Investment in Cloud computing projects in China is expected to reach USD 154 billion over the coming few years on cloud related technologies such as SaaS, PaaS and IaaS. Cloud is going to be big, big business in China

Source: Asia Cloud Computing Association

EXECUTIVE SUMMARY

The growth in the use of Cloud services to replace traditional IT service provision is rapid, and accelerating. From a Chinese tax perspective, this means change. Business models are evolving and they are changing to fit in with how the Cloud is actually developing.

KPMG China has put together this briefing paper, which covers direct and indirect tax issues in China, as well as challenges and opportunities that can arise out of Cloud computing. In essence, the emergence of the Cloud brings with it the following issues of concern:

• Significant PRC tax issues for both parties in a Cloud supply arrangement, i.e., providers and purchasers. These tax issues are multiplied when the transactions are cross-border.

• Uncertainties surrounding the Chinese tax implications. Often, the tax impact is not fully considered at the time that the transition to a new Cloud delivery model is being planned and executed. Tax can influence the long-term outcomes of planned new Cloud projects, and should be included in any business case analysis.

• Additional scrutiny from Chinese tax authorities who are becoming increasingly aware of the tax implications of the switch from traditional IT service provision to Cloud computing, and the potential for tax leakage.

It is becoming increasingly important that companies do not undertake Cloud activities in isolation but weigh up any business opportunities with the potential Chinese tax implications.
INTO THE CLOUD

For many years organisations have sought to improve the cost and return on investment of IT through various outsourcing or intra-group subcontractual arrangements (in sourcing). This has evolved into what we describe today as Cloud computing.

Cloud can be considered as no more than the means to source certain IT functions from a virtual environment. However, for many, it also turns out to be cheaper and more effective, with the ability for either the supplier or purchaser to scale up or down to meet fluctuating demands. This flexibility has partially enabled new business models, which can, for example, reduce the time-to-market for new products, and assist in the delivery of products and services to customers.

The key differences between historical outsourcing/in sourcing and working in the Cloud are the elastic, on-demand nature of Cloud services. This coupled with virtualisation, the ability to allow Cloud Service Providers (CSPs) to offer true multi-tenancy to customers while maintaining security and performance levels normally associated with dedicated computing, has produced a dramatic change in the ability of providers to service large portions of their market. This efficiency and scalability are two of the reasons why Cloud is becoming a fundamental component in the supply chain of many organisations around the world.

Cloud as a physical medium does not really exist; it is a term that is used to describe how organisations can source their IT needs without having to resort to the usual channels of purchase/license, ownership and administration. This new business model is driven by the combination of the increasing desire of companies to:

- use the most-up-to-date software
- keep their balance sheets lean
- swap capital expenditure for more flexible operating expenditure
- manage the cost of their procurement activities effectively.

It is generally accepted that there are three main service models and four deployment models that together categorise ways to deliver Cloud services (see side bar for further details).
**Service Models**

**Software as a Service (SaaS)**
This is the provision of software or applications through the web to organisations that no longer choose to host or license the underlying software themselves. At present, this applies on a B2B level with a fast growing B2C element. An example of SaaS is online gaming where players may have basic functionality (i.e., programs) on their own computers but access more expansive software or expansion packs through the internet, for which a charge can be made. Some well-known SaaS providers on the market include Microsoft, Google, and Salesforce.com, etc. Their ‘software services’ would include such applications as Office 365 and Google mail and docs. In delivering SaaS to the customers, a provider uses software applications hosted on its hardware.

**Platform as a Service (PaaS)**
PaaS offers customers the facility to deploy their own applications without the cost and complexity of buying and managing the underlying hardware, software and hosting capabilities. This facilitates application design, development, testing, and deployment. Typically this service does not include the hosted applications themselves but offers the tools upon which applications can be deployed. This is most likely to be found in a B2B environment where the organisation is reliant on third-party infrastructure and needs extensive developmental capability. This is analogous to a musician who uses a recording studio to create an album – they can use the equipment for the time period that they need without incurring the risks of overall ownership of the underlying equipment. Good examples of PaaS on the market include Windows’s Azure, Amazon’s AWS, and Salesforce’s Force.com.

**Infrastructure as a Service (IaaS)**
This service provides access to computer processing, network, and storage. Rather than purchasing servers, software, data centre space, networks, or firewalls, customers instead buy those resources as a fully outsourced service. Again, this is most likely to be found in a B2B environment through companies such as Rackspace and Amazon E2C. However, there is a growing B2C market in this area, e.g., personal data storage where one can back up the contents of a computer through a virtual provider such as Apple’s iCloud offering.
DEPLOYMENT MODELS

There are four types of Cloud deployment models:

- **Public Cloud** – applications, storage, and other resources are made available to the general public by a service provider.
- **Private Cloud** – operated solely for a single business, whether managed internally or by a third-party and hosted internally or externally.
- **Hybrid Cloud** – a combination of public and private Clouds, where private data and applications are kept internal to the business and other data and applications are hosted by the public CSP.
- **Community Cloud** – a Cloud infrastructure that is shared between several organisations from a specific community with common concerns, whether managed internally or by a third-party and hosted internally or externally.

PAYMENT MODELS

Payment models typically include the subscription method, the pay as you go (or metering) method, and the reserved capacity method. Some CSPs are developing marketplaces where excess computing power and IT capacity are auctioned off as commodities. In another variant, access to Cloud computing is provided to customers for free, and the CSP’s revenue is derived from advertisements displayed in the Cloud environment.

TAX IN THE CLOUD

There are a number of Chinese direct and indirect tax issues, challenges, and opportunities that arise as a consequence of:

- Chinese companies using Cloud in their supply chain
- multinational groups transitioning from a traditional IT delivery model to a Cloud delivery model.

This is particularly relevant as Chinese tax authorities increasingly wake up to the complexities of Cloud and try to prevent any potential tax leakage. Considering the Chinese tax implications may well strengthen a group transaction as arm’s length. The classification issue is largely influenced by whether, as part of the Cloud transaction, there is transfer of property to the customer. In many, if not most Cloud transactions, there will be no such transfer and the rules governing the Chinese taxation of services income could apply. However, there may be circumstances where a right is transferred to a customer, in which case the CSP will have to consider whether the income earned is treated as rental or royalty income (each of which involves the transfer of either a copyrighted article or an intangible property right). Where there is a transfer of property, classification will depend upon the nature of the rights the customer has in the property transferred. It is likely that classification matters will progress along a continuum from a pure Cloud transaction where no property is transferred through to transactions where property is transferred together with perpetual rights to use once payments cease. Reviewing the contractual evidence and the potential payment model would be the starting point in determining the proper classification for direct tax purposes.

DIRECT TAX

The correct classification of an underlying transaction is fundamental to Chinese income tax treatment. Depending on how a Cloud service transaction is classified, different tax provision and treatment will apply under the Chinese tax law. For instance, under Chinese corporate income tax law, the source of royalty is the place where the payer of such royalties is located or residing. If the Cloud service payment is classified as royalty and the users are PRC entities or residents, such payments would be considered as being sourced in China and therefore be subject to PRC withholding tax at 10 percent, subject to treaty relief.

From a Chinese Transfer Pricing perspective, classification is required to appropriately assess the pricing of the Cloud services rendered. For example, is it a service that has been rendered instead of a transfer of tangible property or intangible property (IP)? Could the transaction be considered a sale, lease or license as opposed to a service? This characterisation will significantly impact the benchmarking analysis required to support the intra-group transaction as arm’s length.

INDIRECT TAX

The classification of the services also drives the indirect tax treatment of the transactions. For instance, under the current and soon-to-be reformed China Business Tax (BT) regime, if a service is classified as a Value Added Telecommunication service, it is subject to a lower BT rate than the general information technology services. Furthermore, and in particular for B2B services, if services fall under qualified offshore outsourcing services, it may potentially be exempt from BT. Such distinction is also important under the upcoming Value Added Tax (VAT) reform where BT will be unified into the VAT system.

‘Efficiency and scalability are two of the reasons why Cloud is becoming a fundamental component in the supply chain of many organisations’
treatment would likely be different for information technology services (including qualified onshore or offshore B2B outsourcing services and B2C services) that fall under modern service industries and that for telecommunication services.

If the activities performed relate to more than just services (i.e., the PaaS model), the Chinese indirect tax implications (BT and VAT) would be different. When an application platform is being used, the transaction could qualify as a ‘lease’ of tangible goods as some software programs are only capable of being utilised on certain types of hardware. The question then arises as to what is the underlying supply – and in such case, the associated Chinese indirect tax implications.

The supplies involved in an infrastructure transaction (i.e., the IaaS model) could be a mix of goods and services. For instance, many companies today use off-site data storage facilities (i.e., servers/databases as opposed to file and boxes) for various business reasons. Although this type of data management is similar to traditional outsourcing in principle, there are many differences in commercial terms, pricing mechanisms, and delivery channels. These new features lead to significant uncertainties on the proper characterisation of the transaction for Chinese tax purposes. Depending on the classification of the transaction (e.g., composite sale or mixed sale), different PRC indirect tax analysis and outcome may arise.

For both income tax and indirect taxes in China, the critical issue in understanding the tax consequences is to determine the exact nature of the underlying supply. From a PRC tax perspective, it is, therefore, important to strip back the underlying contracts to fully understand what lies beneath the label. In order to strip back the underlying contract, you need to fully understand the supply chain, and recognise the risks and rewards within the new business model from both a commercial and tax perspective. For the vast majority of the services that may be termed Cloud, a rational and hopefully logical tax consequence will arise.

Despite the increasing scrutiny on tax issues related to Cloud transactions, the levels of sophistication and experience for the Chinese tax authorities in different locations still vary. In addition, the Chinese tax regulations do not provide clear guidance on many Cloud transactions. There may be inconsistency in tax treatment by location. Taxpayers should make detailed preparations of the supporting documents and be ready to argue their cases while taking into account both the technical merits and the local practices.

The next section explains the impact Cloud is having on present day supply chains.
SUPPLY CHAINS IN THE CLOUD

The global fluidity of Cloud results in tax compliance risks in terms of evaluating the location of the Cloud business and its customers and assessing intra-group Cloud transactions in accordance with the arm’s length principle. However, it also provides opportunities for multinational groups providing Cloud services, either internally or externally, to consider a tax efficient structure/strategy for the provision of such services.

Source of income

Let us first consider the sourcing aspect of the Cloud supply chain, i.e., whether income derived from Cloud activities is China-sourced or foreign-sourced. Determining income source is important for a foreign CSP as the answer affects whether Chinese withholding tax applies to payments that the foreign CSP receives from China with respect to its Cloud transactions.

Generally, income derived from the provision of services is sourced to where the services are performed. The sourcing rule for services income raises certain complexities in the Cloud context. Rarely will all of the inputs that make up the service offering be provided in a single jurisdiction. Consequently, revenue allocation will likely be required. If a Cloud transaction is classified as rental income, income from the transaction generally is sourced to the place where the property is used (e.g., generally where the servers and other components of the Cloud apparatus are located). If a classification analysis leads to a conclusion that a transaction gives rise to sales income (e.g., the transaction is a sale of an item of property), income generally is sourced to where the sale takes place (e.g., where the contract is concluded and where title and the benefits and burdens of ownership pass to the buyer). Tax treaties may impact these sourcing determinations.

EXPORTING CLOUD

Somewhat surprisingly, Cloud services can be affected by export controls. Such controls – which traditionally only related to the physical movement of certain types of goods – now also apply to technology and virtual elements of global businesses.

Organisations that transfer data, software and other Cloud services across border, need to be aware of the potential liability to export controls. Simply put, export controls are restrictions placed on transactions and technology by governments. Currently in China, we are not aware of specific export controls that are currently imposed by the Chinese government on export of general IT technology from China to overseas. However, in certain countries, such as the US, the regulatory environment may be extremely complex.

From a Cloud standpoint, it is, therefore, important to consider:

- the origin of open-source and third-party software
- if the software contains encryption
- the location of the server used to house the applications.

Businesses will need to observe the export controls for each jurisdiction accordingly as they may need to obtain licenses from the relevant authorities. Failure to take export controls into account can lead to penalties, which include fines and imprisonment – and therefore, evaluating export controls if you are a CSP should be a high priority.

LOCATION OF CLOUD SERVICES

Another key issue to be considered is whether operating in the Cloud creates a Chinese permanent establishment (PE) for a foreign CSP through its infrastructure or for a Cloud service customer through its use of servers in China. In a virtual world, transactions and services can be delivered with little or no “human” involvement. Would a server farm that has significant physical presence in the form of tangible assets in China be considered to create a Chinese PE from the perspective of being able to demonstrate an independently managed business operation, even if minimal individuals are involved in running the server farm?

The OECD Model Tax Convention describes a PE as a fixed place of business through which the business of an enterprise is wholly or partly carried on.

As noted above, Cloud allows the remote operation of many IT processes. Should some processes be moved onto the Cloud, consideration would need to be given as this process in itself would constitute a fixed place of business in the local jurisdiction (e.g., China) connected with the new processes.
CROSS-BORDER STRATEGIES

In considering a tax efficient strategy it is important to identify the key value drivers within the supply chain; the classification of the nature and location of the services provided and sourced; and importantly the profit and growth projections for the business. The following scenarios highlight the issues faced when considering cross-border tax strategies that arise on the provision of Cloud services.

As discussed, examples of Cloud offerings may consist of platform, service, infrastructure and storage. As depicted in the diagrams, these offerings may be undertaken and provided by a single party or multiple entities.

Within a corporate group, you would need to consider how the value (or income) generated by the Cloud should be allocated between the functions performed by the personnel supporting the business and the assets owned by the business, such as IP and infrastructure. You would also need to consider where the functions and risks are performed and by whom. As such, the identification of which legal entity (or indeed PE) is contributing which aspect of the Cloud service is fundamental for tax compliance and planning purposes. This can be a highly complex question because multiple entities (both related and third-parties) may combine their efforts to provide Cloud offerings. From a Transfer Pricing perspective, each entity’s economic contribution will need to be assessed and each entity will need to be compensated according to the arm’s length principle.

See figure 1.1 and 1.2
CONCLUSION

It is no surprise, especially when considering the fact that revenues can be earned remotely, that Chinese tax authorities are seeking to address any possible PRC tax leakage. Since Cloud is a relatively unbroken territory for Chinese tax authorities, taxpayers will need to have a high level of clarity over the transactions undertaken and how the value of the Cloud business is distributed among the IP, infrastructure and the personnel that support the business. Commercial decisions can have far-reaching tax consequences that bring their own risk and reward.

“We recommend that companies do not undertake Cloud activities in isolation, but that they weigh up any business opportunities with the potential Chinese tax implications.”
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