The emergence of generative artificial intelligence

The focus and investment in Generative AI (“Gen AI”) continues to grow and is expected to continue growing in the coming years. For example, Microsoft has made a $10B investment in Gen AI, and is not the only company making similar investments.\(^1\) Google also invested upwards of $300M in Gen AI.\(^2\) Moreover, it is expected that by 2026 companies will be spending a collective $300B on AI generally.\(^3\) The continuing emergence of Gen AI will fundamentally reshape traditional operating models as we know them, ushering in a new era of service delivery. In a July 2023 KPMG survey of business leaders, Gen AI is rated as the top emerging technology, and all respondents expect their organization to be impacted “very highly” in the next 12 to 18 months.\(^4\) A majority of respondents believe that Gen AI will disrupt their industry, and nearly all think that Gen AI will provide value to their business.

This game-changing innovation is already driving a paradigm shift that promises to reinvent how companies scale, transform their workforce, and expand capacity for value creation through improved profitability and accelerated growth. Goldman Sachs Research predicts that Gen AI could drive a seven percent (or almost $7 trillion) increase in global GDP and lift productivity growth by 1.5 percentage points over a 10-year period.\(^5\)

What is generative artificial intelligence?

Gen AI is a type of artificial intelligence that uses algorithms and machine learning to create content such as text, code, images, and videos in response to prompts or questions. Gen AI is trained to mimic human intelligence and perform tasks traditionally performed by humans through analyzing data and patterns provided. While traditional AI relies on existing content to complete basic pattern recognition and analysis, Gen AI goes one step further by relying on existing data to produce new, original content based on a clear set of inputs and

rules. Traditional AI is heavily reliant on pre-defined rules, relying on explicit instructions and programming in order to perform a specific task. In contrast, Gen AI is less reliant on rigid instructions, instead analyzing existing data to recognize different patterns in the data and ultimately creating new, unique content.

Gen AI provides organizations with quick, low-cost content creation through numerous activities. With the adoption of Gen AI, many more services will be shared, ranging from the automation of creative, yet repetitive and time-consuming tasks, to the enablement of customized, highly interactive digital service experiences involving sophisticated data analysis and commentary generation.

In fact, Gen AI has already proven to be a powerful tool for the augmentation of knowledge workers’ everyday activities, and Gen AI will drive significant changes in workforce roles, skill requirements, headcount, and organizational structures. KPMG’s own adoption of Gen AI is a good example. In its first month of operation, AdvisoryGPT, KPMG’s private cloud implementation of ChatGPT, racked up 221k prompts from an average of 1,000 daily users. Already, AdvisoryGPT is drafting status reports, compiling summaries of complex contracts and other documents, and developing structured outputs from group brainstorming sessions. KPMG’s professionals are finding new ways to apply it every day to enhance their productivity.

Gen AI’s ability to create value for organizations, taking into consideration the use cases that are already promising, likely provides the opportunity for Gen AI to play a significant role in future tax planning.

The taxation of multinational enterprises’ profits is based, to a large extent, on where the enterprise generates profits (i.e., where the business’s value drivers are located), as well as on the business’s substance and relationship to such jurisdiction. For example, when an automaker relocates a car factory from one jurisdiction to another, a significant component of the taxable profit related to the sale of cars produced in that facility may also move based on the movement of said assets, risks, functions, and any intangible assets relocated (e.g., knowhow). In some industries, the movement of assets and the related functions is burdensome due to the nature of the assets. Take, for example, the auto manufacturer. However, depending on the nature of the assets,
functions, and risks associated with said assets, moving jurisdictions may be more attainable and less disruptive for a business’s day-to-day functions. For example, a company may be able to generate a portion of the profits attributed to the cost savings created by Gen AI in a different jurisdiction, if relocating the Gen AI is consistent with the overall business and supported by the appropriate substance. Given Gen AI is likely more portable than the automobile production factory, it then becomes necessary to understand how value could be attributed to Gen AI, and what substance would be needed to support moving Gen AI to a lower tax jurisdiction.

Attributing value to Gen AI is not something that is easily done, and it remains to be seen if traditional transfer pricing methodologies can accurately capture and transfer price Gen AI’s value. The differentiation between the value that would be attributed to Gen AI (i.e., the underlying algorithms) versus the data that Gen AI uses to learn is difficult to ascertain. Despite these difficulties, determining the value of Gen AI will quickly become a requirement for companies in order to properly assess where value is created and ultimately what amount of tax exposure results from that value given the prevalence of Gen AI in all industries.

One measure of the value that Gen AI could bring to businesses is based on a multiple of the cost savings that Gen AI generates and the additional efficiencies that it brings to an organization. Suppose that a team of software engineers engage in manual coding, code review, and bug fixing. If those responsibilities could instead be performed by Gen AI, the company could expect to realize significant annual savings as a result of increased productivity or a leaner workforce. Similarly, Gen AI is currently being used in a myriad of ways to make companies more efficient and reduce costs including generating and delivering marketing content, compiling and delivering business performance reporting and data and analytics, and enhancing customer support and customer experience tools like chatbots. However, the actual savings a company would realize as a result of Gen AI performing these functions is reduced because any operational cost savings would typically increase profits and therefore increase tax. Put another way, the actual cost savings obtained would equal the operational cost savings less the amount of U.S. federal, state, and foreign income tax applied to the newly created profits. Yet, because Gen AI is likely portable, it is possible that locating the Gen AI, the data being input into Gen AI, or both, and the related functions in a jurisdiction with a lower applicable tax rate than the U.S. could reduce the tax applied. Doing so would allow the company to retain a greater portion of the operational savings via the lower applicable tax rate. Moving Gen AI, the data being input into Gen AI, or both to a jurisdiction with a lower applicable tax rate will require a focus on what the value drivers for the Gen AI are. Said another way, it is not enough to simply move the Gen AI, the data, and the underlying technology. Rather, you must understand who and what is responsible for making Gen AI a value driver for the organization and ensure those individuals and things are also located in the lower tax jurisdiction. This likely includes individuals who are responsible for the organization’s Gen AI/data management strategy, budgeting process, and overall management.

If an organization is able to locate the necessary substance, as outlined above, in a lower tax jurisdiction, then as Gen AI continues to grow in sophistication it will be able to take on higher value tasks for organizations. As Gen AI is able to perform higher value tasks for an organization, the cost savings generated and value of Gen AI or the related data will be significantly higher, as will the retention of an organization’s operational savings.
Specific tax benefits of locating generative artificial intelligence offshore

Holding digital assets, and other IP, in lower tax jurisdictions has been a fairly common model for the last 20 years and, principally, before the advent of BEPS and the TCJA, has generally resulted in benefits for many U.S.-based taxpayers. Similarly, locating Gen AI and or the data being leveraged in a lower tax jurisdiction may also create the same benefits, and doing so may offer taxpayers a number of ways to impact their Effective Tax Rate (“ETR”), potentially generating an ETR benefit.

If a U.S. taxpayer offshored Gen AI, the corresponding data, or both to a jurisdiction with a lower tax rate, then presumably less tax would be imposed. Moreover, various countries have certain regimes that provide beneficial rates for holding IP. As countries plan to enact, or have already enacted, various provisions associated with the Organization for Economic Co-operation and Development (“OECD”) Pillar 2 regime, offshoring Gen AI, data, and the related functions and profit could serve as a means to lower a taxpayer’s ETR in that country through using the beneficial rates for holding IP. This is especially true if the taxpayer is locating the Gen AI, data, and the related functions and profit in one of those countries that otherwise has a high corporate income tax rate.

Specific tax complications of offshoring generative artificial intelligence

Offshoring Gen AI comes with challenges. In addition to the needed necessary substance, as outlined above, companies must address a host of tax issues when exploring whether to offshore Gen AI, the related data, or both. For example, the U.S. generally taxes outbound transfers of IP, which may result in the taxation of certain components of the Gen AI offering or underlying IP (including data). Once offshore, the Global Intangible Low-Taxed Income regime (“GILTI”) would impose U.S. tax on the additional foreign profit generated, to the extent such earnings are not taxable under subpart F.

Moreover, where the remuneration for exploitation of the Gen AI is paid as a separate fee by the U.S. (e.g., a value-based fee), the Base Erosion and Anti-Abuse Tax (“BEAT”) could apply and impose an additional minimum tax. In particular, if a U.S. taxpayer offshored Gen AI, BEAT could impose an additional tax above the income tax on the U.S. taxpayer making deductible payments to the foreign related IP holder. Additionally, a host of other tax rules may also apply, such as U.S. withholding taxes, foreign indirect taxes, CAMT, and Pillar 2 rules. Each of these requires significant planning but often times only serve as minor roadblocks in achieving the additional retention of Gen AI’s created cost savings.
What lies ahead?

As the use of Gen AI continues to expand, both in terms of sophistication and relevance, it will surely result in disruption to businesses and, in many cases, financial benefits. Now that you know there are avenues to accessing more of the financial benefits that Gen AI is expected to generate, what are you waiting for?

6 To the extent that any of complications noted prevent locating the Gen AI offshore, then it may still be possible to retain a greater portion of the operational savings through a domestic structure which could result in both federal income tax savings as well as state tax savings that is aligned with the business.

Contact us

Erik Oliverson
Partner Tax – Value Chain
Management – Digital Services

T: 503-820-6476
E: eoliverson@kpmg.com

The information contained herein is of a general nature and is not intended to address the circumstances of any particular individual or entity. Although we endeavor to provide accurate and timely information, there can be no guarantee that such information is accurate as of the date it is received or that it will continue to be accurate in the future. No one should act upon such information without appropriate professional advice after a thorough examination of the particular situation.

© 2023 KPMG LLP, a Delaware limited liability partnership and a member firm of the KPMG global organization of independent member firms affiliated with KPMG International Limited, a private English company limited by guarantee. All rights reserved. The KPMG name and logo are trademarks used under license by the independent member firms of the KPMG global organization. USCS006859-1A