



Making Taxes Less Taxing

Americans spend 7 billion hours every year filing taxes. It is one of the most complex financial transactions consumers do all year, and can be overwhelming for both taxpayers and tax preparers alike. Taxpayers are eager for ways to make the filing process easier, more accurate, and more efficient.

According to a study conducted by Accenture, two thirds of taxpayers consider artificial intelligence-powered digital tax assistants useful, and are ready to jump in for the extra assist. This is great news for financial service marketers, as AI tax assistants can offer opportunities to increase customer satisfaction by reducing errors, simplifying the tax process, and (hopefully) maximizing refunds.

Natural Language Processing: The Key to Transforming Tax Prep

Natural language processing is the most critical aspect of AI for tax preparation. It can be defined as the ability to quickly extract understanding from unstructured text, written or spoken, and takes on a particular nuance for AI systems hoping to understand the 74,000 page tax code in the United States. Not only do AI tax assistants need to be able to transform common language inquiries into intelligent accounting questions, they need to do the reverse — translate complex tax code into easy to understand responses. One example of this is Intuit's Tax Knowledge Engine ExplainWhy, which leverages natural language processing to provide personalized, easy-to-digest explanations behind deductions, credits, and tax refunds. That's no easy task, and takes training across millions of filings.

Your Taxes, Powered by AI

Advances in natural language processing are making AI tax assistants a viable resource. Companies worldwide have begun to leverage AI technology to help reduce errors, predict outcomes, and deliver the most advantageous results for each individual situation. Here are just a few examples:



H&R Block leverages the power of IBM Watson along with the expertise of their 70,000 tax professionals to provide maximum benefits during tax season. Watson's ability to understand context, interpret intent, and understand and deliver the most advantageous outcome for each individual's personal situation has paid off for the tax giant. Customers have responded positively to the technology, and H&R Block's quarterly revenue has grown by 8%.



In Australia, Ailira, or "Artificially Intelligent Legal Information Resource Assistant," can scan through millions of uploaded tax documents and use artificial intelligence to provide the most relevant and favorable responses. Ailira leverages a machine learning algorithm that can quickly learn and understand complex information through natural language processing, and has helped tax preparers save hours of time, finding the information they need in a mere second.



Canadian tax and legal professionals can now leverage Tax Foresight, a suite of AI-based tax outcome predictors from Thomson Reuters and Blue J Legal. Based on information provided by users as well as past judicial outcomes, Tax Foresight uses machine learning to help predict how courts will rule on tax decisions, making the analytical process more efficient for businesses and professionals.

What Will AI Mean for Tax Preparers?

H&R Block, Ailira, and Tax Foresights are merely glimpses into tax technology that will likely become standard in the future. But how will this new technology impact the role of tax professionals? While a PWC report projects that AI will replace some of the basic tasks of first and second-year tax associates, the human factor remains a critical player in the tax market. The most effective tax solutions will combine the power of human and machine intelligence.

While AI systems can find connections across large data sets, personalize the tax preparer's digital experience, and simplify the filing process, only experienced humans can solve for non-standard context. For example, tax professionals are often able to make valuable, personalized tax savings suggestions, and provide the emotional reassurance that tax preparers often seek when making stressful financial decisions.



Consumers and businesses alike are eager to make the process of filing taxes less stressful, more accurate, and more efficient. Artificial intelligence, combined with human expertise, has the potential to reduce errors, relieve anxiety, and increase customer satisfaction.