## What is artificial intelligence?

- The technology that I've selected to present is one that I truly believe that Accenture can continue to use to solve business challenges is artificial intelligence in the healthcare field.
- First I am going to provide a brief overview of ai and describe what it is
- Artificial intelligence is accumulation of technologies that allow a digital computer to perform tasks that are associated with human intelligence by learning from iterative processing and algorithmic training.
  - For example, speech to text recognition uses ai to analyze voice input and transforms it into text.
  - Automated customer service chat bots can receive input in the form of a written question from a customer and can answer the question. Some can even initiate and process returns
- There are two types of ai, weak ai and strong ai
  - Weak ai is trained to automate specific tasks. Voice assistants like alexa and siri are great examples, they can only complete tasks that they are trained to do such as answering specific questions or setting a timer
  - Strong ai is able to learn and replicate human thinking. Its important to note that strong ai doesnt exist yet but an example would be C3PO

### How does an ai system work?

- First the ai must be fed labeled training data. For example if you want an ai that detects
  pictures of dogs in a picture library, input labeled data of pictures of dogs, and pictures
  that arent of dogs. Al would learn the difference between pics of dogs in a trial and error
  format. Ai would use the patterns it discovered from teh labeled data and apply it to data
  that isnt labeled
- Steps
  - Learning
    - Acquiring data and creating rules for how to turn the data into actionable information
  - Reasoning
    - Selecting correct algorithm to reach desired outcome
  - Self correction process
    - Fine tunes algorithm to ensure most accurate results

#### Al in healthcare

- In the united status, 185,000 people suffer limb loss from an amputation, neurological condition or infection annually. All can be used in the creation of future neuroprosthetics to allow for enhanced freedom of movement.
- Neuroprosthetics are artificial devices that restore or facilitate sensorimotor, cognitive, auditory or visual functions that were damaged from injury by bypassing the damaged neural circuits
- Neural interfacing is use of electrodes to record brain signals for prosthetic control
- Main goal is to gather data from brain, analyze it, determine the intention of movement and instruct prosthetic to perform a specific movement

# Diagnostic

- Ai can be used in to diagnosis patients with little to no healthcare worker intervention
- First, ai can be

#### **Business**

- Ai can pre authorize insurance, follow up on unpaid bills, maintain records

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