DRIVEN-4

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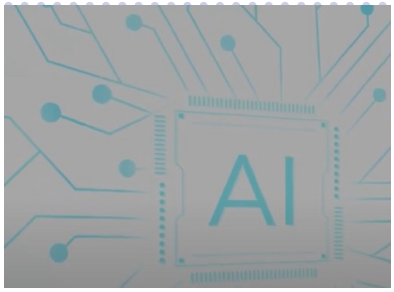
How to Use AI to Kick-off your Digital Transformation



Artificial intelligence (AI) is defined as: "the ability of computers or computer-controlled robots to perform tasks commonly associated with intelligent beings. These computers/robots have the same intellectual processing characteristics as humans—the ability to reason, discover meaning, generalize, or learn from past experiences". A lot of people think that AI is relatively new to technology and industry. In fact, the field of AI research was founded at a workshop held at Dartmouth College during the summer of 1956 by John McCarthy. It has been around a long time but has truly become a technology that needs to be integrated into organization's technology stack and digital transformations going forward.

AI has progressed from its first introduction of industrial robots in General Motors in the 1960s, to the first driverless car invented by Mercedes Benz in the 1980s. Let's not forget the demonstration of what "could be" by IBM— in the 1990s, IBM's "Big Blue" computer beat the reigning world champion in chess, then they introduced Watson the natural language processing computer who defeated two Jeopardy champions in 2010.

We all know ChatGPT and how its attracted so much attention. Today, there have also been some great advances in AI that make it significant for business use. A few topics to consider and think about in respect to AI are:

1. **Customized Enterprise Generative AI models**
   Businesses require smaller, more narrow-purpose models in order to be successful. Keep in mind, it takes a lot of effort and investment for companies to create these models from scratch. Today, it is possible to build these models by modifying existing AI models. In doing so, companies can create generative AI models to support multiple initiatives. From product development test analysis, to supply chain predictability to customer support. Just remember to prioritize the initiatives. Concentrate on what brings the biggest business value and focus. Don't loose focus!

2. **Open Source AI**
   Business needs to recognize that building large generative AI systems is a time consuming and expensive proposition that requires large amounts of compute power and reliable data. The introduction of open source AI models enables organizations to build and modify pre-existing work which reduces costs and decreased the effort and time to deliver results. Open source AI is publicly available and usually free and enables smaller companies the same potential benefits as large organizations. It also allows companies to contribute to existing code and can be shared with other organizations if they want to. The biggest use of these models is the ability to "Experiment" before going into a deep and complicated implementation project.

3. **A Generative AI Reality Check**
   Extending the thought of experimentation - companies are now thinking about how they take models from an experiment to full deployment. The initial excitement surrounding generative AI to the reality of actual adoption and integration into the corporation is a daunting task. When doing so, companies need to address enterprise scaling. This takes into consideration, the needed source data quality, the quality of the AI output, as well as, the security and ethics considerations that need to be planned and implemented to declare success. Not a task that should be taken lightly but one that needs to be planned out and implemented well.

4. **Data – The need for Clean and Configured Data**
   Data is the fuel that powers AI. Data allows AI systems to learn by identifying patterns, adapting based on this data and to make decisions based on the data they are fed. More data, better the AI model performs. The quality of the data determines the quality of the AI output. The other element to keep in mind is to understand the context of the data— is it "Work in progress", "Released", etc. and the origin of the data is extremely important to the model.

Just some points to consider in you AI journey. DRIVEN-4 has the needed expertise and practical experience to help you develop an enterprise Artificial Intelligence (AI) strategy and implementation.

If you'd like to talk about how we can help you give us a call!

Next Month: Increase your Shop Floor Visibility and Operational Performance