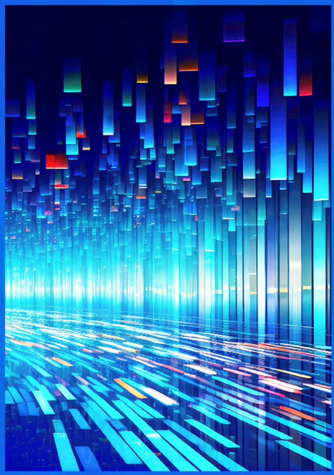
Harnessing GenAI for research tax credits

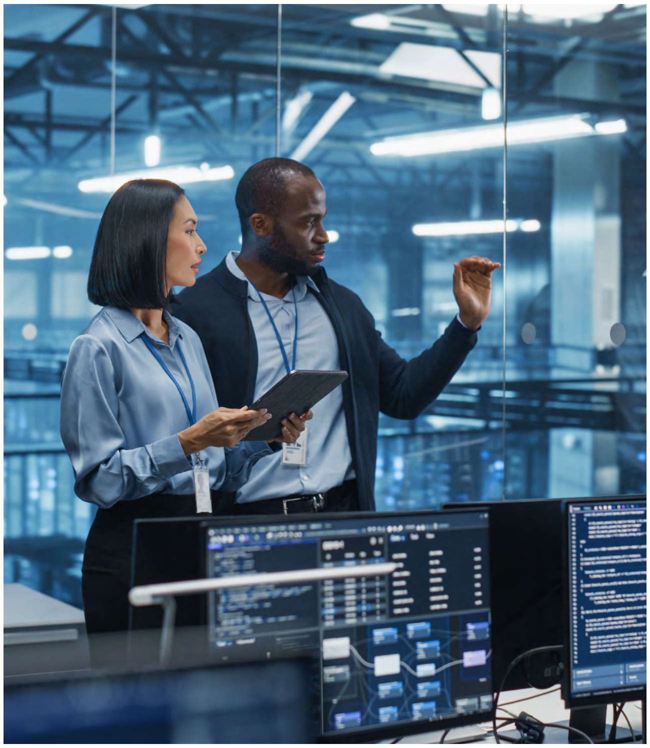


Why combining human expertise with AI is the future of research tax credit strategy

Generative artificial intelligence (GenAI) has the potential to transform the way organizations manage their research tax credits. When employed by tax technical experts with extensive skills, knowledgebase, and tailored AI tools, GenAI not only can enhance efficiency but also deliver substantial value in several key areas.

The power of GenAI in research tax credit studies

A significant challenge in research tax credit studies is the extensive data and technical documentation collection and analysis. Traditionally, this has been a manual and time-consuming process, often leading to delays and increased client burden. However, GenAI is changing the game by accelerating many such tasks and augmenting the skills and expertise of the human subject matter expert (SME).



How GenAI technology can be used to enhance the research tax credit study process

1 Enhancing the organization and analysis of vast arrays of data and documentation:

In the past, data stewards with extensive institutional knowledge and understanding of where and how the organization's relevant data and documents were stored were needed to gather and refine information before any analysis could be carried out. Research credit studies often involve significant analysis of technical documentation in various file formats to identify and qualify research activities. Appropriately employed AI tools now enable human experts to assimilate large volumes of unstructured and fragmented documentation and data capturing potentially eligible activities. GenAI trained on and enriched with tax technical language models and agents can enable one to efficiently process and analyze these documents, flagging relevant sections and identifying qualified activities. This means that senior experts within the organization's engineering and information technology functions no longer need to do the heavy lifting of gathering, cleaning, and collating the data to give it context—a critical, however relatively low-value, task. Instead, their time and effort can now be focused primarily on leveraging their knowledge to provide more valuable analysis and insights.

2 Streamlining the drafting of memoranda and technical narratives:

GenAI tools can be tailored using Retrieval Augmented Generation (RAG) and other techniques to assist in the drafting of organization-specific detailed memoranda and technical narratives, which reduces the workload of assimilating and summarizing key facts from a myriad of sources to create cohesive and compelling content. This may also enable the organization to generate enhanced documentation on a larger population of its eligible activities for the credit which in the past may have been cost prohibitive. Unfettered use of GenAI to generate documentation, however, carries with it the risk of AI introducing inadvertent hallucinations into otherwise well-written memoranda that require detailed review by a SME. Thus, it is important that organizations employ trusted tools created and operated under strict human review and governance procedures in order to realize the full benefits of GenAI.

3 Interpretation and application of regulations and recent audit experience:

Recent audit experiences, guidance from the US Treasury, and prevailing trends from various tax authorities in different jurisdictions can provide helpful context in designing and administering a more sustainable research credit study. GenAI can be infused and continuously updated with the aforementioned relevant context to enable an organization to more effectively identify and flag qualified research and development activities and provide input on the quality and quantity of contemporaneous documentation.

Why KPMG?

While GenAI offers powerful capabilities, it is not a substitute for human expertise. KPMG LLP (KPMG) combines the deep knowledge and experience of our Tax professionals with the strengths of GenAI. The KPMG Digital Gateway platform, powered by Microsoft Azure cloud and GenAI, automates data extraction from multiple sources. It identifies qualifying activities and enhances documentation procedures, helping ensure that the necessary information is captured and organized for the research tax credit claim.

Our approach

Human oversight: Skilled Tax professionals guide the AI processes to help ensure trust, accountability, and compliance.

Risk mitigation: Our experienced Tax professionals help manage the risks associated with AI, such as hallucinations and data integrity issues.

Regulatory alignment: We help ensure that all AI-generated content aligns with professional standards and regulatory requirements.

With KPMG Trusted AI as our foundation, we help tax functions build and deploy responsible, ethical, and fair GenAI programs that create value across tax operations.

Digital Gateway is an AI-enabled portal for all our tax clients, bringing together a wealth of essential tools and solutions that support the complex needs of the modern tax department. GenAI data management, analysis, and virtual assistant capabilities are fully integrated throughout the Digital Gateway technology suite, delivering transformative improvements for a wide range of tax-related tasks. The Digital Gateway platform gives tax leaders a single point of access to our complex set of tax technologies, enabling their departments to smoothly harness the power of GenAI capabilities in all aspects of tax operations: reporting, compliance, planning, data management, and more.

Put the power of GenAI in your tax team's hands with KPMG Digital Gateway.

Let's start the conversation.

Contact us to learn how you can harness the power of GenAI for your research tax credit studies.

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