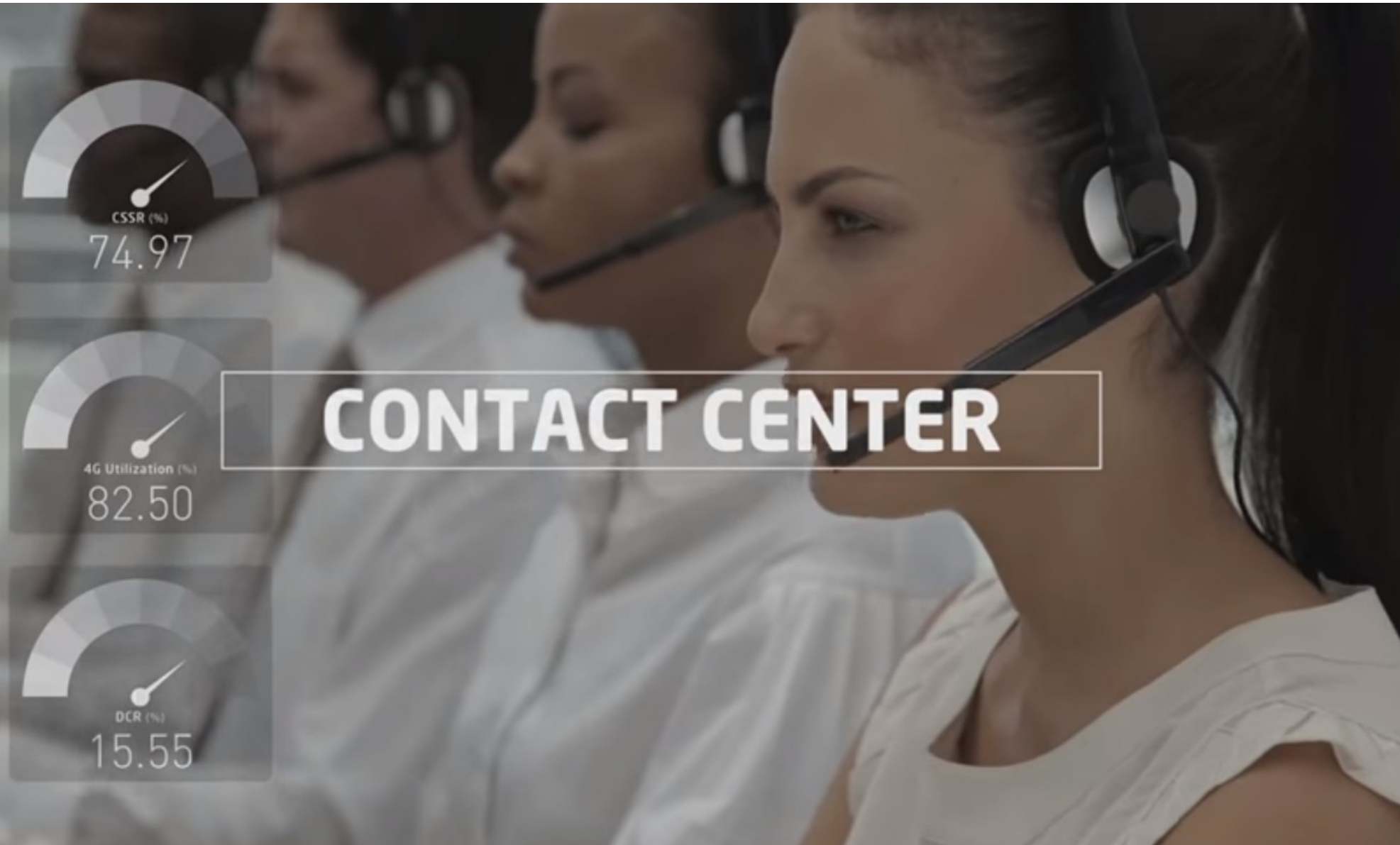
TELECOMMUNICATIONS



Data Analytics – Opportunities



Data Analytics – Opportunities



Data Analytics – Opportunities



Data Analytics – Opportunities



Data Analytics – Opportunities



MAKE INFORMED DECISIONS
Anytime, Anywhere, Anyhow

The background image shows two business professionals in an airplane cabin. A man in the foreground is pointing at a tablet, while a woman behind him looks at a smartphone. The smartphone screen displays a 'Sales Performance' dashboard with data for 'Mumbai' (▲11.01%), 'London' (▼1.29%), and 'Shanghai' (▲3.67%).

Data Analytics – Opportunities

A person is shown in profile, holding a tablet that displays various data analytics charts, including a bar chart and a line graph. The background is dark and out of focus, suggesting an indoor setting with ambient lighting.

With Insights
AT YOUR FINGERTIPS

Data Analytics – Opportunities



Data Analytics – Opportunities



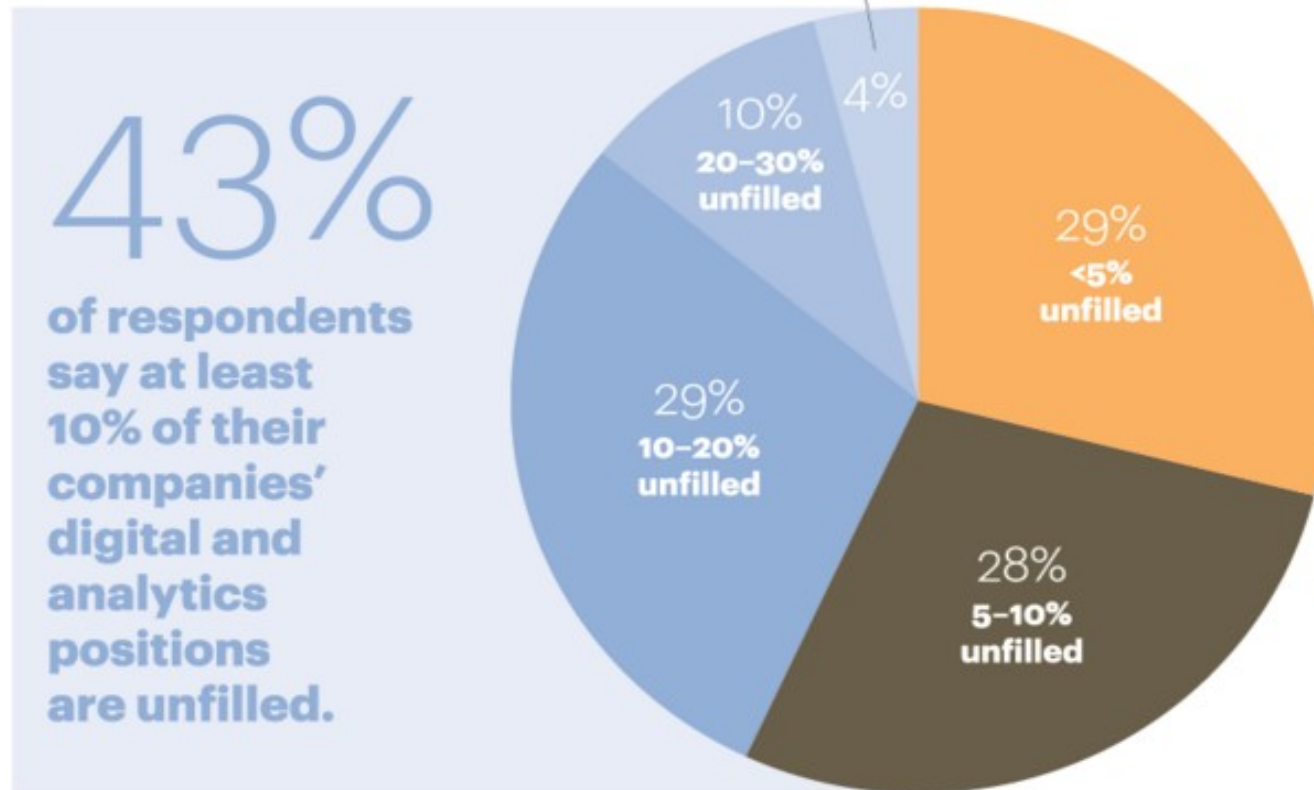
Data Analytics – Opportunities



Data Analytics – Opportunities



% of respondents



Source: A.T. Kearney 2015 LEAP (Leadership Excellence in Analytic Practices) talent study

Opportunities in INDIA

- India's IT outsourcing firms are betting on U.S. President Barack Obama's healthcare reform to rev up revenue growth which is slowing as the \$146 billion industry's key financial and manufacturing clients spend less on software services.
- The United States is the biggest market for the outsourcing industry, which is dominated by Tata Consultancy Services Ltd , Infosys Ltd and Wipro Ltd.

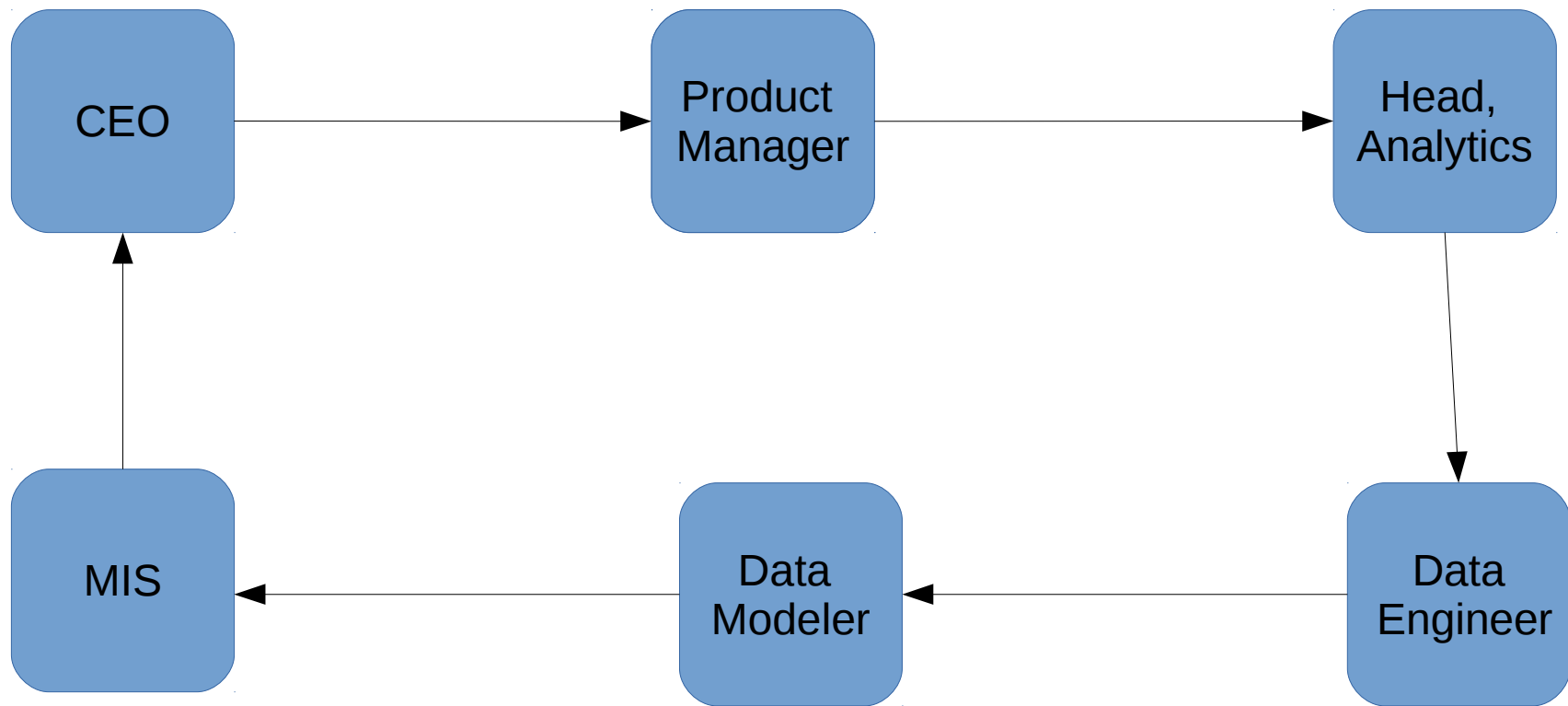


Data Analytics

- Understand the Business
- Understand the Data
- Cleanse the Data
- Do Analytics the Data
- Predict the Data
- Visualize the data
- Build Insight that helps to grow Business Revenue
- Explain to Executive (CxO)
- Take Decision
- Increase Revenue



Data Analytics Life Cycle



What My CEO wants ??

1. DAU (single/multiplayer/both)
2. MAU (single/multiplayer/both)
3. DAU/MAU (stickiness)
4. Average Session length (single/multiplayer/both)
5. Average Session per user (single/multiplayer/both)
6. Retention (D1-D7-D15)
7. Average Drop-off Distance by Day
8. Save me by laddoos, Save me close.

About 21,00,000 results (1.01 seconds)

Facebook is using WhatsApp's messages for targeted ads ...

https://www.reddit.com/.../facebook_is_using_whatsapps_messages_for_... ▼

Jun 5, 2015 - Content which benefits the community (news, rumors, and discussions) is

... Please submit bug reports and feature requests to the AOSP tracker. ... Misleading

Title Facebook is using WhatsApp's messages for targeted ads. and hangouts and

I suspect Facebook does it with their own messaging service.

Hands On

1. Weed USA
2. Titanic Sinking
3. Community! Find Partner

Thank you.

- Q & A ??

- Chetan Khatri, Principal Engineer – Data & Machine Learning.

Nazara Technologies Pvt. Ltd