

A FOCUS ON THE DATA SCIENCE FIELD

BRIDGING THE GAP BETWEEN BUSINESS & TECHNOLOGY



AGENDA

01 CULTURE: TECH & BUSINESS TEAMS

"Culture eats strategy for breakfast."
- Peter Drucker, Author

02 ALIGNMENT: TECH & BUSINESS TEAMS

"If everyone is moving forward together, then success takes care of itself."
- Henry Ford

03 BIG DATA & CLOUD COMPUTING

"The most valuable commodity I know of is information."
- Gordon Gekko

04 DATA SCIENCE: BRIDGING THE GAP

"Data scientists are kind of like the new Renaissance folks, because data science is inherently multidisciplinary."
- John Foreman



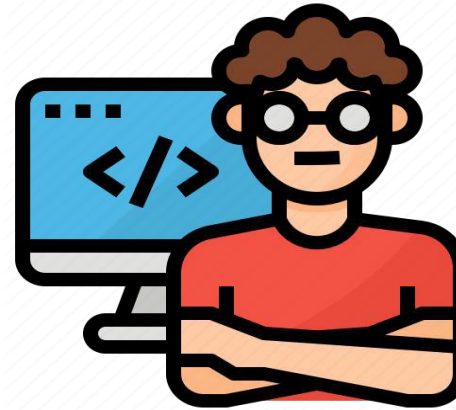
CULTURE: TECH & BUSINESS TEAMS



Multiple programming languages translates to misaligned communication



Software Fails!
We don't know all of the infinite possibilities of getting things wrong



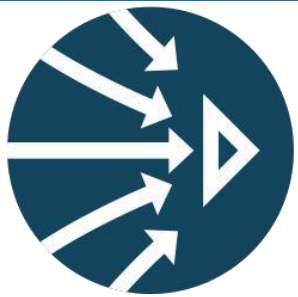
Business doesn't realize that by definition, developers are often introverts



It's really important to have people on both sides to bridge this gap in thought process



A whopping 58% of employees have left a job or would consider leaving one if they felt the culture was permeated by negative office politics.



ALIGNMENT: TECH & BUSINESS TEAMS



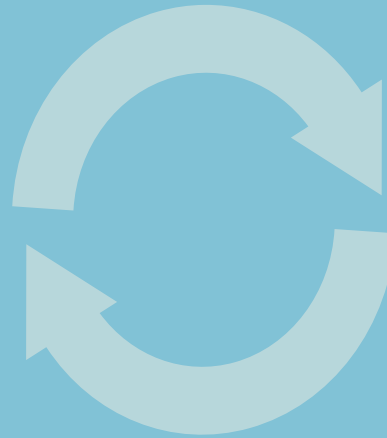
The process of software development is still siloed



Business doesn't like to think about failure, but the reality is that software fails



The world doesn't function without software anymore



Tech teams need to make decisions on behalf of business



It's an iterative process of co-creation and co-failure



According to a report published by McKinsey, knowledge workers spend an average of 14% of their workweek in communicating and collaborating internally. The study also showed that improving the internal collaboration through social tools could help raise the productivity of interaction by as much as 20 - 25 %

BIG DATA & CLOUD COMPUTING





WHAT IS BIG DATA?

Big Data is data that contains greater Variety arriving in increasing Volumes and with ever-higher Velocity. This is known as the three V's.



Volume

- Terabytes
- Health Records
- Insurance
- Transaction
- Tables, Files



Velocity

- Batch
- Near Time
- Real Time
- Streaming



Variety

- Structured
- Unstructured
- Semi-Structured
- All The Above

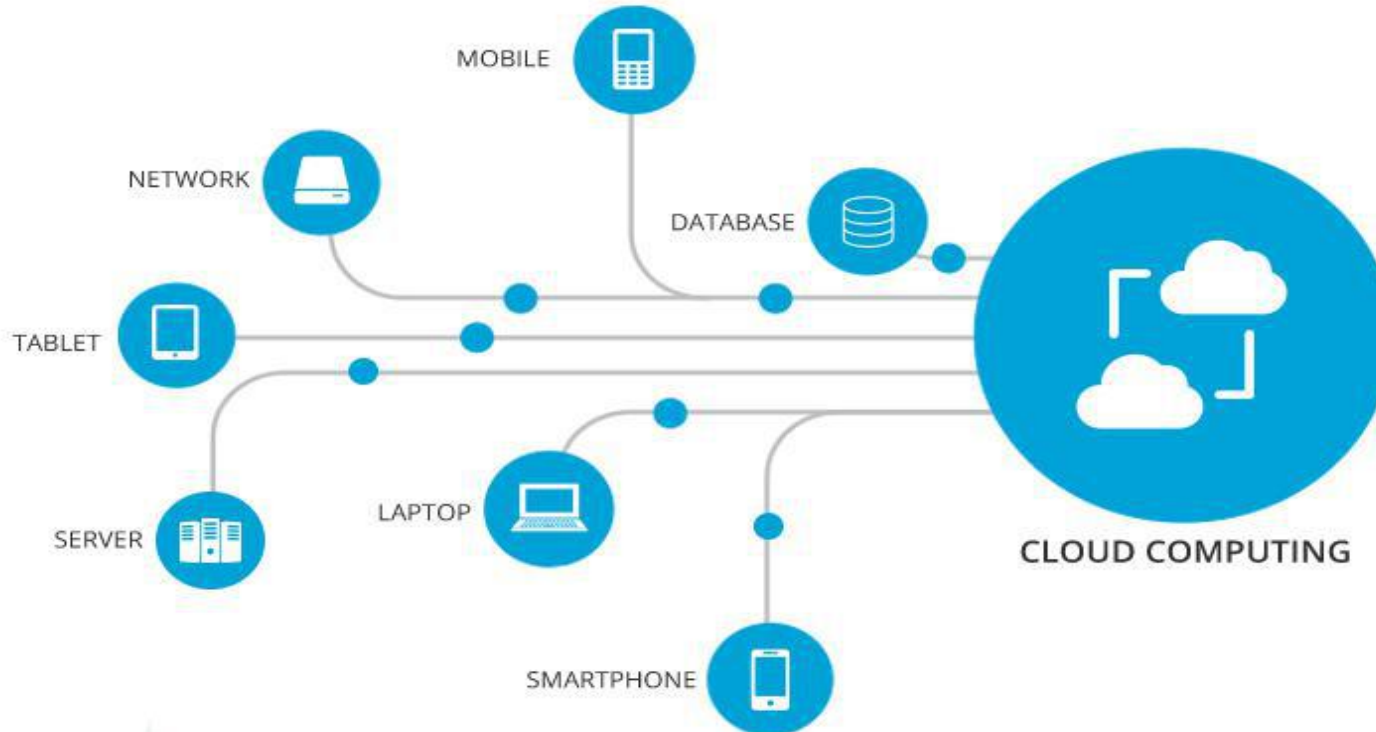


97.2% of organizations are investing in Big Data and AI.



WHAT IS CLOUD COMPUTING?

Cloud computing is the delivery of computing services - including servers, storage, databases, networking, software, analytics, and intelligence - over the Internet ("The Cloud") to offer faster innovation, flexible resources and economies of scale.



71% look for speed improvements, 63% want greater flexibility, and 57% pick the improved customer support as the primary driver to the Cloud.



BIG DATA & CLOUD COMPUTING

A Perfect Match

“Big Data” refers to the large sets of data collected, while “Cloud Computing” refers to the mechanism that remotely takes this data in and performs any operations specified on that data.



45% of businesses worldwide are running at least one of their Big Data workloads in the Cloud.



ADDED VALUE

01

Cost Saving

Big data technologies such as cloud-based analytics bring significant cost advantages when it comes to storing large amounts of data - plus they can identify more efficient ways of doing business.

03

New Products and Services

With the ability to gauge customer needs and satisfaction through analytics comes the power to give customers what they want.



02

Faster, Accurate Decision Making

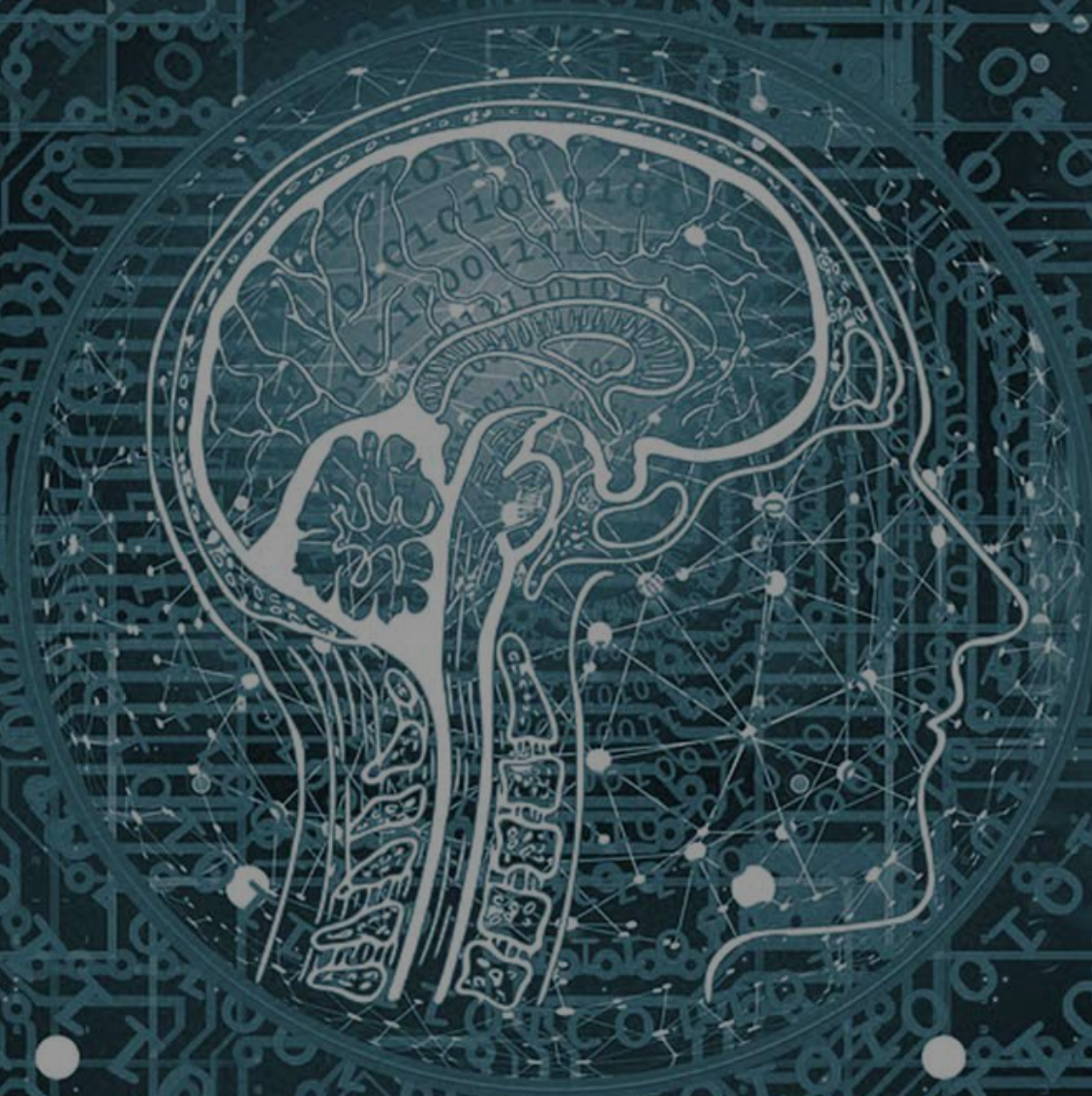
With the speed of cloud-based analytics, combined with the ability to analyze new sources of data, businesses are able to analyze information immediately - and make decisions based on what they've learned.



According to an Accenture study, 79% of enterprise executives agree that companies that do not embrace Big Data will lose their competitive position and could face extinction. Even more, 83%, have pursued Big Data projects to seize a competitive edge.

DATA SCIENCE

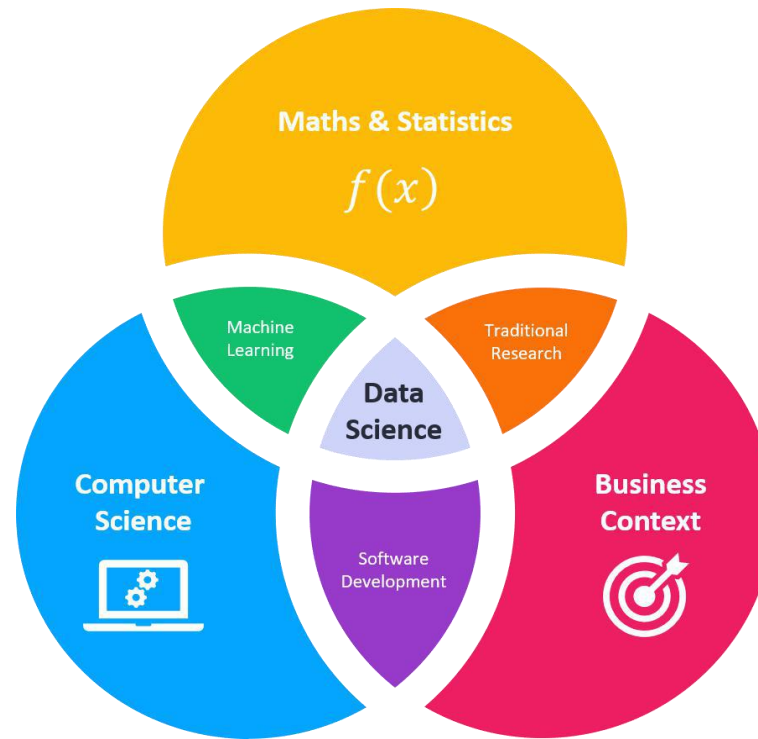
BRIDGING THE GAP





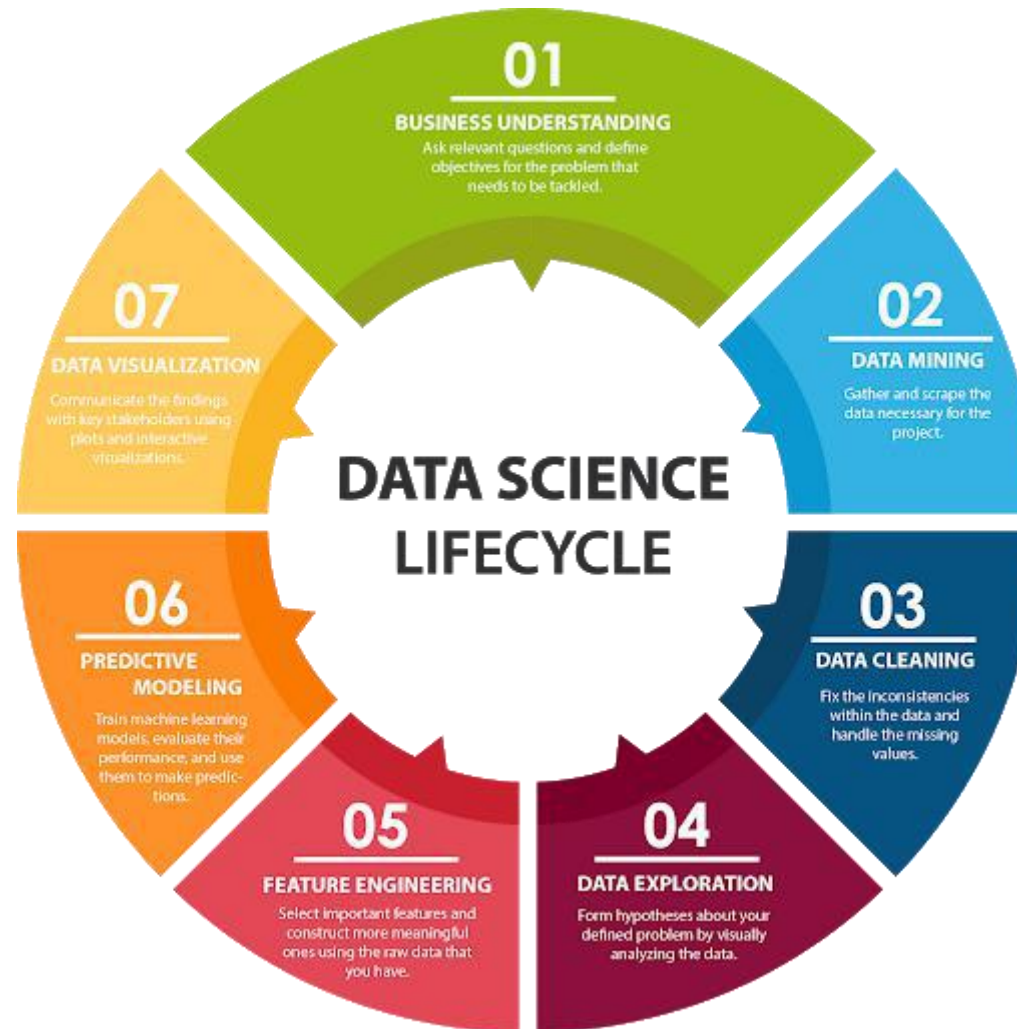
WHAT IS DATA SCIENCE?

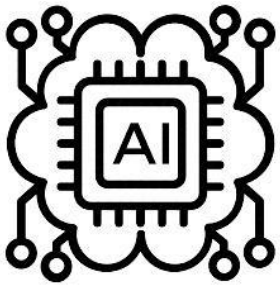
Data science is an inter-disciplinary field that uses scientific methods, processes, algorithms and systems to extract knowledge and insights from multiple structured and unstructured data sources.



“Data is useless without the skill to analyze it” - Jeanne Harris

DATA SCIENCE LIFE CYCLE

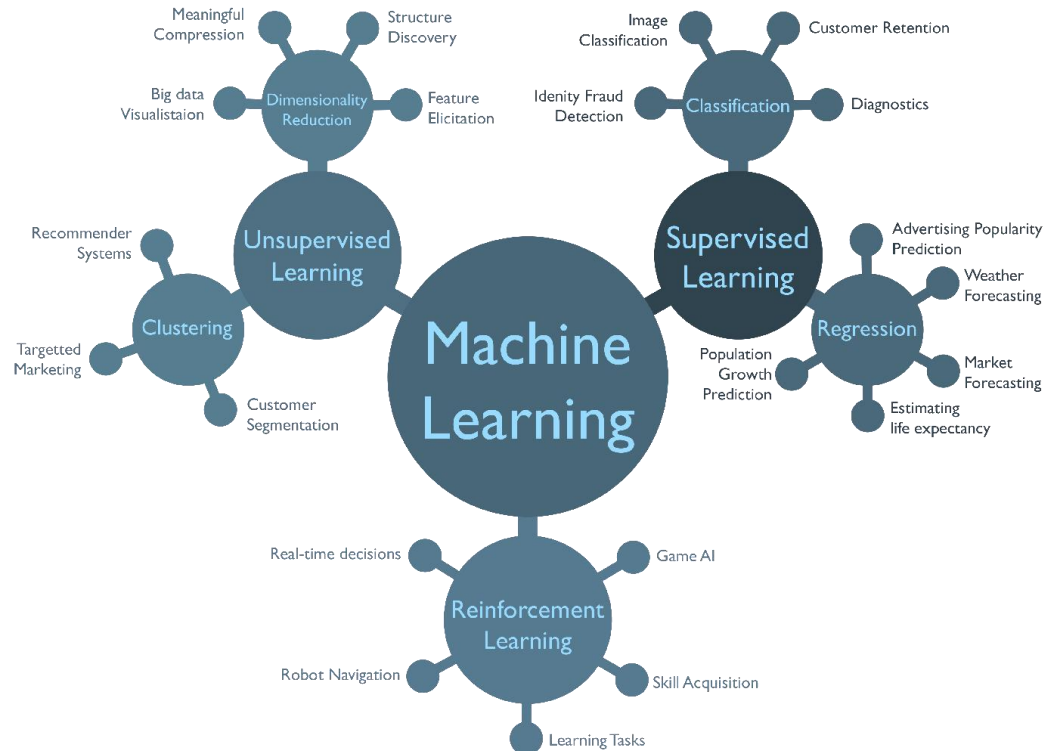




BIG DATA & MACHINE LEARNING

Another Perfect Match

Machine learning is a method of data analysis that automates analytical model building. It is a branch of artificial intelligence based on the idea that systems can learn from data, identify patterns and make decisions with minimal human intervention.



5 Ways AI Fuels Better Insights

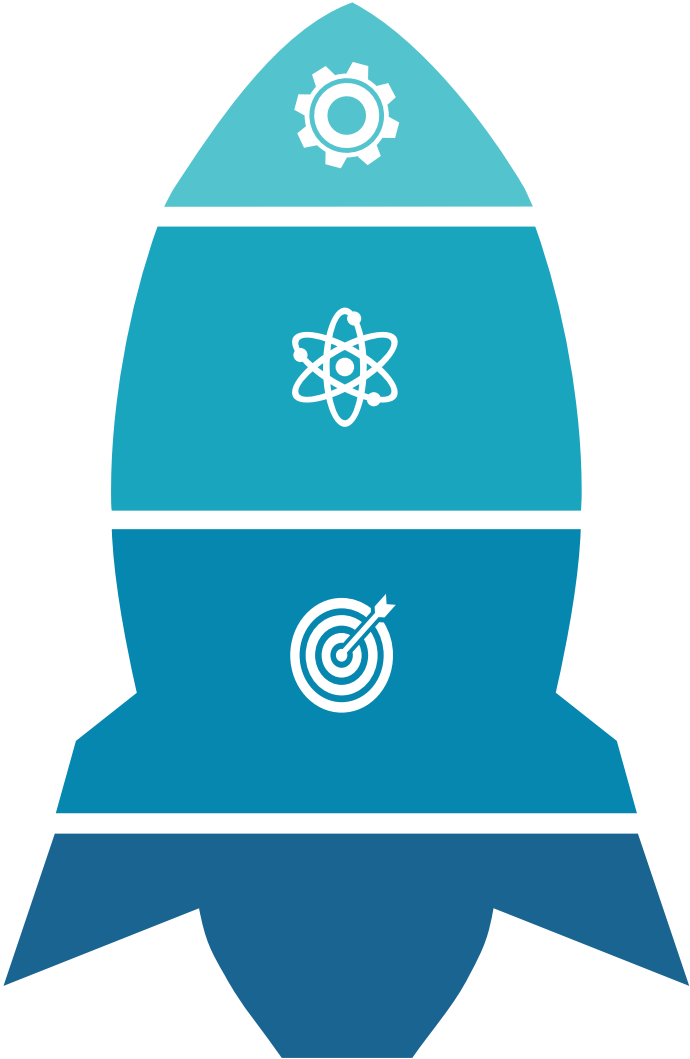
1. AI is creating new methods for analyzing data
2. Data analytics is becoming less labor-intensive
3. Humans still matter plenty
4. AI/ML can be used to alleviate common data problems
5. Analytics become more predictive and prescriptive

Today, we want as much data as we can get - not only to drive better insight into business problems we're trying to solve, but because the more data we put through the machine learning models, the better they get.



"Data is the new science. Big Data holds the answers." - Pat Gelsinger

BRIDGING THE GAP



• Solving the Silo Problem

Each data scientist comes from a diverse range of backgrounds and fields, and are able to break down silos and enable analytics for everyone. They use various tools and platforms to solve the issue of collaboration and communication between departments



• Machine Learning Integration

It's estimated that 80% of company data is unstructured. This includes the text contained in emails and various documents. ML models make high-value predictions that guide enterprise decisions and smart actions in real-time.



• Data-Driven Decision Making

Analytics can be deployed for better decision-making. Making decisions can be automated provided the right data is collected and utilized.





THANK YOU

QUESTIONS?