

# Best Practices for Successfully Carrying out AI for Your Business

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## INTRODUCTION

While artificial intelligence (AI) programs are on the rise, many businesses are unprepared for the challenges switching to AI presents. It's important that businesses know not just what AI is, but why they should (or shouldn't) choose AI, and how to implement a successful program. Challenges have been expressed throughout numerous interviews on the hurdles that occur while implementing AI. Before a business decides to adopt AI, leadership teams must fully determine and define its business use case, and a course of action. To do this teams must focus on the questions of "WHY" and "HOW" to ensure all AI work is valuable and applied appropriately.

## KEY TAKEAWAYS

1. A concise and deliberate plan is essential for a successful implementation
2. Identify the data sources intended for use
3. Assess data quality and take the necessary steps to reduce bias
4. Educate all staff members on the benefits of AI

# KEY FINDINGS:

## Evaluating Your Data Before Transitioning to AI

Prior to adopting AI into a business, it is important to understand the vast amount of data required for accurate modeling. Throughout many interviews conducted at Fletcher/CSI, we have come across common hurdles that many organizations in varying industries have encountered. Before a business decides to incorporate AI for internal uses or as a part of a customer facing tool, it is important to understand and consider the following:

### Where is the Data Coming From?



There are two parts to knowing the where your data is coming from, one is knowing the intricacies of where/how data is stored. When using multiple databases siloed across a business, it is imperative to have properly integrated systems. If these systems do not work together, the data can be poorly categorized and lead to a failed model. The second part is leveraging your system knowledge to build a model. Knowing what specific data to use and which databases to pull it from in order to incorporate it into the model is often overlooked, but equally important. In some cases, the data a business currently has may not be enough to achieve the desired results.

### Assess the Quality of the Data Intended for Use:



It is critical to evaluate the quality of data that will be used for modeling, ensuring that there are no natural biases in the data set. In one study, a leading financial organization expressed this challenge of natural bias when building an AI system. The purpose of the AI was to assist employees and be customer-facing. Initially the organization relied on data it had collected over several decades, without realizing that their data was not diverse. As a result, the model produced profiles that skewed towards an individual that was near retirement and had more conservative behavior. Natural bias occurred because the data favored older individuals. The organization was unable to use these models to build profiles for a larger, more diversified customer base.

### Understand the Preparation Time Required to Build a Model:



If a business has enlisted data scientists or engineers, understand that a large portion of their time will be allocated to cleaning the data compared to building and analyzing a model. Due to the continual increase in the amount of data points, diligence is needed in order to manipulate the data within a model. Additionally, they must scrub any sensitive details or irrelevant information. Although this task is cumbersome, it does not devalue what these experts bring to the table. Clean data is essential to build the foundation and guarantee the success of a model.

## Making a Smooth Transition:

In order to achieve a smooth adoption of AI within a business, best practices must be discussed about the use case, building models, and ongoing stewardship and use of the program. These are three of the most common practices used by data science professionals and leaders to help make a smooth transition to AI:

### Clearly Identify the Need for AI:



Rather than falling victim to the mass appeal of innovative AI technology, businesses should ensure clear intentions of use. Identifying an applicable use case will help determine the elements of data needed to create the desired model. Establishing this will allow for smooth implementation and reduce any roadblocks that may prevent the development of a model.

### The Prevention of Biased Data in a Model:



Scrub any information that will cause a model to learn based on sensitive information, to remove and balance bias within a model. Incorporating anonymized data from third parties can diversify models and also help mitigate natural biases. Sources such as LexisNexis, federal and state government public databases can be used to capture diverse demographics. The process of using anonymized data can prevent stigmatization and discrimination based on predictable prevalence's.<sup>1</sup>

### Properly Educate Employees on the Benefits of AI:



Education can reduce fears of job security in cases where staff will not be reduced as a result of digital transformations. Data scientists have voiced that employees are more accepting of AI implementation when they are shown that it can automate tasks, making day-to-day processes more efficient.

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<sup>1</sup> [The Legal and International Situation of AI, Robotics and Big Data With Attention to Healthcare](#), Puaschunder – SSRN Electronic Journal, Oct 30, 2019



## CONCLUSION

When deciding to incorporate AI into a business or a customer facing tool, a business must consider where its data will come from, the quality of said data, and the time needed to build a successful model. If properly implemented, AI can automate processes, allowing for reallocation of staff-hours towards more revenue-generating activities. With a reduction in human errors a cost savings can even be achieved. Additionally, automation can be used to speed up application testing and the delivery of products to market. The challenge that remains for leadership teams is the ability for AI to provide the “SO WHAT” to assist in critical decision making. Creating an AI model that consistently provides the “SO WHAT” will be a sustainable competitive advantage for any business. Establishing best practices early on will reduce the hurdles a business will encounter during AI implementation, and help build an effective model to answer those “SO WHAT” questions. Your AI program and model will only be as effective as the practices you followed and continue to follow.