Artificial Intelligence:

“The good, the bad, the ugly”

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Jeff Rowland
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Agenda

- Biography / Introduction
- What is Artificial Intelligence?
- Artificial Intelligence Examples
  - Good, Bad, and Ugly
- Why it is important for Auditors to understand AI
- Questions
Jeff Rowland currently serves as Vice President, IT/Security Audit for USAA. Jeff has over 27 years of Financial and IT Audit experience in a number of diverse industries, including Banking, Insurance, Manufacturing, Retail, and Health Care. Experienced in accounting, internal and external audit, information systems, fraud investigation, process re-engineering, security, IT systems implementations, and network solutions, Jeff has spent the last 15 years of his career at USAA.

Prior to USAA, Jeff has held positions as Senior Manager with Ernst & Young in Dallas, Vice President of Operations for Systems Resources Consulting, Senior Auditor with Electronic Data Systems, Audit Manager for Jones Blair Paint, and began his career as an Auditor for a small real estate company straight out of college. Jeff has a BBA from Southern Methodist University in Finance & Accounting with a minor in Real-Estate. He is a Certified Public Accountant, Certified Fraud Examiner, Certified Internal Auditor, Certified Information Systems Auditor, and holds a Certification in Risk Management Assurance.
Introduction – Jeff Rowland, USAA
What is Artificial Intelligence?

“Machines that can think independently”

- The theory and development of computer systems able to perform tasks that normally require human intelligence, such as visual perception, speech recognition, decision-making, and translation between languages. (Oxford Dictionaries – Internet Search)

- Artificial intelligence is intelligence displayed by machines, in contrast with the natural intelligence displayed by humans and other animals. (Siri)

  Follow-up: Siri, are you artificially intelligent? Answer: I don’t have the answer to that. Is there something else I can help you with?

- “OK Google, what is Artificial Intelligence?”

  “Artificial intelligence is the theory and development of computer systems able to perform tasks that normally require human intelligence, such as visual perception, speech recognition, decision making, and translation between languages.” (Hmm, this look strangely similar to the Oxford Dictionary definition?)

  Follow-up: OK Google, are you artificially intelligent? Answer: My intelligence is artificial.
Artificial Intelligence – The Good

AI can help mankind

- Health & Medical - https://www.youtube.com/watch?v=iZjWEVkDrHY

- Transportation - https://www.youtube.com/watch?v=EYh0F_8ZdSU

- Work - https://www.youtube.com/watch?v=m5uut9pya4g
Artificial Intelligence – The Bad

Anything that can be used for good can be used for bad

- Stephen Hawking - [https://www.youtube.com/watch?v=fFLVyWBDTfo](https://www.youtube.com/watch?v=fFLVyWBDTfo)
- Elon Musk - [https://www.youtube.com/watch?v=Ze0_1vczikA](https://www.youtube.com/watch?v=Ze0_1vczikA)
- First fully automated plane - [https://www.youtube.com/watch?v=feyx80koMC8](https://www.youtube.com/watch?v=feyx80koMC8)
Artificial Intelligence – The Ugly

You cannot program morality

- Death - https://www.youtube.com/watch?v=ecClODh4zYk
  (Note: Although events in this video clip appear real, it is in fact fiction)

- Moral Dilemmas - https://www.youtube.com/watch?v=W BJ Y3QGNdAw

- Morality - https://www.youtube.com/watch?v=rNi6CmK3fcY
Why it is important for Auditors to understand AI

“Although *you don’t have to be a clown to audit the circus*\(^1\), it is wise to have a good idea how a clown fits into the act.”

So what makes AI possible?

- Professional standards require it
- As the profession continues to drive toward more efficient & effective auditing, AI will be a significant enabler
- The “Audit of the future” may be conducted through AI.
  - If ever machines routinely program machines, it will take a machine to understand what you are looking at.

Potential Value Propositions for Audit

- Continuous Auditing
- Predictive Analysis
- Process Automation

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IIA Standard 1210: Proficiency

(Excerpt from IPPF)

Internal auditors must possess the knowledge, skills, and other competencies needed to perform their individual responsibilities. The internal audit activity collectively must possess or obtain the knowledge, skills, and other competencies needed to perform its responsibilities.

1210.A3 – Internal auditors must have sufficient knowledge of key information technology risks and controls and available technology-based audit techniques to perform their assigned work. However, not all internal auditors are expected to have the expertise of an internal auditor whose primary responsibility is information technology auditing.

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\(^1\) Richard Chambers, president and CEO of The IIA
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