

# SHOULD YOU FEAR MACHINE LEARNING?



Advances in artificial intelligence (AI) have brought us to the point where systems are using a combination of algorithms, analysis, and experience to learn and program themselves without human intervention.

85%

of customer interactions will be managed without humans by 2020

38%

of jobs could be replaced by AI/machine learning by the 2030s

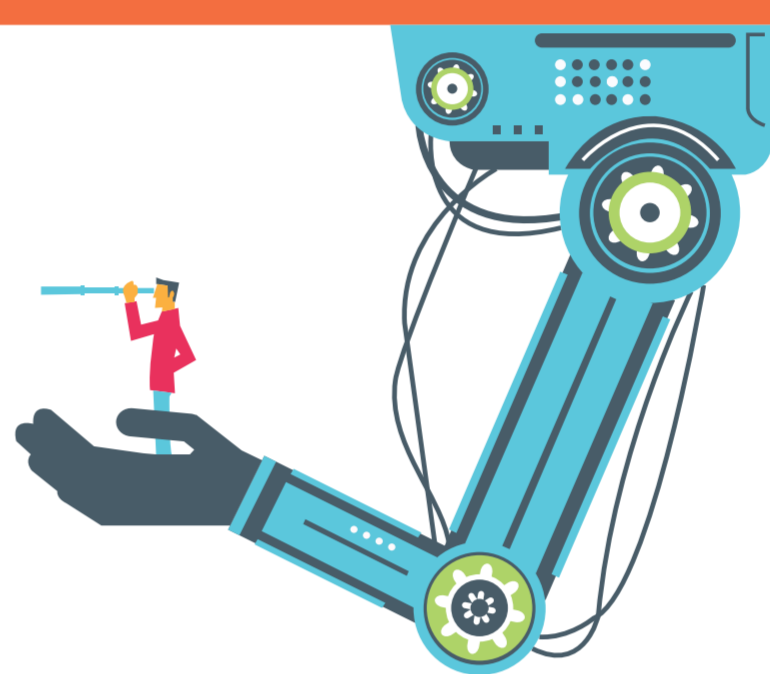
20%

of top executives rely on machine learning to run their businesses

## MACHINE LEARNING VS AI

### WHAT'S THE DIFFERENCE?

While these terms are often used interchangeably, machine learning is actually a subset of what artificial intelligence can do.



#### AI

- ✓ A broad concept where computers act intelligently on their own
- ✓ Where computers act according to their environment
- ✓ When systems display cognitive ability similar to humans
- ✓ Computers make decisions that maximize their success



#### MACHINE LEARNING

- ✓ One application of AI
- ✓ Computers observe & analyze and learn from experience
- ✓ Predict future events based on previous patterns
- ✓ Based on pre-programmed algorithms



## SOME REAL LIFE EXAMPLES OF MACHINE LEARNING

The use of machine learning has grown exponentially in the past few years, and you may not realize how widely it is used.

#### EMAIL SPAM FILTERING

Since introducing machine learning technology, Gmail has successfully reduced spam by

99%



#### MOBILE BANKING

Banks use machine learning to analyze handwriting on cheques deposited via smartphone apps



#### FINANCIAL RISK ASSESSMENT

Financial institutions rely on machine learning algorithms to determine creditworthiness and prevent fraud



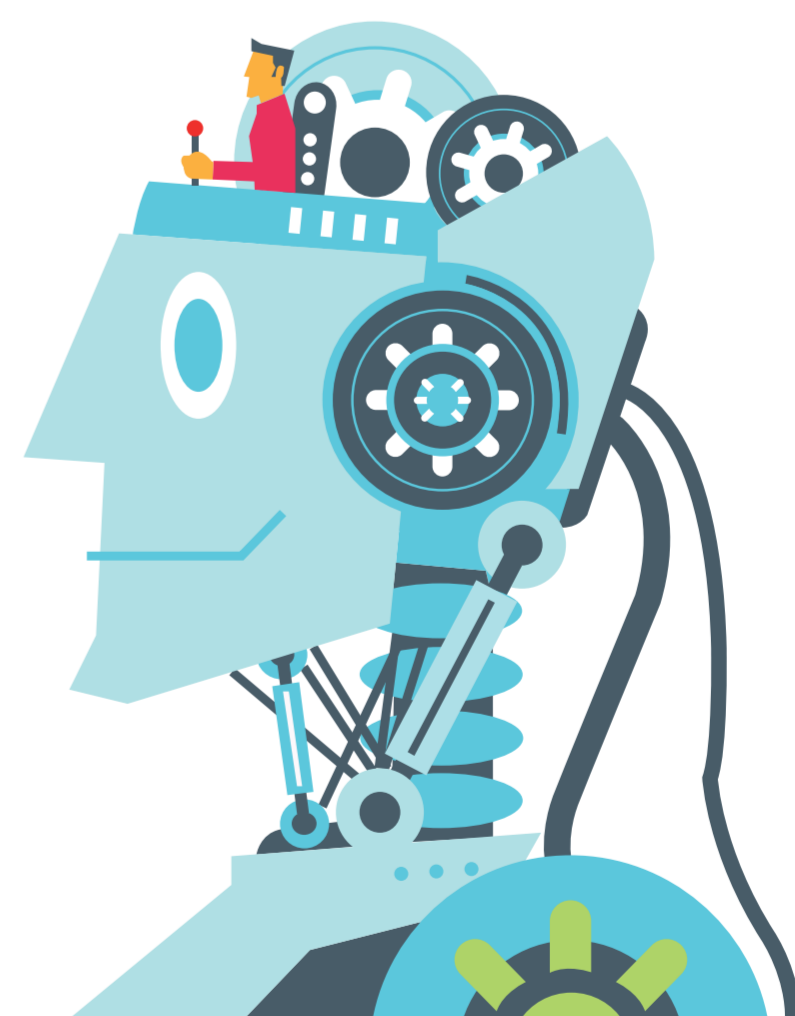
#### SOCIAL NETWORKS

Social network platforms like Facebook use machine learning to recognize faces and associate them with users



## WHAT INDUSTRIES ARE GOING TO BE MOST AFFECTED BY MACHINE LEARNING

As the technology matures, machine learning will continue to disrupt industries both for better and for worse.



#### CUSTOMER SERVICE

Machine learning is being widely used to power customer service chatbots, gradually replacing human agents



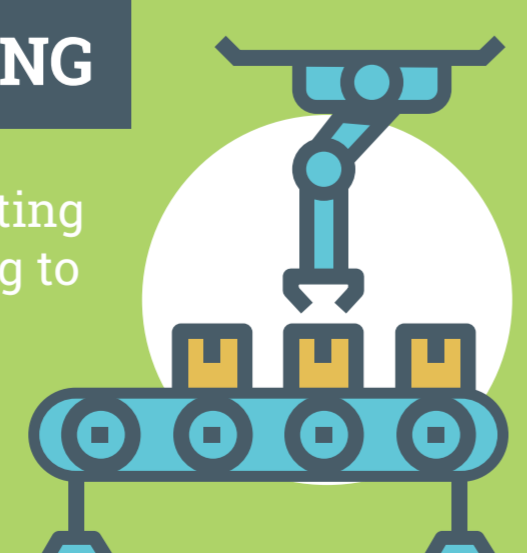
#### TRANSPORTATION

Self-driving cars use machine learning algorithms to function, with 10 million of these vehicles expected to be on the road by 2020, altering the public transportation system



#### MANUFACTURING

Manufacturers are starting to use machine learning to learn from production history and optimize production lines and reduce the need for human analysts



#### FINANCE

With so much data collected by the financial sector, the human element will be drastically reduced in the future as more planning and forecasting is driven by machine learning



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