



# Digital Decoder: An HR Pro's AI Glossary



# “Every once in a while, a new technology, an old problem, and a big idea turn into an innovation.”

—Dean Kamen, American engineer/inventor

These words apply across nearly all areas of our life and culture, and describe much of the explosive growth and innovation we know in the 21st century.

When it comes to artificial intelligence, HR/benefits pros can look forward to capitalizing on a big idea to solve an old problem: Building on the functionality of personal digital assistants like Siri® and Alexa® to interact with employees and help them find the right benefits, in the right place, at the right time. This is exactly what personal benefits assistant Sofia<sup>SM</sup> was created to do.

When it comes to the intersection of HR and AI, we're just beginning to leverage enhanced technology, which means the future is still very much ahead of us. To make things easier — and help you better understand how these new innovative opportunities may benefit you and your employees — here's a quick-hit glossary of nine important terms and concepts to get you started.



# Artificial Intelligence

AI is the ability of machines to perform human cognitive functions. Technology can accomplish such tasks as visual perception, understanding speech, and making decisions. These cognitive functions are the building blocks of creating a new way to interface with end-users or get bulk or rote processes done more efficiently.

## Algorithm

Algorithms are the building blocks of AI. They are mathematical formulas and/or programming commands that essentially teach computers how to learn and solve problems autonomously. By providing data inputs, it's possible to "teach" AI to make decisions and carry out tasks.

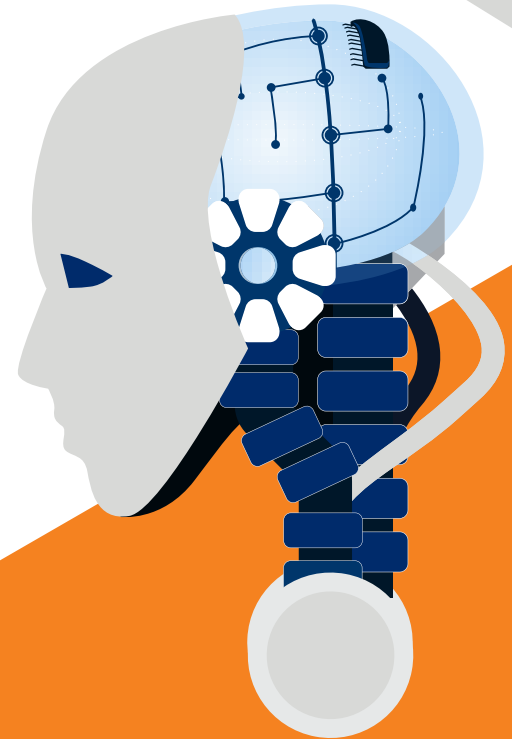


# Artificial General Intelligence (AGI)

AGI replicates a human skill or set of skills; in practice, it's a machine that can successfully perform an intellectual task that a human being can. One example is the robotic automation currently happening in the manufacturing industry. In the HR/benefits space, AGI can be leveraged to create a personalized benefits experience, interacting with the participant who has questions about their options or how to use them. It may also be used for repetitive processes.

# Artificial Super Intelligence (ASI)

ASI takes AGI several steps further, with a machine that possesses intelligence that surpasses that of the most gifted human mind – even possibly possessing general reasoning systems that lack human cognitive limitations. In many Hollywood-movie scenarios, ASI supplants not just human skill, but humanity. Luckily, we're a long way off from being replaced by ASI!

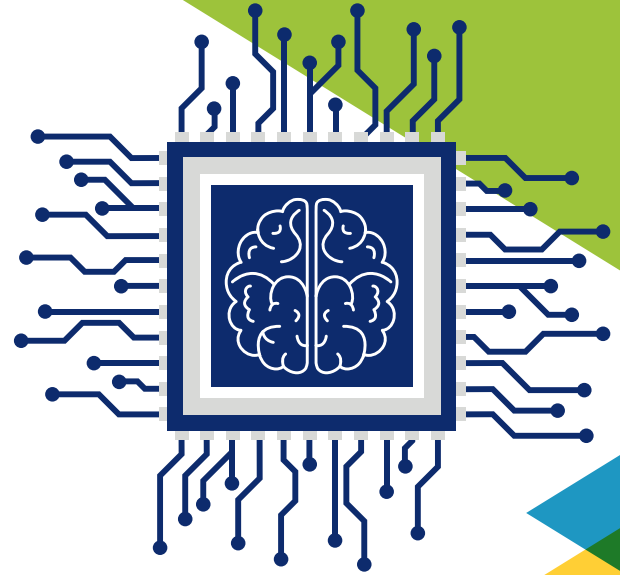


# Chatbot

Hey, Alexa – what’s a chatbot? Like Alexa® herself, a chatbot is a computer program that conducts conversations with human users by simulating how humans would behave as a conversational partner. You’ve probably experienced these when shopping online. They pop up and ask if you need help. Maybe you didn’t even know it was a bot?

# Machine Learning (ML)

Machine learning is the process by which an AI uses algorithms to perform functions and/or make decisions. For example, when you use Spotify®, an ML algorithm recognizes the type of music you like and tries to match it to something similar. At Businessolver®, we use ML with Sofia to improve employees’ experience; she understands natural language and can respond with the personalized information from verified websites, vendor APIs and employer documents to provide a personalized benefits interaction.



# Natural Language Processing (NLP)

NLP applications aid chatbots in understanding natural human communication, and helping them learn to communicate in kind. Sofia, Siri, and Alexa all use NLP to create a more engaging, human-like experience for users. Some [users are surprised](#) to learn Sofia isn't human!

## Sentiment Analysis

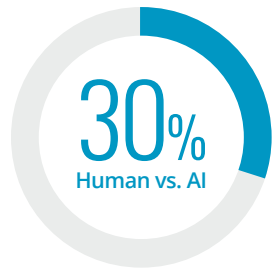
Sentiment analysis allows an AI to recognize feelings – understanding when a customer is angry, happy, or sad. For example, Sofia can use sentiment analysis to recognize when an employee is growing increasingly frustrated during an interaction; she can then quickly escalate the conversation to a live rep. On the other hand, Sofia could also recognize when she is getting praise, and reply in kind.



# Turing Test

This test is named for Alan Turing, the English mathematician and scientist who's considered the father of modern computing and artificial intelligence.

The Turing Test, which he developed in 1950, is a way to determine whether an AI is "smart" enough to fool a human into believing they are interacting with a real person. A machine "passes" the Turing Test if a human mistakes the AI for a person more than 30% of the time during a five-minute text-to-text response conversation.



# What does all of this mean for HR Professionals?

Artificial intelligence and machine learning are already delivering value in the HR and benefits space. From a member experience perspective, AI personal benefits assistants like Sofia can address not only basic benefits questions, but also provide benefits guidance at any hour and from any device. She provides quick access and meaningful engagement for employees while freeing you up to do more strategic work.

During 2020 annual enrollment, Sofia took 76% of the total chat volume, her most popular topic was dependent verification and, to top it off, she interacted equally with members of all generations. Just imagine having a virtual benefits assistant available to answer your employees' important benefits questions, right when they need it!

**The future is here!**

To learn more, check out our Beyond Binary webinar.



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