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Artificial Intelligence and Robotics in Marketing

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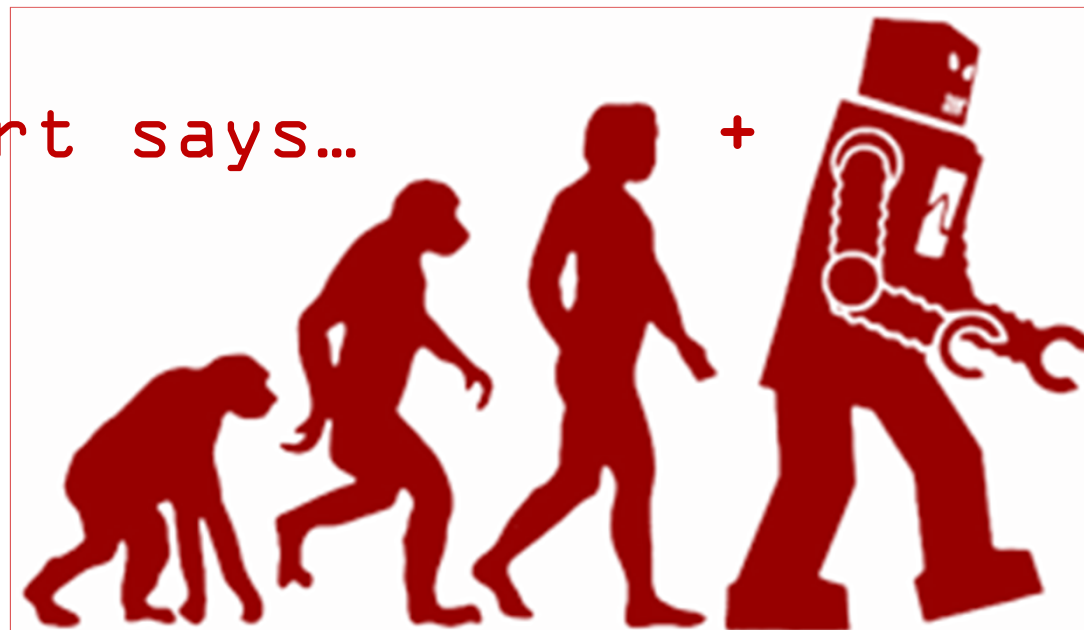
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Should we be extatic or worried about robots taking over our marketing jobs!?

Report says...





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Management Summary





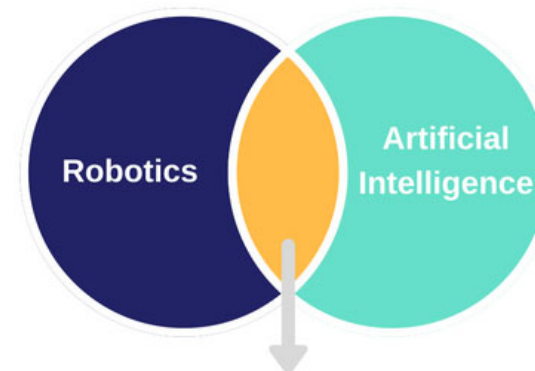
What is Robotics?

- › A robot is “a reprogrammable, multifunctional manipulator designed to move material, parts, tools, or specialized devices through various programmed motions for the performance of a variety of tasks.”
- › Robotics is therefore “concerned with the generation of computer-controlled motions of physical objects in a wide variety of settings”.
- › These definitions are rather broad and also comprise industrial robots.
- › In this report, the focus is on social robots that are defined as “an autonomous or semi-autonomous robot that interacts and communicates with humans by following the behavioral norms expected by the people with whom the robot is intended to interact”.
- › All these definitions imply that the robot has a **physical embodiment**.



What is Artificial Intelligence (AI)?

- › Artificial Intelligence (AI) can be defined as “a system’s ability to interpret external data correctly, to learn from such data, and to use those learnings to achieve specific goals and tasks through flexible adaptation”.
- › AI is manifested by machines that exhibit aspects of human intelligence and can perform activities such as speech recognition and learning.
- › AI does not need a physical embodiment; examples are chatbots, Siri or IBM Watson.
- › A robot can be, but does not have to be controlled by AI.



Artificially intelligent robot



Advantages of AI

- › AI potentially creates a lot of **value** by personalizing products and services to an extent that was unimaginable a few decades ago.
 - “Morphing”, i.e. automatically matching a website’s “look and feel” to cognitive styles increases purchase intentions around 20%.
 - Adaptive personalization system for music leads to 25% increase in songs of a playlist listened to.
- › AI can lower the **costs** of serving customers
 - › AI system developed by Infinite Analytics improved online ad placement for a global consumer packaged goods company and increased advertising ROI threefold.
- › AI can increase availability and **capacity** of customer service by e.g. the use of chatbots.

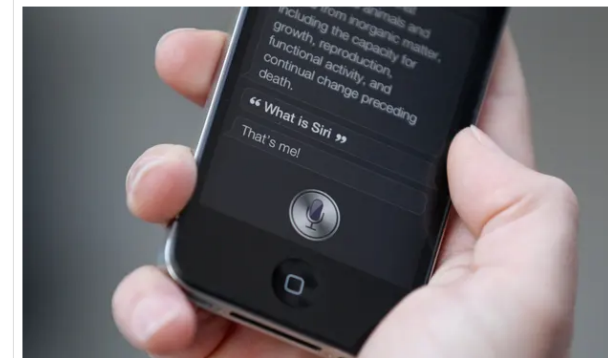


Disadvantages of AI

- › AI can be experienced as **creepy**.
- › AI training and use requires massive amounts of (confidential) data. This leads to concerns about data usage and **privacy**, in particular
 - data persistence
 - (unintended) data reuse
 - data spillover, e.g. from one person to another
- › The societal **discussion** about what “we” find acceptable regarding AI is still ongoing, as well as the design of rules and **regulations**.

Apple contractors 'regularly hear confidential details' on Siri recordings

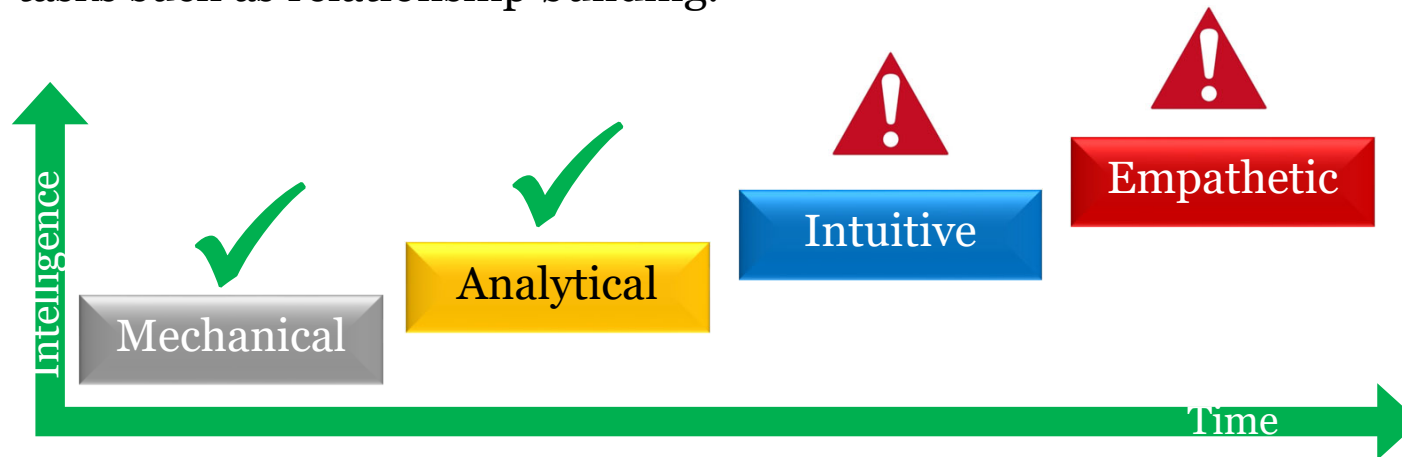
Workers hear drug deals, medical details and people having sex, says whistleblower





Which jobs will AI and Robotics take over?

- › Mechanical and analytical tasks will first be taken over by AI, followed by intuitive and empathetic tasks, where negative reactions to AI are quite likely.
- › AI performing formerly human tasks has the advantage that humans can potentially focus more and perform better in their core tasks.
- › AI will change job content and requirements, with humans focusing on “feeling” tasks such as relationship building.





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Use of AI for specific tasks

