Learn About AI and Evolve

1.0   INTRO TO AI:

Artificial Intelligence can have many different applications so gaining a basic definition is the best way to understand it:

"AI is the ability of a machine/computer to display human-like capabilities such as reasoning, learning, planning and creativity."

An algorithm is a set of instructions - a pre-set, rigid, coded recipe that gets executed when it encounters a trigger. AI on the other hand - which is an extremely broad term covering a myriad of AI specializations and subsets - is a group of algorithms that can modify its algorithms and create new algorithms in response to learned inputs and data as opposed to relying solely on the **inputs it was designed to recognize as triggers**. This ability to change, adapt and grow based on new data, is described as "intelligence."

Dr. Mir Emad Mousavi, founder and CEO of **QuiGig**, further explained the difference between AI and algorithms. According to Mousavi, we should think of the relationship between Algorithm and AI as the relationship between "cars and flying cars." "The key difference, is that an algorithm defines the process through which a decision is made, and AI uses training data to make such a decision. For example, you can collect data from thousands of driving hours by various drivers and train AI about how to drive a car. Or you can just code it [to say] when [it] identifies an obstacle on the road it pushes the break, [or] when it sees a speed sign, [it] complies. So with an algorithm, you are [setting] the criteria for actions," he explained.

On the other hand, Mousavi said that with AI you, "would not tell the **computer** what to do because AI determines [what action to take based on the] data that says this is what people almost always do."

2.0   THE TWO TYPES OF AI:

> .1   Narrow AI (weak)
> .2   Strong AI (deep)

Narrow AI is where programmers write software with an algorithm for every possible scenario, such as:

- ✓ When you are texting on your phone or writing on your computer and the system is making spelling or grammatical corrections or software predicts the rest of your sentence.
- ✓ Semi autonomous cars that can partially drive themselves.

- ✓ Face recognition software in a gambling casino that alert the security guard to a person with a gambling addiction who should not be allowed to enter or recognize your face when shopping, so ads change give you a more personal experience.
- ✓ Software like Alexa and Google Home can read you the weather or show times or research information for you on the web.
- ✓ Smart Farming automates livestock feeding and irrigation and even has weed removing robots.

Strong AI is the next step towards more comprehensive machine intelligence that can evolve and adapt to new scenarios.

Rather than focusing on a single task, the goal of Strong AI is to teach the machine to comprehend and reason on a wide level just like a human would. The goal is the machine's ability to think generally, to be able to make decisions based on learning rather than previous training. Strong AI would have the ability to take training into consideration and then make a judgement on whether there is another, more appropriate course of action to be taken. Independent learning from experience, which is the way humans learn and reason, is the goal. Strong AI is moving towards a higher level of intelligent tasks but that is a lofty task and one that we are still very far from accomplishing - but the geniuses of our time are hard at work to get closer and closer to this goal.

Examples of Strong AI include:
- ✓ The ability to diagnose and propose a health care solution.
- ✓ A fully autonomous self-driving car or aircraft with no human controls whatsoever. Google and Tesla are testing fully autonomous cars which are projected to be on the roads by 2024.
- ✓ Artificial Intelligence (AI) integration into human resources (HR) practices will make organizations better because these **applications can analyze**, predict and diagnose to help HR teams make better decisions, according to research from the **International Research Journal of Engineering and Technology**
- ✓ Computers that can provide personalized recommendations to solve a problem or diagnose a mental health disorder and make recommendations.
- ✓ Sales support tools that look at your data and create deep learning models customized for your data to score all your leads and identify the best ones to contact.

3.0   TRENDS IN AI AND THE PACE AT WHICH IT'S EVOLVING

Human Resource management is one example of how AI accelerating. Most HR practitioners welcome the integration of AI into their HR **processes**, according to an **Oracle/Future workplace report**. In fact, 64% of them reported in the 2019 study by Oracle and Future Workplace they would trust a robot over their manager for advice.

Further, researchers also found:
- ✓ 50% of workers are currently using some form of AI at work compared to only 32% in 2018.
- ✓ The majority (65%) of workers are optimistic, excited and grateful about having robot co-workers, and nearly a quarter report having a loving and gratifying relationship with AI at work.
- ✓ Workers in India (60%) and China (56%) are the most excited about AI, followed by the UAE (44%), Singapore (41%), Brazil (32%), Australia/New Zealand (26%), Japan (25%), US (22%), UK (20%) and France (8%).
- ✓ Men have a more positive view of AI at work than women with 32% of men optimistic vs. 23% of women.

"Over the past two years we've found that workers have become more optimistic as they've adopted AI in the workplace and HR is **leading the way**," Dan Schawbel, research director at **Future Workplace**, said in a press release. "The 2019 study shows that AI is redefining not only the relationship between worker and manager, but also the role of a manager in an AI-driven workplace."

"To AI or not to AI" may still be the question for many organizations, but some are already on the bandwagon. We've found some examples of how **companies** are investing into AI and cognitive **computing** for their HR workflows.

There are many factors accelerating the use of AI, including:
- ✓ Labour shortages that require businesses to replace humans with AI machines/computers.
- ✓ AI can help organizations deal with hyper competitiveness that is pushing organizations to enhance their offering and increase efficiency.
- ✓ Increased computing power is allowing AI to evolve at a rapid pace and be more affordable.

Note: Today AI does not apply to every organization, however every leader should ask themself if there is a place for initial Narrow AI to streamline a process or enhance their service/product offering.

4.0   CAN AI HELP YOUR ORGANIZATION?

The fist step is to contact a Streamline senior advisor to schedule a no obligation review to determine how AI can benefit your organization. Streamline can conduct a ROI (return on investment) analysis to determine:
- ✓ the cost of developing and implementing AI into your organization
- ✓ the cost savings over a period of time
- ✓ how long it will take to regain your return on investment

5.0   ABOUT STREAMLINE

We are a team of software developers and business logic professionals with a solid track record in helping government and private organizations streamline their business processes and enhance their client offering.

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