KPMG

Digital Procurement and Intelligent Automation Offshoring

Combining operational excellence with tax model to enhance financial results

kpmg.com

Contents

Cost savings arising from internal efficiencies and operational benefits aren't the only financial advantages bots can provide. Just as human workers can be offshored for economic benefits, operations handled by bots can also be moved to countries with more economic friendly regulations. Depending on how an organization's bots are acquired, developed, and deployed, they could create tax advantages or exposures, providing additional, and sometimes significant, savings.

Digital Procurement has come a long way in creating operational efficiencies, while simultaneously reducing cost.

Today, that effort is being powered by Intelligent Automation, software with the ability to automatically perform routine tasks in a more efficient manner than typically executed by humans. Intelligent Automation includes Robotic Process Automation (RPA), but also areas such as Natural Language Processing (NLP), Machine Learning, and Advanced Data & Analytics. Of these, RPA is the most common and will serve as the basis for the examples in this article.

RPA uses software robots—or "bots"—to digitize labor, providing a more efficient, productive, and cost-effective alternative to the standard human workforce. Because of its effectiveness, companies are beginning to adopt RPA to replace or supplement employees for certain tactical activities—such as procurement, contract management, problem solving, business planning, in-depth analysis, and computer programming—inside supply-chain organizations.

Bots are allowing procurement departments to react faster to changes in the marketplace and are less expensive and more efficient than human workers, resulting in significant cost savings and increased profits, among other benefits. (See sidebar 1)

KPMG

How bots are transforming the marketplace

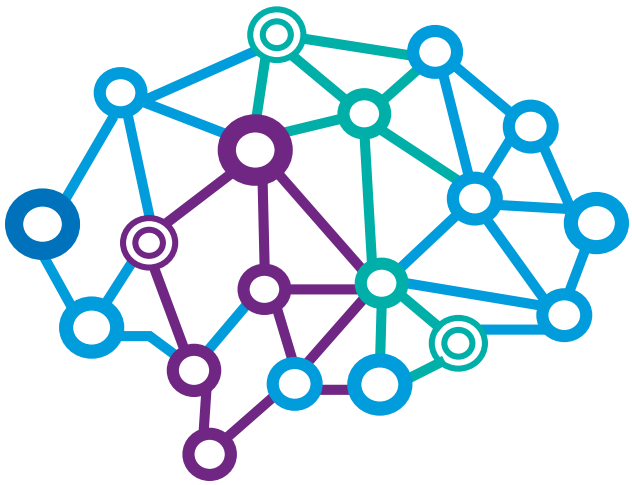
Procurement departments are using RPA to help transform business activities such as accounts payable, contract management, and sourcing.

Many studies show that organizations can generate nearly 600–800 percent returns by implementing software that utilize RPA.

Below are the leading business implications of Intelligent Automation in procurement.

- **Cost efficiency**—Estimates suggest that a software robot is approximately one-third of the cost of an offshore FTE. Digital labor savings are estimated to be between three and 10 times the cost of implementing the automation.
- **Productivity/performance**—Software robots work 24/7 and 365 days a year, do not take vacations, and perform tasks at digital speeds. Advanced bots incorporating Machine Learning (ML) and Artificial Intelligence (AI) represent a wide array of capabilities that can mimic and complement human behavior much more closely than ever.
- **Consistency/predictability**—Organizations using bots can expect fewer mistakes, accidents, regulatory violations, and fraud.
- **Quality/reliability**—Software robots do what you tell them to do—when properly configured they do not make mistakes and thereby eliminate human error.
- **Employee satisfaction and innovation**—Eliminating mundane and repetitive tasks frees up human talent to innovate and create.
- **Scalability**—Software robots scale instantaneously at digital speeds to respond to fluctuating workloads. There is also no overtime, no hiring challenges, and no training needed.

Digital labor impact



$152B+ **The expected market size for digital labor by 2020***

ROI between 600–800%*

45% of activities individuals currently perform in the workplace can be automated using existing technologies*

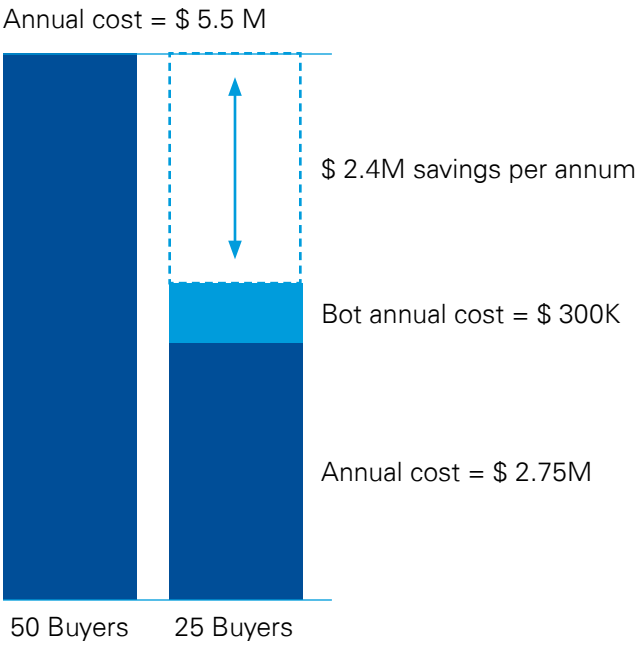
* Bank of America Merrill Lynch, November 2015
* London School of Economics, The IT Function and Robotic Process Automation, October 2015
* McKinsey & Company, Four Fundamentals of Workplace Automation, November 2015

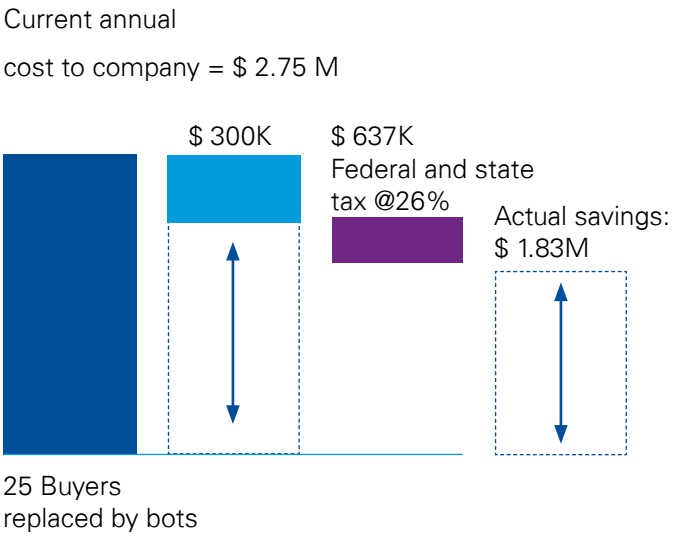
Using bots to your tax advantage

The taxation of multinational enterprises' profits is based to a large extent on where the enterprise generates profits, and based on its substance and relationship to such country. For example, when a Japanese automaker moves a car factory from Japan to Ohio, a significant component of the profit related to the sale of cars produced in that facility also moves from Japan to the United States based on the movement of assets and activities to the United States. Similar to other activities, a company may be able to generate a portion of the profits attributed to the savings created by bots in a tax-advantaged jurisdiction, if such a move is consistent with the overall business and supported by appropriate substance.

A bot is potentially more portable than, say, an automobile production factory. Consider the following example: Suppose that a team of 50 buyers sitting in San Diego engages in procuring predetermined quantities of basic goods, aggregate invoicing, manage purchasing rebate criteria, etc., with average annual costs to the company of **$110,000** per employee, which includes salary, benefits, and indirect costs. If half the buyers were replaced by **10 bots**, each of which has an annual cost of $30,000, the company could expect to realize **$ 2.4M** in annual savings. In reality, the company would realize savings of closer to **$ 1.8M** (after reduction for approximately 26 percent blended federal and state income taxes).

However, because bots are basically software, it is possible that some (potentially most) of the profits attributed to the savings created by bots could be generated in a tax-advantaged jurisdiction, for example, Ireland's 12.6 percent.[1]



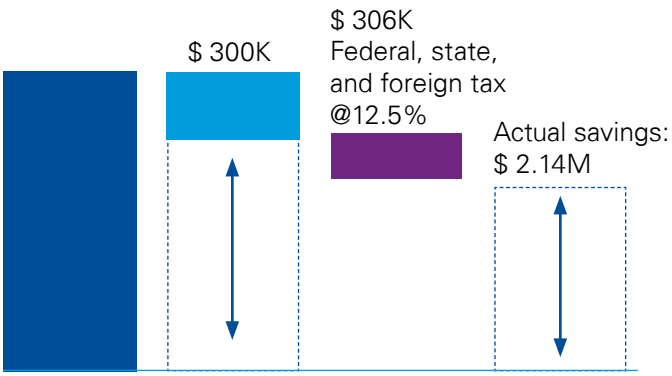


[1] As discussed below, as a result of several U.S. tax rules, the combined global tax rate applied to earnings of an Irish affiliate of a U.S. company could indeed be simply the 12.5% Irish rate or could be higher.

Proposed savings due to tax advantaged jurisdiction

Current annual

cost to company = $ 2.75M



25 Buyers
replaced by bots

Offshoring versus outsourcing

Outsourcing is often confused with "offshoring." So, before tackling the risk involved with this strategy, let's decipher "offshoring" involving a bot as compared to outsourcing.

Outsourcing is a common business practice adopted by organizations to shift internal workloads—typically an operational process such as manufacturing, administrative processes, or accounting—to another source or supplier. Outsourcing allows for businesses to take advantage of potential synergies, cost, or capability efficiencies by using external resources.

On the other hand, offshoring involves the relocation of business processes to a foreign region to not only capitalize on the advantages mentioned, but also gain from the potential regulatory and tax differences, as well as physical proximity to suppliers or markets, of being located in a different country. For example, a U.S. multinational company moves existing components of intangible property to a foreign country, which generally results in taxable gain on the transfer. After the transfer, investment and development of the intangible offshore results in future profits that are taxed at the (generally) lower tax rate of the jurisdiction to which the intangible has been transferred. (There are risks that new taxes might be imposed on digital labor, but currently there are not yet robotic-specific taxes.)

Offshoring typically is motivated to find a lower cost of operation. But technical and speed-to-market factors can also influence this decision making.

See a comparison between the two strategies in the chart below.

Outsourcing

A company decides to contract a third-party accounting firm to handle their annual books or taxes. This allows for the business to focus on their core competency by subbing out a subset of their business.

Offshoring

A company in the United States decides to use a company in the Philippines to handle their customer service or accounts payable. The company in the Philippines can offer similar services at a reduced cost. The U.S. company is able to maintain the same level of service and potentially expand their market to foreign consumers.

Outsourcing benefits

- Cost efficiencies
- Focus on core competencies
- Quality/capability
- Labor flexibility

Offshoring benefits

- Cost savings
- Business efficiencies
- Larger pool of resources
- Enhanced skills/technical capabilities
- Market expansion

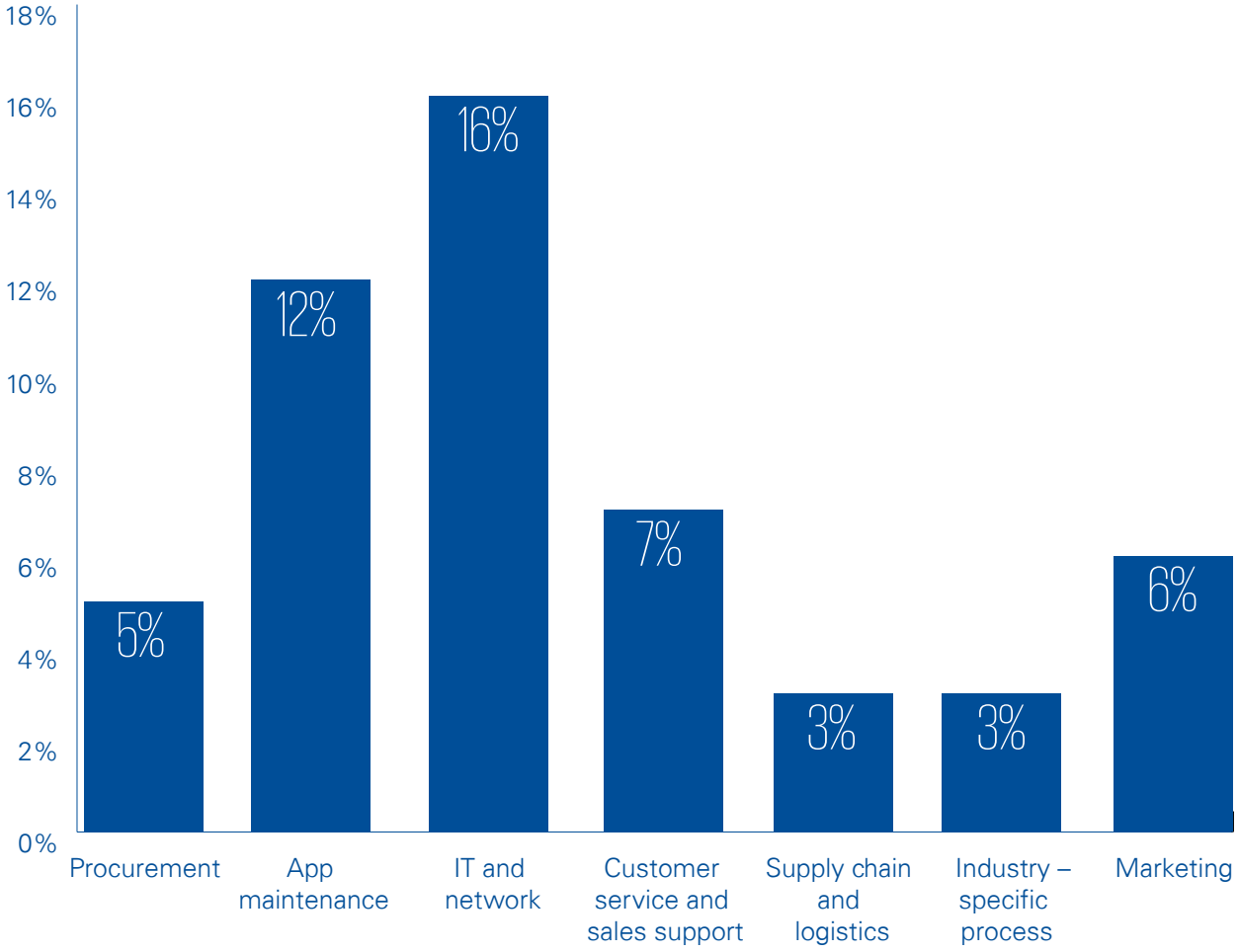
KPMG

With the expansion of Intelligent Automation, offshoring digital robotics is enhancing digital procurement. In the procurement area alone, offshoring increased by 5 percent from 2014 to 2016. This graphic highlights a 2016 study of the increase in offshoring as a result of outsourcing.

Changing use of offshoring—outsourcing

How will offshore use change in outsourcing and shared services?

Changing use of offshoring—outsourcing



http://www.kpmg-institutes.com/content/dam/kpmg/sharedservicesoutsourcinginstitute/pdf/2017/webcast-slides-business-operations-2017-hfs.pdf

Offshoring can create an additional avenue for cost savings by earning additional profits (i.e., the cost savings created by the robotic process or AI function) in countries that are tax advantaged. This potential tax benefit gained by generating profits using offshore assets comes with a number of challenges. We'll explore these challenges next.

Offshoring is common, but complicated

Offshoring software, and the profit generated by that software is not easy, but it has been a fairly common model for the last 20 years in more traditional software arenas (e.g., software commercialized as a product, such as a video game, Internet of Things software that ends up inside a connected tangible product, internal use software of a money transfer business that manages transfers and cybersecurity, etc.).

Nevertheless, companies must deal with a host of tax issues. For example, new rules imposed under U.S. tax reform, such as the Global Intangible Low-Taxed Income provision, or "GILTI tax," could impose U.S. tax on foreign earnings, which before reform might not have been subject to U.S. tax until distributed to the U.S. parent in the future.[2]

Tax reform also has complicated digital procurement where the remuneration for digital services is paid as a separate fee (as opposed to being included in the sale price of a purchased-and-sold good) by a new provision called the *base erosion and anti-abuse tax* (BEAT). The BEAT imposes an additional tax above the income tax on certain taxpayers who make deductible payments to related persons above a certain threshold. In addition, a matrix of other tax rules continues to apply, such as U.S. withholding taxes and foreign income and indirect taxes. Each of these requires significant planning. Moreover, any such offshore structure requires substance of various types to achieve intended tax results.

Achieving optimal benefit could be affected by myriad elements—location of servers, how bots are developed, whether they are developed internally or externally or collaboratively, in what type of business the U.S. company using the bots is engaged, the corporate structure of the taxpayer, legal rights and agreements, the entity and people that manage and oversee the development and operation of the bots, etc.

Where the tasks assumed by the bots are highly manual and lower value, the amount of the profit that can be generated by the bot offshore is often limited to an amount based off the reduction in the costs of performing the function (i.e., salary and other costs eliminated, less costs to acquire and operate the bot). However, as bots become more sophisticated and assume more important roles, or where the RPA is combined with other high-value functions such as predictive analytics, the profit that could be generated by the bot offshore could be far more significant and could be based on an amount saved by the better performance of the function.

For example, suppose that a bot incorporates algorithms and predictive analytical technology allowing the company's procurement buyers to save $20 million per year by timing their purchases based on commodity prices, "right sizing" acquisitions based on multiple factors, such as cost, capacity, scarcity, etc., or enhanced optimized hedging. In such cases, it may be possible to attribute a sizable portion of that $20 million annual savings amount to the bot, which may be owned in a tax-advantaged location and thereby allowing the company to retain more of the savings.

Some companies employ a similar, conceptual framework wholly within the United States that generates a smaller, but sometimes still meaningful, benefit by saving state taxes.

[2] Through a combination of income inclusions, deductions, and credits the GILTI intends to ensure that foreign profits of certain foreign subsidiaries of U.S. persons are taxed at a nominal (combined) rate of at least 10.5%. In practice, the rate of actual tax paid varies depending on many factors.

KPMG

Potential risks associated with offshoring and the possibility of digital taxation

With potential rewards, there are also several tax risks involved with offshoring bots.

Because bots are essentially software, payments for bots that cross borders could result in withholding taxes that may or may not be fully creditable. Also, depending on how the bot is developed, acquired, or operationalized, there could be indirect taxes such as a value-added tax (VAT), which is a transactional tax imposed on the provision of goods or services.

The European Commission has indicated an intent to potentially implement a pan-EU digital tax, such as the proposed 3 percent digital tax that would apply to certain digital platforms and advertising. In May, Australia's Federal Treasurer stated that they "will explore" options for taxing digital business in Australia, including a similar 3 percent digital tax.[3]

In addition, some people argue that there is a real risk of new taxation on digital labor. For example, Bill Gates has suggested publicly that perhaps certain types of robotic labor should be subject to tax.[4] And San Francisco Board of Supervisors' member Jane Kim has suggested a local tax on robotic labor.[5]

The logic of such proposals is that when a human is replaced by a bot (or when several humans are replaced by a single bot) it creates unemployment and also depresses wages, as basic tasks no longer require humans. As a result, it reduces the wage base upon which multiple tax levies are based—including individual income tax, unemployment insurance tax, social security tax, etc.

Currently, it isn't clear whether any country, state, or locality will enact new laws to specifically tax digital labor, or what those taxes would entail.

[3] Source: "Australia to unveil proposals for multinational digital tax: Treasurer, Reuters Web site, May 8, 2018

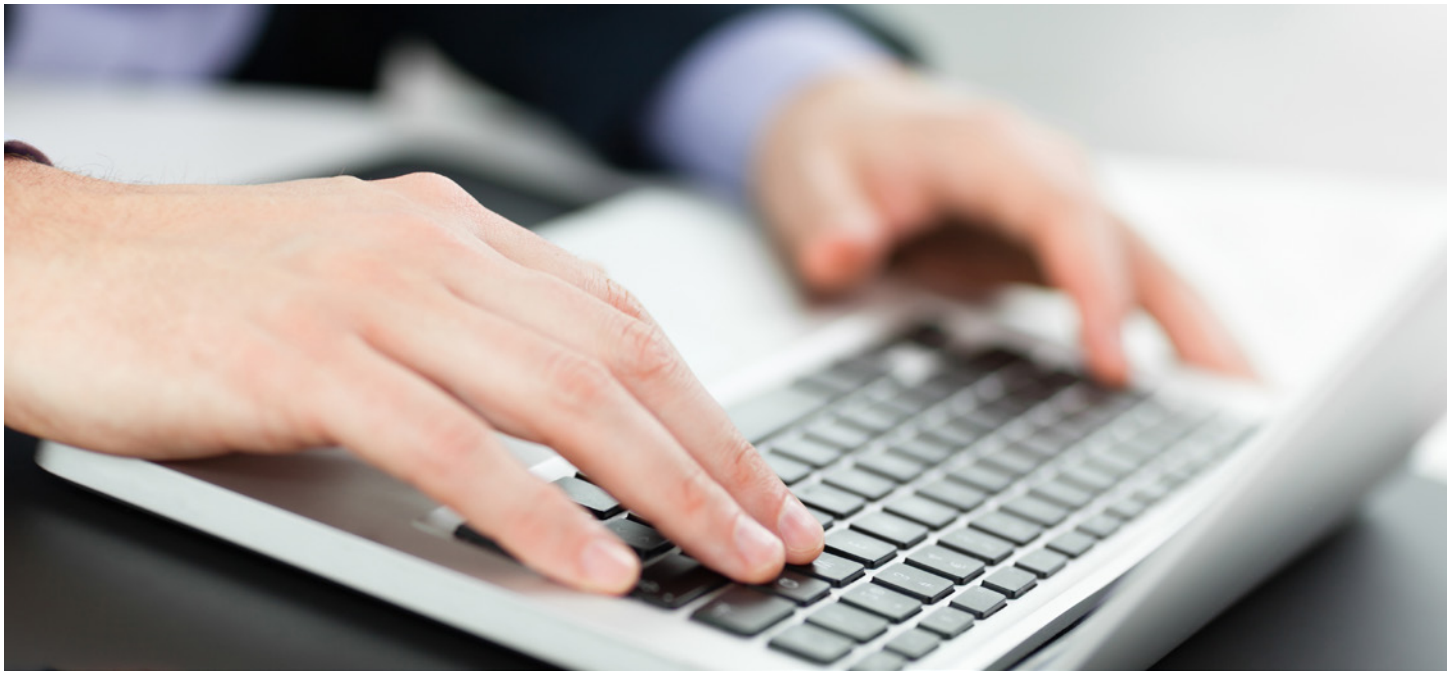
[4] Source: "Bill Gates Says Robots Should Be Taxed Like Workers," Fortune Web site, February 18, 2017.

[5] Source: "San Francisco is considering a once unthinkable measure to offset the threat of job-killing robots," Business Insider Web site, May 2, 2017.

What lies ahead

RPA has already made its mark on digital procurement. By combining RPA with offshoring, businesses may be able to enhance financial performance by earning profits in tax-advantaged jurisdictions. It's already proven that RPA can generate significant, year-over-year savings in labor cost.

Now that you know about the additional savings that can be recognized for your business, the only questions is "How quickly do you want to take action?"



Use case 1

Global Procurement Model enhanced by basic bots (no analytics or advanced bot capabilities)

A U.S. multinational with substantial procurement has a footprint concentrated in the United States and other high-tax countries including France, Germany, and Italy (each of which is subject to an effective rate of tax over 30 percent). In addition to high-value functions around strategic planning and supply-chain management, the procurement team includes a significant number of employees engaged in repetitive, low-value activities. The company replaces 200 FTEs worldwide with a number of bots located in the United States and around the world, creating an annual cost savings of $12 million.

Consistent with its operating model that includes engineering and production in Singapore as well as other Asian production locations, the company is able to locate half of the savings (as profit) in a Singapore affiliate taxed at 10 percent. As noted above, depending on the facts, the combined global rate of tax applied to the newly created profit could be greater than the Singapore tax as a result of other tax rules, such as the GILTI and BEAT discussed above. However, in many cases, the shift of profits to Singapore creates a tax benefit in addition to the operational savings.

Use case 2

U.S. Multinational creates a global procurement hub in Ireland with a combination of people and bots

A U.S. industrial manufacturing company with a global procurement team has its buyers located in the United States and other high-tax countries such as Germany and France, to stay close to production facilities. Key strategic decision makers sit in Ireland, where they manage vendor relationships, establish KPI and vendor certification/recertification, make strategic decisions for global buyers, etc. bots are employed by buyers engaged in remedial, repetitive, lower-value tasks reducing head count in high-cost countries, saving the company $5 million per year. Because the bots are developed and owned by the Irish development team, part of the savings attributable to the bots generate profits in Ireland, and the company is able to reduce its tax cost on such profits.

In addition, predictive analytics and other software tools are developed, owned, and managed by the team in Ireland. The Ireland procurement hub drives $100 million of annual costs savings on direct and indirect spend reduction, much of which is driven by their technology-enabled strategies and decision making. The key decision makers combined with technology enablement allows the Ireland entity to generate significant profits. By generating profits in Ireland rather than the United States, the company's profits are taxed at a lower tax rate. For many taxpayers, this result provides a global tax rate (inclusive of U.S. GILTI and BEAT) that is lower than would apply if the profits were earned in the United States or in higher-taxed countries such as Germany or France.

Use case 3

U.S. Multinational creates a global procurement hub in the U.S. coupled with an Irish Digital Center of Excellence

Same fact pattern as Use Case 2, except that key sourcing leadership is tied to the United States and can't be moved. However, key components of their IT team are mobile. The company migrates software assets and the management oversight to Ireland while leaving most of the coders and developers (of the bots and analytics) in a distributed workforce within the U.S. and around the world. Funding and management of IT investment and projects sit in Ireland. The core procurement team remains located in the United States and in key jurisdictions around the world.

While the profits attributed to core savings from procurement teams around the world (including the United States) remain subject to high rates of tax, the Ireland entity funds and owns the bot based on its activities and substance, and generates the profits derived from savings attributed to bot and analytics, without moving the overall procurement human capital footprint.

Contact us

Len Prokopets
Managing Director
KPMG Procurement and Operations Advisory
T: 203-233-9077
E: lprokopets@kpmg.com

Paul Glunt
International Tax Principal
KPMG Value Chain Management
T: 949-885-5759
E: gpaulglunt@kpmg.com

Contributors

Nikhil Parva
Manager
KPMG Procurement and Operations Advisory
T: 972-310-4444
E: nparva@kpmg.com

Justin Gardner
Senior Associate
KPMG Procurement and Operations Advisory
T: 770-853-5137
E: justingardner@kpmg.com

Some or all of the services described herein may not be permissible for KPMG audit clients and their affiliates or related entities.

kpmg.com/socialmedia