MODULE

Tax Implications

Overview

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Overview

While tax implications are rarely included with early design and development, this toolkit encourages a broad-based approach so that no part of the business is an afterthought. Tax implications are best considered from the initial scoping and strategy phase of a blockchain implementation.

The purpose of this module is to educate the deployment managers and business, identify details, and address characteristics in order to properly apply various tax implications from blockchain usage across the globe. For specific tax liability calculations and compliance reporting requirements, consult with local tax specialists in the jurisdiction as tax laws may vary based on the specific facts and jurisdictions. Proper planning and tax research can reduce tax uncertainty, meet regulatory requirements, create efficiencies with respect to operations, and reduce overall tax burden.
What are the most prevalent tax considerations that may arise from a blockchain solution?

This focus area aims to cover the more common tax considerations that may arise from blockchain solutions focusing on creating a tamper-resistant, traceable record of data distributed among multiple parties. Below are steps for solution owners to understand the potential tax implications that may arise from their solutions.

Identify the parties involved in the chain

Blockchain solutions will typically have multiple participants, including owners, users, and others. An important starting point in evaluating tax implications is identifying all participants and understanding how they interact with the solution.

Understanding the characteristics of the parties involved in detail will help identify the appropriate tax ramifications to the participants and the solution. For instance, the locations of the owners of the solution should be understood as local country tax considerations may apply. Additionally, the parties involved in the transactions can impact the tax classification of the transaction.

Consider the following questions:

- Who are the relevant stakeholders involved in the transactions?
- Where are the stakeholders located?
- What roles do they play within the solution?
- What are their unique tax requirements and how can they be enabled by the solution?

Sample participants who may be part of the blockchain network include:

- Blockchain network nodes
- Consortium members
- Employees
- End users
- Investors
- Supply-chain participants (e.g. third-party intermediaries, brokers)

Potential tax considerations that may arise based on the facts around the participants include:

- **U.S. owners of a non-U.S. operation**: If U.S. investors are owners of a non-U.S. entity operating the blockchain platform, an analysis into the overall ownership mix will be necessary to understand the tax impact to the investors. A similar implication may apply to investors from other jurisdictions.

- **Compensation**: If employees are compensated through the blockchain operations, withholding taxes and reporting obligations may be triggered. With appropriate tax planning, there may be different tax considerations such as automating the withholding process with appropriate calculations.
and connecting payments with those liable as well as with regulators to which payments are due.

- **Domestic and cross-border withholding and reporting obligations:** Depending on where the participants are located and their activities in the jurisdictions, separate reporting obligations, withholding taxes, or indirect taxes like a Value Added Tax (VAT) or a Goods and Services Tax (GST) could be applicable.

For instance, the solution owners could ask questions such as:

- Does the manufacturer of the solution act as a node that verifies and records the transactions?
- Is the seller located in a jurisdiction that imposes VAT, and where are the goods being shipped to and from?

The solution owners may have to ask these questions to determine if there will be separate reporting obligations and indirect taxes that could be applicable.

**Identify the value(s) generated**

Inherent in blockchain solutions is the generation of new value. For instance, value enabled by blockchain may include data analytics, identity as a service (IDaaS), or report automation. Value can be tracked (e.g. tracking physical assets in a supply-chain) or generated (e.g. generating value in the form of efficiency, transparency, traceability, or integrity).

The new value generated often creates intellectual property (IP) linked to the blockchain technology. Facts around the IP, such as the location and the ownership of IP, will bring about tax considerations. The new value could also be captured through revenue generation or cost reduction for the entities associated with the technology. For instance, through the increased efficiency of the blockchain solution, there could be higher product margins. Considerations such as where and how the margins are attributed can also bring about tax implications.

As the value is created, captured, or transferred, solution stakeholders should consider the tax ramifications associated with the new value.

Consider the following questions:

- What is the business model? Does the solution generate revenue or fees directed towards an entity or multiple entities? Is there income realised and recognised?
- What is the value generated?
- Where is the value generated and attributed to?
- Who has ownership and control of the blockchain solution?
- Will the value be transferred to a different jurisdiction?
- Will the value be shared or split among different entities, as in a consortium?

Potential tax considerations that may arise associated with the value(s) generated include:

- **Legal entity structuring:** The value of the solution may be captured through revenue generation. Any revenue-generating solution will have to consider structuring its legal entities to mitigate unnecessary costs and allow for flexibility in future expansion plans. It is important to understand how each relevant jurisdiction will seek to tax any created intellectual property or value transferred.

Example

For a purchase order management related use case, value is transferred among participants involved in a blockchain network through the purchase and sale of goods between each of the participants. Participants in the solution often include producers, manufacturers, sellers, buyers, distributors, agents, and retailers spanning different jurisdictions. The solution owners will have to identify the specific roles of these participants and their locations to determine the proper tax ramifications.
Building out a blockchain solution involves significant technical considerations in architecture and design. Having a tax lens at the table during the design phase enables tax efficiencies in compliance processes, and a greater ability to gather tax sensitive data for use in compliance, planning and in support of a tax examination.

Rob Massey, Partner and Global Tax Leader – Blockchain and Cryptocurrency, Deloitte LLP
Tax-sensitised data
Tax-sensitised data incorporates relevant tax compliance, reporting, and planning considerations for increased tax efficiency. Figure 13.1 depicts a diagram with steps. Deployment owners should:

1. Analyse where in the transaction flow data relevant to tax will be captured
2. Build mechanisms to extract the data
3. Capture the relevant data

Potential considerations for tax efficiency that the solution owners may consider include:

- **Indirect tax tracking**: The process for calculating indirect taxes is often driven by manual efforts prone to inefficiency and error. A blockchain-based system of recording indirect taxes and automating payments to regulators may help save costs and time for parties involved in the blockchain ecosystem as well as for authorities.

- **FDII Substantiation**: A lower effective U.S. tax rate is provided with respect to a domestic corporation’s foreign-derived intangible income (FDII), which includes certain qualifying transactions like sales of property to foreign persons for foreign use and the provision of services to persons or with respect to property located outside the United States. Understanding the transaction flows and tracking transaction data through blockchain can help determine whether a transaction constitutes an FDII-qualifying transaction, establish appropriate documentation required for FDII substantiation, and, if applicable, provide data for the computation of FDII.

- **Automating Manual Processes**: Organisations will often have processes that have rules and parameters required for tax compliance and regulatory purposes. Consider building in tax sensitivities to the transaction level data and integrating with tax compliance tasks to streamline efficiency and enhance quality. Also consider smart contract protocols to automate manual processes and large volumes of data.

The below figure depicts steps to consider when tax sensitising the transaction level data in a supply chain and the potential increased benefits achieved through the process.

Example
Implementing processes to capture the relevant data for tax processes, such as VAT or GST, and embedding this data into the supply chain solution may drive efficiency and cost-savings, especially as the supply chain solution begins to scale and launch into full production with multiple users and thousands of transactions. Blockchain technology provides the ability for transaction level data in a supply chain (e.g. flowing from raw materials to the manufacturers, sellers, distributors, retailers, and to the consumers) to be captured in an immutable and traceable organised manner that can easily be retrieved.

**Figure 13.1:** Steps to consider when tax sensitising transaction-level data with potential benefits
2. Digital asset considerations

What are the most prevalent tax considerations that may arise from a blockchain solution?

This focus area covers blockchain use cases utilising digital assets. With relatively little guidance from the taxing authorities and with inconsistent tax rules on digital assets among various jurisdictions, the tax implications around digital assets are often complex. The tax considerations start with understanding and determining the nature of the digital asset for tax purposes.

Blockchain is often considered to be the underlying technology behind creating the “Internet of Value”, where monetary value could be transferred freely just as information is transferred with the internet we have today. The prospect of the “Internet of Value” is made possible due to blockchain’s ability to create, store, and transfer digital representations of assets in a secure, immutable, and efficient manner.

Whatever is being transacted within the solution is a key factor in determining the tax classification and implications of the transactions on the blockchain. The digital asset may be a virtual currency or virtual representation of cash, physical assets, securities, income, or other benefits. This variable can create additional complexities as well as potential opportunities. It will be important to apply a tax lens to analyse how the digital asset is used across the solution as the tax analysis may differ from the analysis for accounting, legal, and/or regulatory purposes. Moreover, the tax analysis may differ across tax type (i.e. direct tax versus indirect tax) or in one jurisdiction versus another.

The specific details surrounding the digital asset will matter in classifying the nature of the digital asset for tax purposes. Some questions to consider include:

- How are the digital assets being used and what is the underlying value represented? Are they used as payments, compensation, securities, commodities, and so on?
- Do the digital assets have readily convertible values?
- Where and who are the parties transacting with the digital assets?
- Are the digital assets operated in a closed-looped system or are they open for third parties to access?
- In what entity type and jurisdiction will the development and transfer of digital assets be conducted?

Potential tax implications and considerations associated with digital assets include:

- **Basis tracking:** If the digital asset is representing property, the transaction could be considered a barter exchange and trigger gain or loss at the time of the transaction – an additional consideration compared to transacting in cash. Designing basis tracking into the blockchain solution would be necessary to compute gain and loss to provide to all the parties participating in the transaction with the information needed for their own reporting purposes.
• **Inventory methods:** The analysis into the nature of the digital asset combined with the blockchain’s ability to record information in an accurate, real-time, and reliable manner may give more flexibility and efficiency around choosing the inventory methods to record the transactions. For instance, specific identification methods may become possible where before FIFO (First In, First Out) or LIFO (Last in, Last Out) were the only acceptable methods available.

• **Indirect tax & withholding requirements:** If the digital asset is considered property, there could be withholding requirements and indirect tax considerations on the purchase or sale of the digital asset.

**TOOLS AND RESOURCES**

**3. Blockchain transactions tax process**

The following figure depicts a high-level framework for thinking about tax in all blockchain solutions. Owners should work with their tax specialists to identify the tax implications specific to the developed solution and relevant jurisdictions.

![Figure 13.2: Overview of key steps to understanding tax implications](image)
Process:

1. **Identify the purpose and business use case of the solution**: Having a clear idea on the purpose and the business use case of the blockchain solution will help identify tax treatment and potential tax liabilities.

2. **Understand the relevant facts of the solution**: Tax is driven by the detailed facts surrounding the business use case. Small changes in the details could lead to completely different tax consequences. For instance, is there a contract in place with the users of the solution? Is there a lease or full transfer of custodial rights? Is the user paying royalty or subscription fees for the use of the solution?

3. **Understand the tax implications of the relevant facts**: Each fact will lead to different tax implications. The above graphic highlights some of the key tax issues arising in blockchain deployments. However, as tax rules are complex, there could be many other tax implications to consider. Therefore, the need to consult with a tax specialist for each solution before concluding the possible tax results.

4. **Develop strategies**: Could unintended tax consequences be mitigated? What are the risks? Are there opportunities for efficiencies? Consider the strategies to drive not only decisions around tax but decisions around the overall business solution.