Artificial Intelligence - a Miracle or a Threat.docx

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Artificial Intelligence- a miracle or a threat

Executive information systems are looking to the future by taking advantage of artificial intelligence to come up with unstructured decision making instead of using the old ways which include benchmarking, brainstorming, business rules analysis, using focus groups, functional decomposition and the root cause analysis. Part of the reason why they are starting to use artificial intelligence is because artificial intelligence (AI) simulates human thinking and behavior, such as the ability to reason and learn. Its ultimate goal is to build a system that can mimic human intelligence.

Artificial intelligence is in just about everything these days that we use. “Intelligent systems are various commercial applications of artificial intelligence. They include sensors, software, and devices that emulate and enhance human capabilities, learn or understand from experience, make sense of ambiguous or contradictory information, and even use reasoning to solve problems and make decisions effectively (Baltzan, 2013).” Intelligent systems can perform simple tasks such as boosting productivity by monitoring equipment and signaling when preventive maintenance is required. These systems can be found in cars on the road today. They can also be found in the form of robots such as Shell Oil’s SmartPump or Matsushita’s courier robot. While artificial systems are unstructured they can increase the speed and consistency of decision making, solve problems, with incomplete information as well as resolve complicated issues that cannot be solved by the old methods of thinking and computing. There are a ton of different types of AI systems out there today but the prominent five are:

- Expert Systems
- Neural Networks
- Genetic Algorithms
- Intelligent Agents
- Virtual Reality

Expert systems are the computerized advisory programs that can imitate reasoning processes that humans are born with. They assist in solving difficult problems. They can include a knowledgebase that contains various accumulated experience and a set of rules that assist with applying the knowledgebase to each situation. These systems are the most common these days because they fill the gap when real human experts are difficult to find, retain, or are too expensive. Neural networks are a category of AI that attempts to emulate the way a human brain things. The key word is attempts because no amount of artificial intelligence will be able to replicate the human brain. These networks work to analyze large amounts of information in order to establish patterns as well as characteristics when the logic or rules are unknown in different situations. These networks are mostly used in banks and financial institutions. They are used to spot anomalies or peculiarities in bank accounts and credit cards.

Genetic algorithms are a form of AI system that can mimic the evolutionary process to generate better solutions to a problem. While this mathematically seems feasible it is still not a for sure way to solve a problem or come up with a solution in order to create a new design for a business. The only reason this AI system is used is because it can evaluate solutions more thoroughly and faster than a human can. For instance, a telephone company or a company that runs fiber optic cables such as Frontier will use the genetic algorithms to determine the configuration of the fiber-optic cable. Intelligent agents are special-purpose knowledge-based information systems that can accomplish a specific task on behalf of the user. An example of this would be a knowledge-base that helpdesk agents use to assist with fixing an issue that comes across their desk.
Virtual reality is the last of the five AI systems used today and it is a computer-simulated environment that can be real or imaginary. This is probably the most used today especially to have employers work from home or set up a virtual training system instead of with books and paper. It allows people to connect together using a computer to train in a virtual classroom or employees to connect virtually to their work to complete their jobs.

There are some of the five AI systems used today that I think are extremely useful for businesses such as Virtual Reality mainly because it does save on cost expenses. I think certain types of robots are also useful to businesses because they can help save the company save time and cost again for example in a hospital a courier robot that delivers information from one party to another is necessary because the healthcare employees such as nurses and doctors are very busy and may not always have time to get patient file or x-ray from one place to another. A robot that can do this makes sense because then it allows the nurses and doctors to do what they do best which is to heal people. A robot would also be useful in certain types of fires because they can withstand a greater amount of damage then a human can.

Despite the usefulness of the AI systems, to think that they can replace a human is far more damaging to a business mainly because while these AI systems can be more thorough they can also fail and at that point they would have to have a human to fix the failures. This then will end up costing the business in the long run. Businesses need to determine wisely whether they will make use of a certain type of Artificial Intellige nt system or if they will spend their money on someone that can get the job done. No one can deny that an AI system is useful especially in certain areas that they are used in but for someone to say that an AI system can completely replace a human when it comes to decision making would be speaking falsely. AI systems can for sure be invaluable in the long run.

Piotr Paluch

Context: For a past few years we are able to see the rapid grow and quick development in the area of artificial intelligence. The role of the machines in everyday life is growing up and they do more and more tasks instead of humans. They make our lives much easier but on the other hand they make people lazier and not capable of doing some simple tasks. Do the machines slowly take control of humans? Are we in danger of being totally dependent on robots?

Outline: In this article I will put some light on the bright and dark sides of the artificial intelligence and possible threats it can bring to human kind. Importance: These days AI is one of the most commonly discussed topics even by the biggest names in science like Bill Gates, Elon Musk and Stephen Hawking. All of them warn about AI and it’s rapid grow, so it’s definitely worth considering.

Benefits of AI:

First of all I will try to highlight some advantages of AI, as even that there are some negative opinions, it’s a great achievement of technology, maybe even the biggest one in the history. The artificial intelligence is now starting to participate in all areas of our life. We see the self-driving cars, kitchen robots which can make the whole meal on it’s own or smartphones which can replace more than 10 electronic devices used 10 years ago. In the near future there are plans to implement “Robot doctors”, which can diagnose the illness and apply the correct medicaments for the patient. Nowadays the robots powered by AI are playing a huge role in military, the drones which don’t need a pilot can be send to dangerous areas to do tasks, which can be potentially fatal for humans. As well as on battlefront, the robots help us to
explore space and other planets. Not a long time ago we have seen the space walker “Curiosity” landing on Mars. The robots are capable of doing things, which human is physically not capable of. That’s why it’s great news that we can use their help and enjoy their abilities, but we must be very careful not to cross the line.

Threats:

Bill Gates said that in 2045 robots would interfere in nearly all of the human life areas. He is one of the biggest visionaries of our era and one of the pioneers in artificial intelligence engineering, but he is also the one who is warning the world about dangers connected with the robot development. “I don’t understand why some people are not concerned.” – these are the words from one of the interviews with the Microsoft CEO.

We have all seen the movies like “Matrix” or “The Terminator”, where the machines control the world, and humans are kind of “slaves” for the robots. Obviously these are science-fiction films, but if we take a closer look how fast the machines become smart and able to think on their own the scenario like that does not look so abstract anymore. There are already companies working on chips, which can be implemented to human brain that will help people to manage their memory, organisation and focus. Will the person with the mini computer in his brain still be a human or half human half machine? The moral aspect of this kind of inventions will be crucial but also very fragile.

OpenAI:

That’s why the biggest masterminds of the planet Earth come to help. Elon Musk, the founder of Tesla and SpaceX alongside other scientists from Silicon Valley launched a non-profit research called OpenAI, which is developed to control and work on Artificial Intelligence in the way it benefits humanity the most without creating any risks of getting out of control. The project is done not to bring any financial benefits for the participants. As Musk says he is trying to “Find ways to make artificial intelligence to work for humanity, not against it.” Moreover himself alongside with other great people of science including Stephen Hawking and Apple co-founder Steve Wozniak have written the letter to the major world leaders to ban autonomous weapons and use of AI in the military. They think if there will be another arms race (similar to the one during Cold War) it can lead to the disaster as the weapons can fall into the wrong hands and be used in the fatal way for human kind.

Conclusion:

As we can see Artificial Intelligence is a very popular topic in the technology area discussions nowadays. Without any argument the AI brings a lot of good ideas and help to everyday life, but we have to be very careful with using it. Except all the dangers that it can cause, of which I have written before, there is also another aspect. The robots, which do all the tasks for us, make us lazier and less independent. Nowadays for young people it is nearly impossible to exist without using their smartphones and staying connected to the network for the whole time. How often we see a group of people sitting together, but instead of talking they are just browsing their mobile phones. We are slowly starting to live in the digital world instead of real world. Maybe in a few years we will all have a self-driving car and a robot, which will cook a dinner, clean a house and walk our dog for us. Of course it is convenient, but doesn’t it make a beginning to the machines slowly taking over human kind? Will we be able to live
without them in the future? Let’s hope the scenarios from the science-fiction movies won’t happen in real life.

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References:


