

An analysis of the alternatives to impose direct taxes on income from non-resident app stores

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ABSTRACT

The debate on the appropriateness of the current international tax framework to address electronic commerce business models has been ongoing for almost two decades with little resolution on alternatives for reform. One of the recent business models to emerge in the last eight years was the internet app store. Since its launch in 2008, the internet app store has exploded into a multi-billion dollar business model extending across the globe. The internet app store is a digital distribution platform in which developers and platform providers sell apps and digital content to consumers through their mobile devices. In a tax treaty context South Africa may only tax the income from non-resident app stores when a PE is created in South Africa by the non-resident. However, the tax planning structure and intangible nature of the internet app store enables non-resident platform providers and developers to sell apps and digital content extensively to consumers in a country without having a taxable presence in that country. In an effort to address the inability of the PE concept to cover e-commerce business models like the app store, the OECD raised potential alternatives in Action One of its 2015 BEPS Action Plan.

The main purpose of this study was to consider the application of two of these potential alternatives to the app store, namely a new PE nexus based on significant economic presence and a withholding tax on digital transactions, in order to determine the difficulties with the application of each alternative in South Africa. In order to address the main purpose of this study, it was necessary to obtain an understanding of the app store business model and to determine the current SA direct tax legislation which is applicable to the income from non-resident app stores operating in South Africa.

KEYWORDS: Permanent establishment; source; income tax; app store; app; developer; platform provider; electronic commerce.

LIST OF ABBREVIATIONS

ABBREVIATION	MEANING
Ad	Advertisement
BEPS	Base Erosion and Profit Shifting
B2B	Business to Business
B2C	Business to Consumer
DTC	Davis Tax Committee
G20	Group of Twenty
Income Tax Act	Income Tax Act (58 of 1962)
OECD	Organisation for Economic Co-operation and Development
OECD MTC	Organisation for Economic Co-operation and Development Model Tax Convention
OS	Operating System
PE	Permanent Establishment
SA	South African
SARS	South African Revenue Service
TAG	Technical Advisory Group
VAT	Value-Added Tax

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CHAPTER 1: BACKGROUND AND OBJECTIVES OF THE STUDY

1.1 Background

The evolution of various business models in the digital economy has resulted in non-resident companies operating in a market jurisdiction in a fundamentally different manner today than at the time international tax rules were designed. Due to the advances in technology, a non-resident company is able to sell extensively into a market jurisdiction without having a physical presence in that country (OECD, 2015a:98). The growth in internet access through smartphones and tablets has resulted in the development of the internet app store (OECD, 2015a:58).

An app store is a virtual marketplace for the development and sale of apps and digital content, managed by a platform owner (Pon, 2015:14). The two main app stores, the Apple App Store and the Google Play Store are the main platforms by which most developers promote and sell their apps, and most end-users search, buy and install apps (Heitkoetter, Hildebrand & Usener, 2012:1-2).

The term “app” is short for an application, typically a small, specialised program downloaded onto mobile devices (Dictionary.com, 2016a). The app store itself marks a drastic change in the way software is sold and delivered. Rather than packing software and selling it via retail channels, app stores make apps available for online download (OECD, 2013:19).

App stores typically feature applications produced by developers in multiple countries and are sold to consumers worldwide. Platforms earn revenue by charging a transaction fee based on the sales price. The developer sets the price for the apps. When an app is sold, the platform owner will receive a transaction/commission fee charged on the sales price, the remainder (the sales price minus the transaction/commission fee) is remitted to the developer. The transaction/commission fee is usually 30% of the sales price (OECD, 2013:20).

There are seven business models that developers use to monetize their apps, namely premium apps, in-app advertising, freemium, e-commerce, subscriptions, in-app

purchases and a hybrid of in-app ads and in-app purchases (AdMob, 2016a:3). E-commerce is also referred to as electronic commerce and is used interchangeably throughout this study.

When the Apple App Store launched in 2008, there were 552 apps available at launch (Friedman, 2013) which grew to 2 million apps by June 2016 (Statista, 2016a). In early 2016 the Apple App Store had paid a cumulative amount of \$40 billion to developers since 2008 (Apple, 2016a). Since Google's launch in 2008 with just a dozen apps (Perenson, 2008), it now hosts 2.1 million apps in its app store (Appbrain, 2016).

The mobile app store has grown rapidly since 2008 and this growth is expected to continue into the future. Global annual mobile app store revenue is expected to increase from \$41 billion in 2015 to \$101 billion in 2020 (App Annie, 2016a:7). Global annual mobile app store downloads are expected to increase from 111 billion downloads in 2015 to 284 billion downloads in 2020 (App Annie, 2016a:8).

1.2 Literature review

The development of new business models, like the internet app store, has raised questions about whether the current international tax framework continues to be appropriate to deal with cross-border digital transactions. In particular, it raises concerns about the characterisation of income and the allocation of taxing rights among residence and source jurisdictions (OECD, 2015a:99).

According to Olivier and Honiball (2011:9-10), the fundamental question in determining whether income is taxable in a particular country, is whether a connection or nexus exists between the income and the country. The connecting factors under domestic tax law are residence and source. Under the residence basis, a country's right to tax depends on the person who receives the income and under the source basis of taxation, a country's right to tax depends on whether the activities that generated the income took place within its borders (Olivier & Honiball, 2011:9-11). The rationale is that taxpayers can be expected to share in the costs of infrastructure and the running of a country which makes possible the production of its income (Olivier & Honiball, 2011:9-11).

The concept of permanent establishment (“PE”) is used in tax treaties to determine the source of business profits (Pinto, 2003:55). A country is given the right to tax the business profits of a non-resident if the profits can be attributed to a PE in that country (OECD, 2014:28). For South African (“SA”) income tax purposes, a PE is defined in Section 1 of the Income Tax Act (58 of 1962) (“Income Tax Act”), with specific reference to Article 5 of the Organisation for Economic Co-operation and Development Model Tax Convention (“OECD MTC”). In terms of Article 5 of the OECD MTC, a non-resident will have a PE in a country through a physical presence or the activities of a dependent agent (OECD, 2014:26-27).

However, the application of the PE concept is challenging in an e-commerce environment as e-commerce allows businesses to be carried on without a tangible fixed place of business. The geographical nexus is no longer required in a virtual world (Venter, 2015:34). The development of the internet has enabled companies to interact directly with customers through an internet website. Customers therefore no longer need to visit physical places to buy products but can now log onto a website to select, purchase and pay for a product (Oguttu & Tladi, 2009b:81).

Similarly, the need for human intermediaries such as brokers, agents and distributors has reduced as technology can automate the order filling, contract negotiating and payment processing traditionally done by dependent agents (Oguttu & Tladi, 2009a:217). Furthermore, in terms of Article 5(5) of the OECD MTC, the creation of a PE by the activities of an agent can be avoided by the use of independent agents or intermediaries in a source country (OECD, 2014:27).

The sale of digitised products also creates problems relating to the characterisation of income. Digitised products include a variety of goods like software, music and copyright images. A particular transaction may be classified as the use of an intangible asset, the supply of goods or the rendering of a service. The character of income determines whether income should be taxed in the country of source or residence (Wong, 2008:248).

The Organisation for Economic Co-operation and Development (“OECD”) sought to address the challenges e-commerce posed to the PE concept by incorporating principles by which a server may be regarded as a PE (OECD, 2010:110-113). There has been much criticism regarding the use of the location of the server as a PE. For instance, the highly mobile nature of servers as PEs allows companies to shift profits to low tax jurisdictions and the server does not need to have a geographic connection to the income-producing activities where the customers are located (Cockfield, 2001:1192-1193).

It has been argued that source-based taxation remains theoretically justifiable for electronic commerce transactions (Pinto, 2003:45). However, due to the characteristics of electronic commerce, its mobility, its reduced need for physical presence and its intangible nature, the current PE concept needs to be reconceptualised in order to deal with these transactions (Cockfield, Hellerstein, Millar & Waerzeggers, 2013:467-468; Pinto, 2003:130).

In 1999 the Technical Advisory Group (“TAG”) was set up by the Committee of Fiscal Affairs with a mandate to examine how the current treaty rules for the taxation of business profits apply in the context of e-commerce and examine proposals for alternative rules (OECD, 2004:3). Some of the alternatives raised by the TAG in its 2004 final report, included the modification to the preparatory or auxiliary exceptions in the PE definition, a source withholding tax and a new nexus electronic PE (OECD, 2004:30-71).

In 2015 the OECD released two reports dealing with the PE concept in the context of base erosion and profit shifting (“BEPS”). The first was focused on preventing the artificial avoidance of permanent establishment status and dealt primarily with the use of commissionaire arrangements and the specific activity exemptions (OECD, 2015b:9-10). The second report dealt with addressing the tax challenges of the digital economy and referred to potential alternatives from a direct tax perspective, namely the concept of a new PE nexus based on significant economic presence and the use of a withholding tax on digital transactions (OECD, 2015a:106-115).

The new PE nexus would consist of elements such as providing access to an electronic application, the amount of users of the application, a time threshold and the amount of revenue from the digital transaction (Hongler & Pistone, 2015:3). The withholding tax approach would involve the levying of a gross-basis final withholding tax on certain payments made to non-residents for goods and services purchased online (Baez & Brauner, 2015:2; OECD, 2015a:113).

1.3 Motivation of topic actuality

It was held in the SA court case of *SIR v Downing* that cognisance should be taken of the guidelines issued by the OECD in its commentaries when interpreting the term “permanent establishment” (Oguttu & Tladi, 2009b:77).

It is, therefore, relevant to keep abreast of the developments of the concept of permanent establishment (specifically relating to the digital economy), as any proposed changes would directly affect the application of SA domestic tax law and tax treaties.

There are currently no published rulings, court decisions or interpretation notes addressing the application of the PE concept to digital transactions in South Africa. The indirect taxation of electronic services supplied by foreign suppliers to SA residents has already been included in the SA Value-Added Tax (“VAT”) legislation (South Africa, 2014). However, there is still a void with respect to the direct taxation of these transactions, which this study seeks to explore.

The Davis Tax Committee (“DTC”) noted the need for new source rules in Section 9 of the Income Tax Act, dealing specifically with proceeds from the supply of digital goods and services. The report alluded to the proposed use of consumption (the place where the SA resident is located at the time of supply) as a basis for source taxation (DTC, 2015:28).

The current SA direct tax legislation needs to be evaluated in order to determine whether it adequately addresses the taxation of income from non-resident app stores. Furthermore, the potential alternatives indicated by the TAG and the OECD must be

evaluated to determine the challenges that may be faced with the application of the alternatives to a digital business model like the internet app store.

1.4 Problem statement

Although the OECD has raised potential alternatives to impose direct taxes on income in the digital economy, there may be specific challenges when applying the alternatives to the income from app stores. The following research question can be formulated from the problem statement:

- What alternatives exist to impose direct taxes on the income of non-resident app stores in South Africa and what challenges may be faced with the application of the alternatives to the income from app stores?

1.5 Objectives

1.5.1 Main objective

The main objective of the research is to consider the potential alternatives to impose direct taxes on the income of non-resident app stores and to identify the challenges with its application in South Africa.

1.5.2 Secondary objectives

The main objective will be addressed by the following secondary objectives:

- To gain an understanding of the app store business model in order to determine the parties involved in the transactions and the types of the goods or services provided. This secondary objective will be addressed in chapter 2.
- To determine the current SA direct tax legislation applicable to non-resident app stores and to identify the areas of difficulty when applying the current legislation to the income from app stores. This secondary objective will be addressed in chapter 3.

- To describe and analyse the potential alternatives to impose direct taxes on the income of non-resident app stores and to consider the challenges that may be faced with the application of these alternatives to the app store. This secondary objective will be addressed in chapter 4.

1.6 Research methodology

An interpretivist paradigm will be adopted as the research will be qualitative in nature (McKerchar, 2008:7). The research will be conducted using a doctrinal legal research methodology as the research involves a systematic process of identifying, analysing, organising and synthesising statutes and commentary (McKerchar, 2008:19). The study will determine the adequacy of the current SA direct tax legislation to address income from non-resident app stores, in order to explain the areas of difficulty in applying the current legislation. It will also describe and analyse the potential alternatives to impose direct tax on non-residents' app store income.

A literature review was conducted to discover the most recent, credible and relevant literature on the chosen research topic and to determine how others have theorised and conceptualised the area of research (Mouton, 2001:87). A literature review was conducted, firstly, to gain an understanding of the app store business model. Google Scholar was used to gather relevant literature on the app store. Publications on the App Economy by the OECD (2013) and data intelligence companies were consulted as well as the Apple and Google websites. These resources were used to gain an understanding of the various role players in the app economy, the different app store revenue models, the growth of the app store and the terms and conditions of app store contracts.

Secondly, in order to determine the adequacy of the current direct tax legislation to address the income from app stores, the SA Income Tax Act and the OECD MTC and commentaries were consulted. The specific focus was on the application of Article 5 and Article 7 dealing with the taxation of business profits and Article 12 dealing with royalties. The scope of the study was limited to the income received by the main role players in the app store, non-resident platform providers and developers, with a focus on the sale of digital goods and services in the app store. The study was also limited to

the business models of the Apple App Store and the Google Play Store as these were identified as the two largest app stores from which the majority of app revenue is generated worldwide. Literature was also gathered from books, theses and accredited journals to determine the views of academics on the application of the PE concept to electronic commerce transactions.

Finally, in order to describe and analyse the potential alternatives to impose direct tax on the income from app stores, Action One of the OECD BEPS Action Plan (OECD, 2015a) and the research papers by Baez and Brauner (2015), Hongler and Pistone (2015) and Pinto (2003) were consulted.

1.7 Overview of the chapters

The mini-dissertation comprises the following chapters. A brief overview of the contents of each chapter is provided below.

Chapter 1: Background and objectives of the study

The objective of chapter 1 is to provide a background for the area of research, to determine the problem statement and research objectives and to establish the research methodology that will be used in the study.

Chapter 2: The app store business model

The objective of chapter 2 is to gain an understanding of the app store business model, its features, growth, main role players, different monetization models and the types of goods and services it provides. The study will focus on the models of the two largest digital distribution platforms, the Apple App Store and the Google Play Store. This chapter will address the first secondary objective as identified in par. 1.5.2 (i).

Chapter 3: The difficulties in applying the current SA direct tax legislation to non-resident app store income

The objective of chapter 3 is to determine the current SA direct tax legislation applicable to non-resident app stores and to identify the areas of difficulty when applying the current legislation to the income of app stores. This study will be limited to the income received by non-resident platform providers and developers, being the main role players in the app economy. The chapter will provide a theoretical overview of the concept of PE used in SA tax treaties and its application to the app store business model. The proposed changes to the PE definition by the OECD, concerning commissionaire arrangements and preparatory or auxiliary activities, will also be considered. This chapter will address the second secondary objective as identified in par. 1.5.2 (ii).

Chapter 4: The alternatives to impose direct tax on the income from non-resident app stores

The objective of chapter 4 is to describe and analyse the two potential alternatives raised by the OECD in its 2015 BEPS Action Plan to impose direct tax on the income from the digital economy. The potential alternatives of a new PE nexus and a withholding tax will be analysed with specific application to the app store business model. The analysis will highlight the challenges that may be faced with the application of the potential alternatives to the app store. This chapter will address the third secondary objective as identified in par. 1.5.2 (iii).

Chapter 5: Conclusion

The final chapter of this mini-dissertation will provide a summary of the findings in chapter 2, 3 and 4. A conclusion will be given on the feasibility of the two potential alternatives to impose direct tax on the income of non-resident app stores operating in South Africa.

CHAPTER 2: THE APP STORE BUSINESS MODEL

2.1 Introduction

This chapter provides an overview of the emergence of the app store including its growth, main features, key players and monetization models. This information will assist in gaining an understanding of the nature of the transactions in the app store business model and the implications for the different key players. It also lays a foundation for eventually analysing the tax implications of the financial transactions involved in the app store. This chapter will address the secondary research objective as identified in par. 1.5.2 (i).

2.2 The emergence of the app store

The digital distribution of software for mobile devices has become a booming industry as a result of the increasing emergence and popularity of the smartphone (Heitkoetter *et al.*, 2012:1). As the smartphone industry and the app industry are considered to have an interdependent relationship (Liu, Jia & Guo, 2014), a study on app stores thus begins with the emergence of the smartphone. The smartphone is defined as “a mobile phone that performs many functions of a computer, typically having a touchscreen interface, internet access, and an operating system (“OS”) capable of running downloaded applications” (Oxford Dictionaries, 2016a). Compared to standard mobile phones, smartphones offer the ability to connect and run a myriad of internet-based services like email, geo-location, video streaming and social networking while providing a good user experience (Kenney & Pon, 2011:22).

The term “smartphone” came into use in 1997 and was built on the technology of handheld computers, often called Personal Digital Assistants. The main smartphone operating systems in the pre-2007 period were Palm OS, Windows CE, Symbian and Blackberry OS. The company named Symbian Ltd which was founded in 1998 was jointly owned by Nokia, Ericsson and Motorola. The Symbian OS was the undisputed leader in the world smartphone market prior to the introduction of the iPhone (Campbell-Kelly, Garcia-Swartz, Lam & Yang, 2015:719-720). In 2002, the company named Research in Motion introduced its first smartphone, the Blackberry 5810, which included

features such as enterprise email support, text messaging and a browser (Campbell-Kelly *et al.*, 2015:719).

The smartphone market, however, changed rapidly with the introduction of the Apple iPhone in 2007 (West & Mace, 2010:275). The iPhone was presented as a revolutionary mobile phone that combined the capabilities of a phone, an iPod and an internet communication (Thomas, 2007). The iPhone differed from other phones by having a full touchscreen with a software-defined virtual keyboard, a browser developed for personal computers, an OS rebranded as iOS and the ability to wirelessly download music and movies from the iTunes store (Campbell-Kelly *et al.*, 2015:720; West & Mace, 2010:275).

The smartphone has become the personal computing device of choice for consumers and the preferred business model for firms in the mobile applications and services market (Bredican & Vigar-Ellis, 2014:232). According to Statista (2016c), the number of smartphone users worldwide is expected to reach 2.1 billion in 2016. The two main smartphone operating systems are the Google Android and Apple iOS operating systems, with Android holding 80% of the global smartphone sales followed by iOS with 15% for the first three quarters of 2015. The leading smartphone vendors are Samsung and Apple, with 25% and 15% respectively, followed by Huawei, Lenovo and Xiaomi (Statista, 2016c).

Software for mobile phones is not a new industry but has been in existence for over a decade. In the early 2000's, before the popularization of the app store, the distribution of mobile content was conducted through mobile portals managed by mobile network operators (Basole & Karla, 2012:30). However, these mobile portals did not attract sufficient developers and users to really succeed. This changed with the launch of the Apple App Store in 2008, which introduced a new distribution paradigm to mobile commerce (Roma & Ragaglia, 2016:173). The Apple App Store is also referred to as the Apple iOS Store and is used interchangeably throughout the study.

The app store is essentially an internet store for the distribution of software applications that are downloaded onto users' mobile devices (Roma & Ragaglia, 2016:173). The production, distribution and consumption of these software applications (referred to as apps) occur entirely digitally and almost simultaneously anywhere around the world (Pon, 2015:109). Instead of accessing content and services through internet browsers, users have become more reliant on apps to access the internet due to the small screen size of the smartphone, the data caps and costs and the general convenience of using a dedicated app (Pon, 2015:138; Spence, 2014).

Shortly after the launch of the Apple App Store, Google launched its own official marketplace for Android apps in October 2008 (later rebranded as Google Play in 2012), which included Google's streaming media services including music, television, movies and books (Pon, Seppälä & Kenney, 2014:65). Since its humble beginnings in 2008, the mobile app store has exploded into a multi-billion dollar industry. Global annual mobile app store revenue (excluding advertising) was reported at \$41 billion in 2015 and is expected to grow to \$101 billion in 2020 (App Annie, 2016a:7). A number of other app stores have entered the app market since the Apple & Google launch, including Blackberry App World, Samsung Apps Store, Windows Phone Marketplace and Amazon App Store (Muller, Kijl & Martens, 2011:64). However, the remainder of the study will focus on the two largest app stores, namely the Apple App Store and the Google Play Store as the majority of the revenue from app stores worldwide is generated from these two stores.

2.3 The app economy

The "app economy" is not a defined term but refers to the range of economic activity surrounding mobile applications (Technopedia, 2016). It encompasses the key transactions between various players including platform providers, developers, consumers, network operators and device manufacturers (OECD, 2013:18).

2.3.1 The nature of mobile platforms

From an economic perspective, mobile platforms (which include hardware, OS and app stores) are considered multi-sided platforms (Campbell-Kelly *et al.*, 2015:722). In the view of Evans (2003:331-334), multi-sided platforms have three fundamental features

- they include at least two distinct groups of customers;
- there are indirect externalities arising from the interconnection of different customers; and
- an intermediary is needed to internalize the externalities created by one group for another.

Mobile operating systems clearly meet these three conditions. Firstly, they include a variety of customers (consumers, device manufacturers, network operators, advertisers and application developers). Secondly, there are indirect externalities flowing from consumers to app developers and vice versa (Campbell-Kelly *et al.*, 2015:722). Consumers are attracted to app stores with a higher number of developers as there is a larger product variety available and developers benefit from app stores in which they can reach a higher number of consumers. The value of participating for one user group is directly linked to the participation of the other user group (Pon, 2015:8). Thirdly, the mobile OS is the platform that regulates the relationship between the different customers. Mobile platforms like Apple's, benefit from these indirect network externalities as they increase the value of its own device and OS (Roma & Ragaglia, 2016:173).

Figure 2-1 below illustrates the various role players in the app economy.

APPLE, ANDROID DELIVER BENEFITS TO ALL SIDES

exponential growth comes from cross-side network effects across all five sides

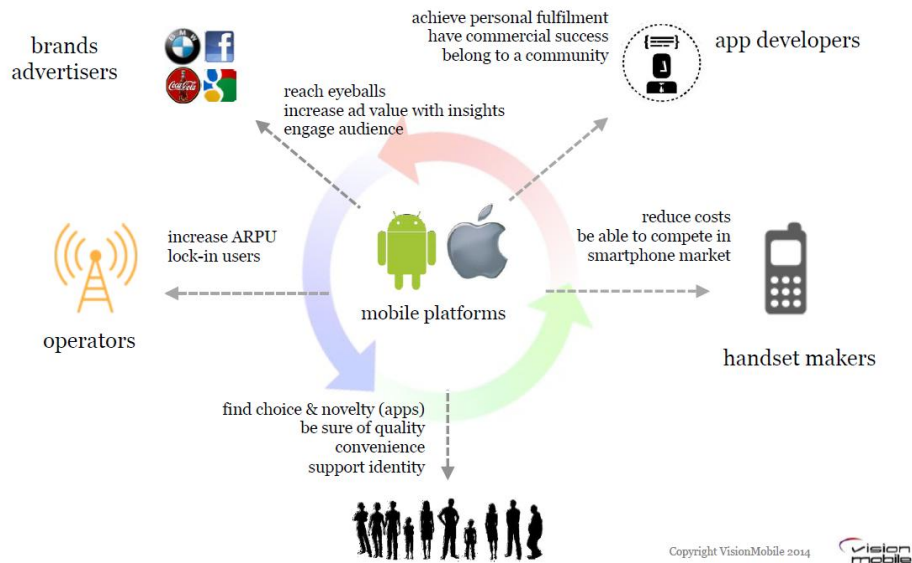


Figure 2-1: The role players in the app economy
(Source: VisionMobile, 2014:25)

As illustrated by Figure 2-1, the various role players in the app economy are

- platform providers;
- developers and consumers; and
- network operators and device manufacturers.

A more detailed overview of each player's role in the app economy is considered below.

2.4 Platform providers

Apps exist within a software platform (an OS). There are several popular platforms including iOS (Apple), Android (Google), BlackBerry (RIM), Windows Phone (Microsoft) and Bada (Samsung) (OECD, 2013:18-19). The goal of the platform provider is to attract users, developers and sometimes handset manufacturers to the platform as the value of the platform increases when the number of available apps and users increase (OECD, 2013:18-19). Platform providers also evaluate and approve the application content on the app store, provide the software to manage the distribution of the apps and manage the payment process (Basole & Karla, 2012:36).

The largest platform by global app store downloads is the Google Play Store, while the largest platform by global app store revenue is the Apple iOS Store (App Annie, 2016b:14-15). Figure 2-2 below illustrates the comparison between worldwide app downloads and app revenue of the Apple iOS Store and the Google Play Store. In quarter one of the 2016 year, Google Play had 100% more app downloads but 90% less app revenue than the Apple iOS Store. This information reflects the very different business models and strategies adopted by Apple and Google with regard to the app store.

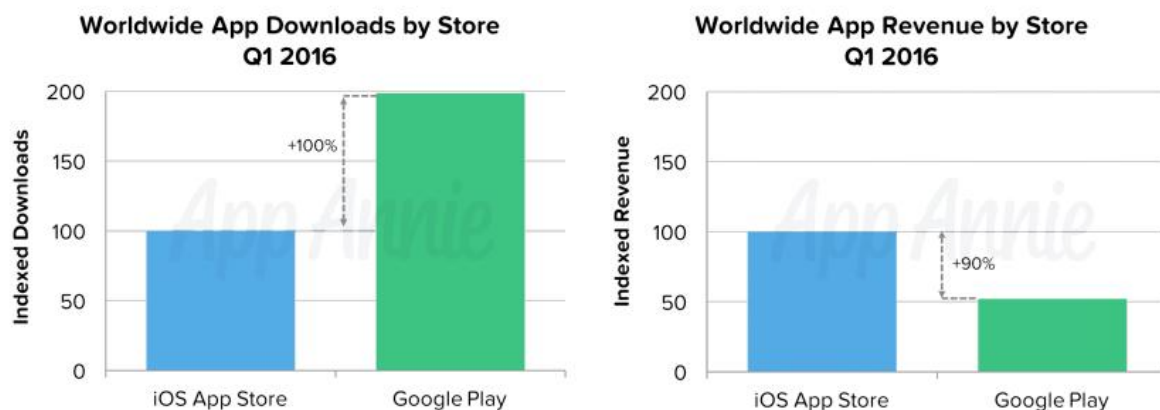


Figure 2-2: Worldwide app downloads and revenue by store
(Source: App Annie, 2016b:11)

As the majority of the revenue from app stores is generated from the Google and Apple app stores, only the business models adopted by these two platforms are considered below.

2.4.1 The Apple App Store (iOS)

Apple is a company incorporated in California that manufactures and markets mobile devices, personal computers, digital music players and sells a variety of software, services and third party digital content and applications worldwide through retail stores, online stores, third party network carriers, wholesalers and retailers (Apple, 2015a:1).

In 2008 Apple launched its online app store, shortly after the introduction of the Apple iPhone (Cheng, 2012:49). The Apple App Store allows users to browse and download applications to Apple specific devices like the iPhone, iPod Touch or iPad (Statista,

2016a). The Apple App Store has grown significantly over the last eight years. With just 552 apps at launch, the number of available apps to download in the Apple App Store has increased to 2 million as of June 2016 (Friedman, 2013; Statista, 2016a). Similarly the number of cumulative app downloads from the Apple App Store was reported at 130 billion apps for the period from July 2008 to June 2016 (Statista, 2016b).

Apple's success is largely owing to the success of the iPhone. By introducing the iPhone to the mobile phone industry, Apple catalysed a shift in the mobile phone industry and accomplished two feats: firstly, it leveraged the desire users had to access the internet and internet-based applications on a handheld device and secondly, it created a platform upon which developers could design iPhone specific applications from which Apple could extract a rent (Kenney & Pon, 2011:33-34). The rent extracted being 30% of all revenue from app store sales. Various authors use the terms "transaction fee", "commission" and "rent" interchangeably. Google refers to the fee as a "transaction fee" while Apple refers to the fee as a "commission" (Apple, 2015b; Google Play, 2016f). For the remainder of this study the fee extracted by the platform providers will be referred to as a "commission".

In the Apple business model, Apple is both the owner of the mobile OS (iOS) and the device manufacturer, that sells an integrated bundle of software and hardware to the consumer (Campbell-Kelly *et al.*, 2015:723). Platform providers use two types of platform approaches commonly referred to as "open" or "closed" platforms. The Apple iOS is known as a closed platform as iOS applications can only be downloaded and installed exclusively from the Apple App Store; content and applications are strictly evaluated by Apple prior to publishing and Apple dictates the mobile devices (namely Apple devices) and programming languages that must be used on the platform (Basole & Karla, 2012:36).

According to Turke (2015), in order to distribute applications in Apple's App Store, a developer must enter into an iOS Developer Program License Agreement with Apple. This agreement contains important information regarding the legal nature of the transactions between Apple and the developer. In terms of Schedule 1 (Exhibit A) of the iOS Developer Program License Agreement, the developer appoints the applicable

Apple entity as their agent or commissionaire for the marketing and delivery of licensed applications to end-users depending on the country in which the user is located.

For the sale of applications in South Africa, the developer appoints an Apple subsidiary named iTunes S.A.R.L., a company incorporated in Luxembourg, as their commissionaire (Apple, 2014; Duhigg & Kocieniewski, 2012). The license to Apple includes allowing for the distribution of apps to end-users, hosting and displaying the app, making copies and allowing for end-user download (Turke, 2015). Apple does not act in its own capacity but for and on behalf of the developer when transacting with end-users. Furthermore, in terms of the agreement, Apple does not acquire any ownership in or to any of the licensed applications. All title, risk of loss and responsibility for control of the applications remains with the developer (Apple, 2014).

Whenever consumers purchase a licensed application from Apple's App Store, they enter into a license agreement with the developer. Developers may have their own end-user license agreement to be distributed to users or may use Apple's standard end-user license agreement (Apple, 2014). In terms of Apple's standard end-user license agreement, products are licensed and not sold to the user and the developer reserves all rights in the applications. Users also may not rent, lease, sell, redistribute or sublicense the licensed application (Apple, 2016b).

Figure 2-3 illustrates the relationship between Apple, the developer and the consumer.

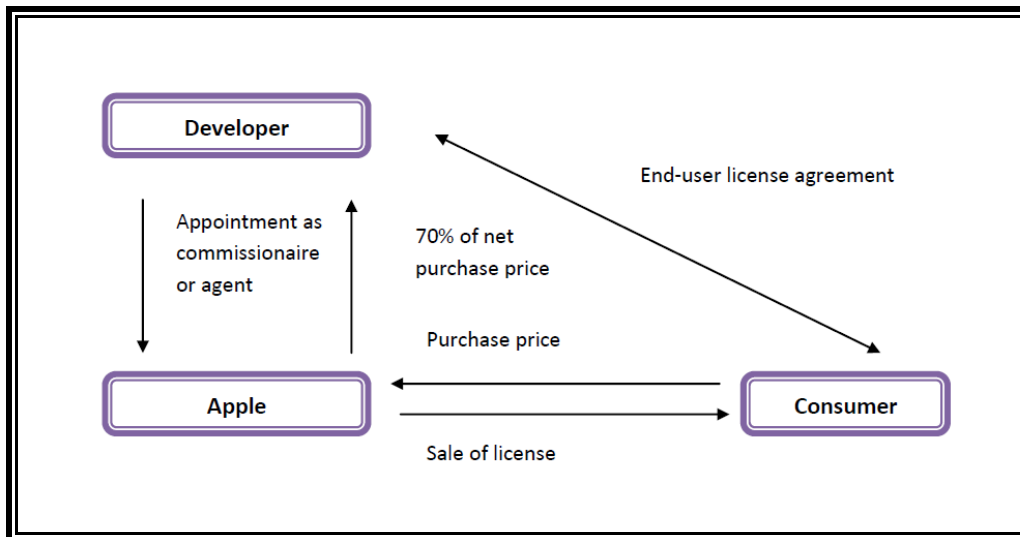


Figure 2-3: Apple app store legal structure
 (Source: Compiled by author)

2.4.2 The Google Play Store (Android)

The Android OS was originally developed by Android Inc., a start-up company founded in 2003 (Pon *et al.*, 2014:62). Google acquired the company in 2005 (Campbell-Kelly *et al.*, 2015:720). According to Roth (2008), Google was concerned about two facts when it acquired Android. Web-browsing had begun to move away from personal computers to mobile phones and the existing capabilities of smartphones for searching the internet (and viewing Google’s advertisements) were limited. The acquisition of the Android OS was therefore a strategy to prevent the potential undermining of Google’s advertising business as a result of consumers moving to the mobile web (Roth, 2008).

Kenney and Pon (2011:35, 40) explain that as an advertising and internet services firm, Google’s business model is quite different to that of Apple. When Google acquired Android, it created an industry consortium around the Android OS by promoting Android as an open platform and licensing the OS for free to handset manufacturers all around the world (Kenney & Pon, 2011:35-40). The major device manufacturers enrolled in Google’s compatibility program includes HTC, Huawei, LG, Lenovo, Motorola, Samsung, Sony, Sharp and Toshiba (Pon *et al.*, 2014:62). Campbell-Kelly *et al.* (2015:720) stated that Google’s strategy resembles that of Microsoft who in the 1980’s licensed its OS to personal computer manufacturers but differs to Google’s strategy in that Microsoft charged a fee.

In comparison to other smartphone companies, Google is also a service provider whose services includes blogging, maps, books, scholar, photo sharing, email, apps, YouTube and Google Voice (Kenney & Pon, 2011:41). However, Google's main revenue stream is advertising. Therefore, by licensing the OS for free to as many handset manufacturers as possible, Google increased its market share and thus the number of mobile devices on which it could generate revenue from advertising (Kenney & Pon, 2011:41). According to Kenney and Pon (2011:42), the entire Google empire rests on its stores of searchable databases and its ability to quickly match the appropriate advertisement ("ad") to the content requested. Google's approach to the app store is also advertising intensive with the use of monetization models like in-app advertising which is dealt with in par. 2.7.

The Google Play Store has also grown significantly over the last eight years. Since its launch in 2008 with just a dozen apps (Perenson, 2008), it now hosts 2.2 million apps in its app store (Appbrain, 2016). In addition to publishing third party developers' apps in its app store, Google also develops and distributes its own apps through Google Play Services (Pon *et al.*, 2014:67). Google's apps include Google Play Games, Google Play Music, Google Play Movies, Google Play Books, Google Play Newsstand and Google Play Developer Console (Google Play, 2016g).

Pon *et al.* (2014:65) explains that paid apps and content can be purchased in Google Play by consumers in 134 countries worldwide. Google uses its own Google Wallet functionality to process online credit card payments. It also has concluded agreements with network operators for carrier billing, which allows users to be billed directly to their mobile account for content purchased (Pon *et al.*, 2014:65). According to Pon (2015:115), both the Apple and Google platforms have separate national app stores for each country in which they conduct business to ensure that all country specific content policies and tax laws are abided by. This also ensures that consumers are restricted to using their own national app store which is determined by the location of their bank account or mobile carrier (Pon, 2015:115).

According to Turke and Sharma (2014), Google also has its own distribution agreement with developers, the Google Play Developer Distribution Agreement. In terms of this agreement, developers who wish to distribute software, content and digital materials through the Google Play Store, acknowledge that these products will be made available for download solely on behalf of the developer and not on Google's behalf (Google Play, 2016f). The developer grants Google a non-exclusive royalty-free license to distribute the products (Turke & Sharma, 2014). The developer contracts with the applicable Google entity depending on where they have chosen to distribute their products. For apps distributed in South Africa, the applicable Google entity is Google Commerce Limited, a company incorporated in Ireland (Google, 2016).

In addition, according to Google Play (2015), each consumer that purchases from the Google Play Store agrees to the Google Play Terms of Service which stipulates that when users buy content, mobile device software, audio or video files, they transact with Google Commerce Limited, the Content Provider or the App Provider. If the transaction involves the purchase of content from a party other than directly from Google, Google acts as an agent of the Content Provider. If the transaction involves the purchase of apps, the user transacts with the App Provider (Google Play, 2015). The user also may not sell, rent, lease, redistribute, and sub-license any of the purchased content without authorisation to do so (Google Play, 2015).

2.5 Developers and consumers

2.5.1 Developers

The role of developers is to create applications for the specific mobile platforms (Basole & Karla, 2012:30). When marketing their apps, developers must decide which type of app to develop, the number of apps to market, which app store to target and which monetization model to use (Roma & Ragaglia, 2016:174). There are a number of different types of apps that can be developed; however, statistics show that games are the leading category in terms of app revenue. According to App Annie (2016a:17), games generated \$34.8 billion in 2015, which was about 85% of the global annual app revenue, and is forecast to increase to \$74.6 billion in the 2020 year.

The top five games developers according to worldwide app revenue in 2015 were Supercell (Finland), King (United Kingdom), Mixi (Japan), GungHo Online (Japan) and Tencent (Japan). The top five non-game developers according to worldwide app revenue in 2015 were LINE (Japan), Spotify (Sweden), InterActive Corp (United States) and Time Warner (United States) (App Annie, 2015:41). Developers have various options to generate money from an app, for example by charging for the app, selling additional services within the app or advertising within the app (Heitkoetter *et al.*, 2012:3). The different monetization models used by developers will be discussed in par. 2.7.

In terms of choice of app store, a survey conducted by VisionMobile (2013:22), revealed that among the developers interested in generating revenue from the sale of apps, 74% use two or more platforms concurrently and 80% of developers use Android, iOS or both. This practice is known as multi-homing, which allows developers to quickly switch to a platform which is attracting more users at any point in time (Campbell-Kelly *et al.*, 2015:727). A survey conducted by VisionMobile (2015:32-33) revealed that around 60% of developers were considered Explorers, Hunters or Guns for Hire.

Of these developers, 23% were independent and using the app store as a side project to seize future opportunities (termed Explorers), 23% of these developers were experienced developers building an app business (termed Hunters) and 17% of these developers were seasoned pros developing apps on commission (termed Guns for Hire) (VisionMobile, 2015:33). In addition, a larger proportion of developers using the iOS App Store were experienced professionals (“Hunters”) as opposed to the Google Play Store which has more “Explorers” using the app store as a side project.

The survey further showed that of the developers selected, 17% earned no revenue through the app store, 18% earned less than \$100 per month, 24% earned between \$1,000 and \$10,000 per month, 14% earned between \$ 10,000 and \$100,000 per month and 5% earned over \$500,000 per month (VisionMobile, 2015:17).

Figure 2-4 below illustrates this split.

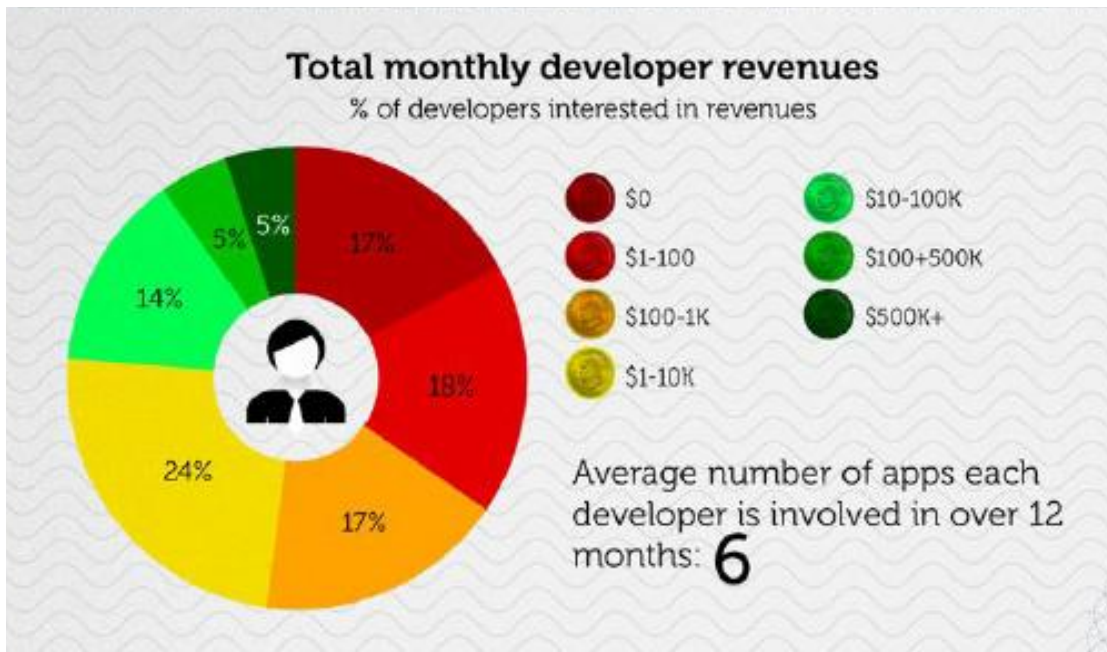


Figure 2-4: Total monthly developers revenue
(Source: VisionMobile, 2015:17)

2.5.2 Consumers

The app store has become a global business model with consumers located all around the world. The statistics released by App Annie give an indication of the regions in which the app store is most prevalent. According to App Annie (2016a:12-18), the global annual spend of consumers on apps is expected to reach \$51 billion in 2016, with the largest contributor being APAC (South Asia, East Asia, Australia and New Zealand) with \$28.3 billion. This is followed by the Americas (North and South America) with \$13.1 billion and EMEA (Europe, Middle East and Africa) with \$9.5 billion. This annual spend is expected to increase to \$101 billion in 2020 (App Annie, 2016a:12-18).

The above statistics regarding the forecast revenue are illustrated in Figure 2-5 below.

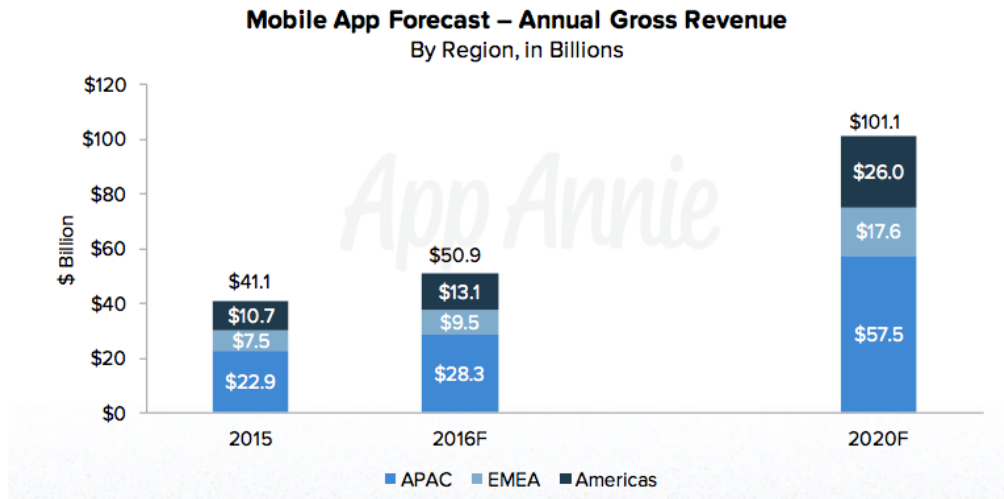


Figure 2-5: Mobile app forecast - annual gross revenue by region
(Source: App Annie, 2016a:13)

The global app store downloads are also expected to reach 147 billion in 2016. Figure 2-6 below illustrates the forecast downloads and is split as follows: APAC (South Asia, East Asia, Australia and New Zealand) with 79.6 billion downloads, followed by EMEA (Europe, Middle East and Africa) with 36.3 billion downloads and Americas (North and South America) with 31.4 billion downloads. The annual downloads are expected to increase to 284 billion in 2020 (App Annie, 2016a:12-18).

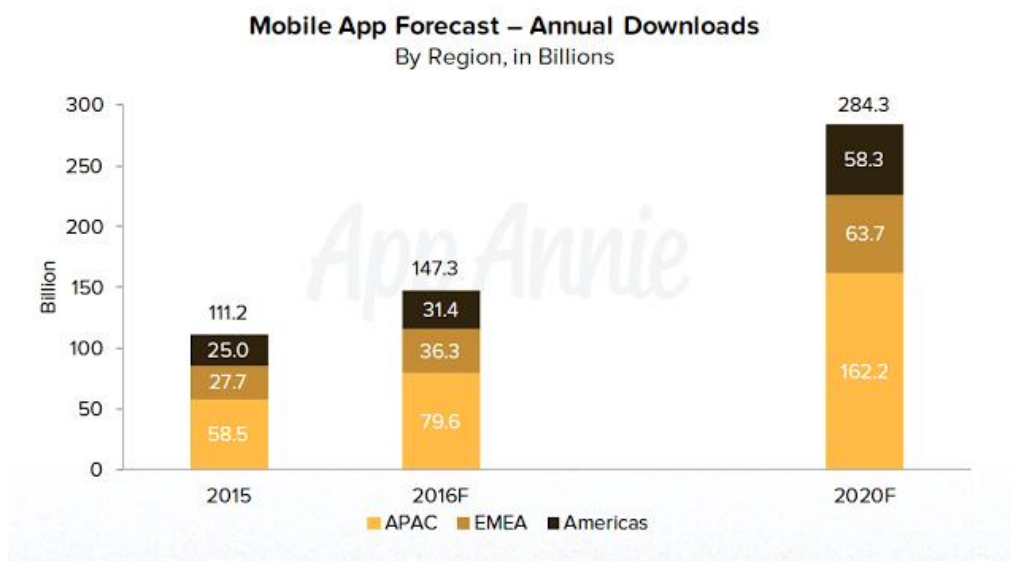


Figure 2-6: Mobile app forecast - annual downloads by region
(Source: App Annie, 2016a:12)

2.6 Network operators and device manufacturers

2.6.1 Network operators

Network operators provide the networks that deliver and support the apps. Reliable networks are important in the app industry as many apps like GPS navigation rely on continuous network connectivity in order to function effectively (OECD, 2013:27). Over the years, network operators have experienced a shift from voice services to data services due to the emergence of new mobile devices demanding increased network data speeds and consumers' rising demand for data services. This change was welcomed by network operators as it presented an opportunity to generate higher revenue through premium-priced data services (Basole & Karla, 2012:29-36). The mobile network operators in South Africa include Cell C, MTN, Telkom and Vodacom (Vermeulen, 2015).

2.6.2 Device manufacturers

The main role of device manufacturers is to produce and distribute the mobile devices on which the apps will be sold. Mobile devices are usually sold via network operators together with a mobile service contract to consumers (Basole & Karla, 2012:29). Examples of device manufacturers include Apple, Samsung, RIM (BlackBerry), LG, HTC and Huawei (Pon *et al.*, 2014:62).

According to Statista (2016d), Samsung is the leader in the smartphone market with a 21% share of the worldwide smartphone shipments, followed by Apple with 19% and Huawei with 18% in the fourth quarter of the 2015 year. Samsung is well known for its main line of Galaxy smartphone products which use the Android OS (Pon *et al.*, 2014:62; Statista, 2016d).

From the above it can be seen that the app economy consists of a variety of diverse and interdependent role players spread across the globe who each have a vital contribution to make towards its success. The success of the app store as a business model relies on the efficiency of device manufacturers to continue to produce innovative mobile devices on which the app store software is run, the reliability of network

operators to supply strong networks for this solely internet business, the creativity of developers to continue to design apps which are appealing to consumers and the ability of platform providers to attract both developers and consumers to their platforms.

The next section will consider the different types of monetization models used by developers in the app store.

2.7 Monetization models

One of the key decisions developers face is what monetization or revenue model to use when marketing their apps. The word “monetization” is derived from the word “monetize” which means “to convert into a source of income” (TheFreeDictionary, 2016). A monetization model therefore refers to the process by which developers seek to earn income from the sale of digital content and advertising in their apps.

AdMob (2016a:3) states that there are several monetization models available

- paid;
- in-app purchases;
- freemium;
- subscriptions;
- in-app advertising; and
- e-commerce.

According to Roma and Ragaglia (2016:177), there is a unique relationship between the monetization model and the mobile OS (namely, Google or Apple). It is widely known that Apple targets the high end of the market with its pricey iPhone while Android targets the lower segments (Edwards, 2014). Therefore the paid and freemium monetization models are more suited to the Apple App Store as there is a relatively high willingness by consumers to pay for apps, while the use of the freemium monetization model negatively affects app revenue performance in the Google Play Store as consumers are less prone to spend money on apps (Roma & Ragaglia, 2016:187-188). For each sale of paid apps, in-app purchases or in-app subscriptions in both the Apple and Google app stores, the platform provider takes a 30% commission fee while the remaining 70% of the revenue is distributed to the developer (OECD, 2013:5-24).

The different monetization models are considered below to provide an understanding of how each model operates.

2.7.1 Paid apps

With the paid monetization model, users pay to download the app and there are no further in-app purchases available. The price of a paid app can range from \$0.99 to \$1,400 (Moreau, 2016; OECD, 2013:22). The majority of apps in the Google and Apple App stores are free. For the 2015 year, 69% of the apps in the Google Play Store were free and 31% were paid (Statista, 2015a). According to Roma and Ragaglia (2016:175), where apps are offered for free, the developer usually monetizes through in-app advertising.

An example of a paid app is the photo editing app named “Photo Lab PRO Photo Editor” which is available to purchase in the SA Google Play Store at a cost of R46,10 (Google Play, 2016e). According to Google Play (2016e), this app was developed by the company Commonwealth Trust Limited located in the British Virgin Islands.

According to a survey conducted in 2015, 20% of global app developers use the paid monetization model to monetize their apps (Statista, 2015c). It can therefore be seen that paid apps is not the main model used.

2.7.2 In-app purchases

The in-app purchases monetization model allows users to download a paid or free version of an app and then charges the user to unlock additional functionality within the app (OECD, 2013:24). An example of an in-app purchases app offered in the SA Google Play Store is “The Amazing Spider-Man” gaming app which is initially sold at R139,99 but allows users to purchase virtual items within the game costing between R37,99 and R1 999,99 per item. The app was developed by Gameloft, a company located in France (Google Play, 2016a). According to a survey conducted in 2015, 33% of global app developers use the in-app purchases and freemium monetization models to monetize their apps (Statista, 2015c).

2.7.3 Freemium

With the freemium monetization model, users initially download a low value version of the app for free, which may include ads and limited or time expiring features, thereafter the user can upgrade to a premium version of the app for a fee (Roma & Ragaglia, 2016:175). This model is slightly different to the in-app purchases model in that the apps are initially downloaded for free. An example of a freemium app is the “Dropbox” app which provides online file storage services to users. This app is initially free and users can purchase additional storage capacity at a fee (OECD, 2013:24). The iCloud Drive app offered by Apple is another example of a freemium or subscriptions app (GetApp, 2016). According to Apple (2016d), the iCloud Drive app allows users to access all the files stored in the iCloud drive from any apple device. A user initially receives 5GB of free storage in the iCloud drive and may purchase additional storage for a fee of between R14,99 and R149,99 per month depending on the data plan chosen (Apple, 2016d). The popular gaming app “Candy Crush Saga” is also a freemium app which is initially offered for free and users can purchase in game items at a cost of between R10,00 and R1 999,99 per item. It was developed by a company named King located in Malta (Europe) (Google Play, 2016d).

2.7.4 Subscriptions

Under the subscriptions monetization model, users download the app for free and pay a subscription (a standard recurring fee) to view additional content in the app. The subscription model is similar to the freemium model except that users pay for additional content rather than additional features (AdMob, 2016a:8). Music and video streaming apps that publish live content often fall into this category. The term “streaming” refers to the transfer of video or audio content over the internet for immediate playback rather than for download and playback at a later stage (Mitchell, 2016).

The “Google Play Music” app is a music streaming app using this model which is initially downloaded for free. The free version allows one to upload up to 50 000 of your own songs on your device and listen to them. Users can then upgrade to an unlimited version with additional content including access to up to 35 million songs on demand, for a subscription fee of R59,99 per month in South Africa (Google Play, 2016b). Apple

also offers a similar streaming service entitled “Apple Music”, giving users access to millions of songs for a fee of R59,99 per month in South Africa (Apple, 2016c). The “Netflix” app is a video streaming app developed by Netflix, a company located in the United States that uses this model as well. The app offers SA users unlimited access to television shows and movies for a monthly fee of between R117,61 and R199,99 depending on the plan chosen (Google Play, 2016c).

According to a survey conducted in 2015, 9% of global app developers use the subscriptions monetization model to monetize their apps (Statista, 2015c).

2.7.5 In-app advertising

With the in-app advertising monetization model, developers sell the app for free and focus on monetizing the app by allowing advertisers to place advertisements in their apps for a fee (AdMob, 2016a:5). Platform providers are particularly interested in attracting advertisers to a platform as advertisements placed on the platform are a significant source of revenue for them. According to Statista (2015b), Google’s worldwide mobile advertising revenue amounted to \$24.3 billion for 2015. In addition, advertising also attracts developers to the platform who wish to monetize their apps and the more developers on a platform, the more consumers are attracted to it.

According to Campbell-Kelly *et al.* (2015:729), over the years there has been a migration of ads from traditional print media to the desktop and now to the mobile device which has led to the introduction of new intermediaries known as ad networks. The role of the ad network is to connect publishers (those who own space on which to advertise) with advertisers (Campbell-Kelly *et al.*, 2015:729). Roth (2008) explains that one of the concerns of Google that led to the acquisition of Android was that eyeballs were migrating away from the desktop and to the mobile device. Kincaid (2009) further states that in order to expand its strong search advertising business to the mobile internet, Google acquired the mobile ad network company AdMob in 2009. In doing so, Google was able to cover the entire spectrum of mobile advertising (search ads, web display ads and app display ads) (Kincaid, 2009).

In the in-app advertising monetization model there are display ads in which advertisers pay developers to display their ads in their apps and there are pay per click ads where advertisers pay developers each time a user clicks on their ad (AdMob, 2016b:2). Mobile ads also come in different formats like banner ads (which appear at the top or bottom of the screen), interstitial ads (full-screen ads), video ads and native ads (able to be altered) (AdMob, 2016b:11). Providers of ad services like AdMob monetize their service by taking a cut of the revenue generated by developers through advertising. According to a survey conducted by VisionMobile (2013:46), AdMob is the leading platform providing mobile ad services and has been adopted by 65% of developers that use ad services.

According to Campbell (2016), Apple also launched its own mobile ad network named iAd in 2010, however, due to Apple's lack of success in the ad selling business this platform will be discontinued with effect from 1 July 2016. Apple developers may however still earn advertising revenue from the use of third party ad networks or from their direct sales (Campbell, 2016).

A survey conducted in 2015 revealed that 63% of global app developers use the in-app advertising monetization model to monetize their apps (Statista, 2015c).

2.7.6 E-commerce

The e-commerce monetization model is primarily used to sell physical goods through the app and is often offered for free (AdMob, 2016a:7). Examples of these apps include South Africa's own takealot and Zando retail apps. As this study will focus on the sale of digital goods and services through the app store, no further research will be done on the e-commerce monetization model.

The above section considered the various monetization models used by developers in the app store and gave specific examples of apps currently using each model. From the above it was found that a diverse selection of digital goods and services may be sold through an app using different monetization models.

The different types of revenue generated from these monetization models can be grouped together in Table 2-1 as follows:

Type of revenue	Description	Monetization model
Digital content revenue (Non-subscription-based)	Revenue received per download of digital goods sold in the app, e.g. e-books, videos, music, software, games and virtual items.	Paid, In-App Purchases or Freemium
Digital content revenue (Subscription-based)	Revenue received per month from the sale of digital goods and services in the app, e.g. video streaming, music streaming and cloud storage.	Subscriptions
Advertising revenue	Revenue received from the sale of advertising in the app.	In-App Advertising

Table 2-1: Summary of revenue types in the app store (Source: Compiled by author)

The vast range of digital goods and services offered and payment options available indicates the nature of the app economy to be very dynamic and typically comprising of low value and high volume transactions.

2.8 Conclusion

In summary, the emergence of the app store began with the introduction of the smartphone. Apple was the main driver in this emergence when it introduced the first iPhone in 2007 and its iOS App Store in 2008. The Google Play Store was launched shortly thereafter following the acquisition of the Android OS. Being the two largest distribution platforms, Apple and Google have very different business models. Apple has a closed system platform where it owns the OS and manufactures the mobile devices from which it generates revenue. Access to Apple’s iOS App Store is

exclusively for Apple device owners. Google, on the other hand, operates an open system where it leases its OS for free to many device manufacturers and generates revenue mainly from mobile advertising.

The key players in the app economy include platform providers, developers, consumers, network operators and device manufacturers. The app store is the digital distribution platform for the sale of apps where Apple and Google act as intermediaries between developers and consumers. The platform providers receive 30% of the revenue from the sale of apps, which are marketed in the app store, while the remaining 70% is distributed to the developers. The monetization models employed by developers in the app store include paid, freemium, in-app purchases, subscriptions, in-app advertising and e-commerce.

This chapter focused on providing a sufficient understanding of the app store business model of the two largest distribution platforms and the various monetization models used by developers to generate revenue. In doing so, it has addressed the first secondary objective of this study as identified in par. 1.5.2 (i).

In this chapter it was found that the App economy is a very fast paced, innovative and evolving global business. The different role players must constantly innovate and keep technologically current in order to remain successful in this industry. Together with this ever changing landscape of new and diverse digital businesses, comes the challenge for revenue authorities to keep up with technology and to appropriately tax these types of transactions.

The following chapter considers the current SA direct tax legislation that is applicable to the app store in order to determine the areas of difficulty with the application of the legislation to the app store business model.

CHAPTER 3: THE DIFFICULTIES IN APPLYING THE CURRENT SA DIRECT TAX LEGISLATION TO NON-RESIDENT APP STORE INCOME

3.1 Introduction

In the previous chapter, it was found that income may be earned by non-resident platform providers and non-resident developers when apps, digital goods, digital services and advertising are sold in the app store. The objective of this chapter is to identify the areas of difficulty when applying the current SA direct tax legislation to the income from non-resident platform providers and developers when sales are made to SA consumers in the app store. This objective will be addressed in the following two stages:

- Firstly, by determining the current SA direct tax legislation applicable to non-resident platform providers and developers.
- Secondly, by applying the current SA direct tax legislation to the income of non-resident platform providers and developers in order to identify the areas of difficulty with the application of the legislation.

In doing so, this chapter will address the secondary research objective as identified in par. 1.5.2 (ii).

3.2 South Africa's jurisdiction to tax

According to Olivier and Honiball (2011:9), in order for income to be taxable in a particular country, a connection or nexus must exist between the income and the respective country. The two connecting factors are known as "residence" and "source".

The "residence" basis (also known as the world-wide basis) of taxation states that the connecting factor between the income and a specific country is the person who receives the income (Olivier & Honiball, 2011:19). Cockfield *et al.* (2013:43) states that the power to tax income based on residence rests on the relationship of the taxpayer to the taxing country and this relationship embraces the right to tax all the taxpayer's income without regard to source. The justification for the "residence" basis of taxation rests in the belief that a resident enjoys the protection of the country in which he resides and should

therefore contribute towards the cost of the government of that country (Olivier & Honiball, 2011:19).

Under the “source” basis of taxation, income can be connected to a specific country when the activities or the location of the property that generated that income took place in that country and this relationship gives that country the power to tax that income (Cockfield *et al.*, 2013:43; Olivier & Honiball, 2011:11). The justification for source basis taxation is that taxpayers can be expected to share in the costs of infrastructure and the running of a country that makes possible the production of its income (Azam, 2007:6).

3.2.1 The principle of residence in South Africa

Since January 2001, South Africa moved from a source basis of taxation to a residence basis of taxation (Olivier & Honiball, 2011:11). The residence principle is briefly considered below from a SA perspective.

In terms of paragraph (i) of the “gross income” definition in Section 1 of the Income Tax Act, residents of South Africa are taxed on their worldwide income. The definition of a “resident” in Section 1 of the Income Tax Act distinguishes between natural persons and persons other than natural persons. In terms of the “resident” definition in Section 1 of the Income Tax Act, natural persons are considered resident in South Africa for tax purposes if they are ordinarily resident or physically present in South Africa. Persons other than natural persons are considered resident in South Africa if they are incorporated, established or formed in South Africa or their “place of effective management” is in South Africa. While it is relatively easy to determine whether a company is incorporated in South Africa in terms of the Companies Act, the determination of “place of effective management” is not as straightforward (Oguttu & Van der Merwe, 2005:310).

The term “place of effective management” is not defined in the Income Tax Act. The South African Revenue Service (“SARS”) has, however, provided guidance in Interpretation Note 6 (Issue 2) regarding the meaning of the term and states that the “place of effective management” of a company refers to the place where the key

management and commercial decisions necessary for the conduct of its business as a whole are in substance made (SARS, 2015).

Therefore, in order for platform providers and developers (specifically companies) to be regarded as residents and thus taxed on their worldwide income (on the residence basis), they must either be incorporated in South Africa or have their “place of effective management” in South Africa. It is unlikely that platform providers like Google and Apple would be incorporated in South Africa based on the fact that the companies distributing apps to SA consumers, Google Commerce Limited and iTunes S.A.R.L are incorporated in Ireland and Luxembourg (Duhigg & Kocieniewski, 2012; Google, 2016).

Residence in South Africa for platform providers would, therefore, rest on the determination of “place of effective management”. Although it is possible for both resident and non-resident developers to sell their apps in the Google and Apple app stores, this study focuses on the income of non-residents from sales in the app store. Therefore, the residence principle will not be considered further in this study.

3.2.2 The principle of source in South Africa

According to Cockfield *et al.* (2013:39), there are two main references for international tax law, domestic law and treaty law. Domestic tax law includes tax legislation, case law and rulings issued by a government body and generally determines who is liable for tax in a country and how income derived by non-residents are taxed in that country. Treaty law encompasses the provisions of the tax treaties a country has entered into with its trading partners and usually overrides or limits the application of domestic law (Cockfield *et al.*, 2013:39).

Source in a SA domestic tax law context is contained in Section 1 and Section 9 of the Income Tax Act. In terms of paragraph (ii) of the “gross income” definition in Section 1 of the Income Tax Act, non-residents are taxed on income derived from a source or deemed source in South Africa. As the term “source” is not defined in the Income Tax Act, its meaning is deduced from case law (Oguttu & Van der Merwe, 2005:311). According to Olivier and Honiball (2011:12) the case of CIR v Lever Brothers & Unilever Ltd 14 SATC 1 is the principle case for determining the source of income in South

Africa. According to the Unilever case, the determination of the source of income consists of two inquiries:

- What was the originating cause of the income?
- In which country is the originating cause located?

In addition to the determination of source based on case law, there are also deemed source rules in Section 9 of the Income Tax Act which under certain circumstances deem the source of income to be in South Africa for specific types of income like interest, dividends and royalties.

According to Olivier and Honiball (2011:18), tax treaties in themselves do not create taxing rights or rules to determine the source of income. However, the exception to this rule is the permanent establishment provisions in Article 5 and 7 of the OECD MTC which allows a country to tax the business profits attributable to a PE in that country (Olivier & Honiball, 2011:18). The remainder of the study will consider the application of source in a tax treaty context to the income of non-resident app stores.

According to Olivier and Honiball (2011:276), the main objective of a tax treaty is to avoid double taxation and to prevent fiscal evasion. Double taxation may arise where the taxpayer is a deemed resident in two or more countries (a residence/residence conflict) or the taxpayer is taxed on his worldwide income in the country of residence and on a source basis in another country (a residence/source conflict) (Cockfield *et al.*, 2013:52-53). Azam (2007:6) states that tax treaties avoid double taxation by allocating taxing rights or distributive rules over different categories of income to the residence and source countries. The two classes of income where source is defined differently is active business income, which is subject to net taxation by the source country under the PE concept, and passive business income, which includes dividends, interest and royalties and is often subject to a gross withholding tax in the residence country of the payer (Pinto, 2003:54-55).

From the above, it is evident that from a treaty perspective, South Africa's right to tax a specific type of income of a non-resident is dependent on the character of the income. The character of the income received by non-resident platform providers and

developers from sales in the app store to SA consumers is considered in par. 3.3 below in order to determine under which treaty provision the income will be taxed. The relevant treaty provision will then determine whether South Africa may impose direct tax on this income and whether the income will be subject to a gross withholding tax or net taxation under the PE concept.

3.3 The characterisation of app store income

From the information provided in chapter 2, it was found that income may be received by non-resident platform providers and non-resident developers when apps or digital goods and services are sold in an app to a SA consumer. In addition, it was found that income may be received by developers when advertisers display ads in their apps which are then viewed by SA consumers. The character of the income received from each monetization model used in the app store is considered further below.

According to Oguttu and Van der Merwe (2005:312), digitisation may cause income characterisation issues by changing the nature of products or services. Income from the provision of a database, online subscriptions or downloading of software may result in income from the performance of a service, royalties for the use of a copyrighted intangible or profit from the sale of a product (Oguttu & Van der Merwe, 2005:312; Wong, 2008:248). From a tax treaty perspective, the main problem is often whether this income should be treated as royalties or business profits (OECD, 2015a:104). The provisions of the OECD MTC dealing with royalties is considered first to determine whether the income received under each model would be classified as a royalty.

Article 12 of the OECD MTC (2014:14) defines “royalties” as:

“Payments of any kind received as a consideration for the use of, right to use, any copyright of literary, artistic or scientific work including cinematograph films, any patent, trade mark, design or model, plan, secret formula or process, or information concerning industrial, commercial or scientific experience.”

For the purpose of this section, the characterisation of income from the various monetization models will be discussed as grouped together in Table 2-1 in par. 2.7.6, according to the different types of revenue generated in the app store

1. paid apps, in-app purchases and freemium apps;
2. subscriptions apps; and
3. in-app advertising.

As identified in par. 2.7.6, the first category represents the sale of application software and digital products (music, videos, books, images) on a non-subscription basis through the app. The second category represents the sale and electronic download of digital products on a subscription basis and the third category consists of the sale of advertising space in apps.

3.3.1 Paid apps, in-app purchases and freemium apps

Under the paid, in-app purchases or freemium monetization models considered in par. 2.7, it was found that a consumer pays for application software, additional functionality in the app or a premium version of the app on a non-subscriptions basis. It was also found that when an app is sold in the app store, revenue (being 70% of the proceeds) is received by the non-resident developer and a commission (being 30% of the proceeds) is received by the non-resident platform provider. It must however be determined whether the income received by developers and platform providers from the sale of application software and digital products (music, videos, books, images) in the app store would be classified as royalties. Article 12 of the OECD MTC Commentary provides some guidance in this respect.

According to the OECD (2010:227), the character of payments received for the transfer of computer software depends on the nature of the rights acquired under the specific arrangement. Where the user acquires the right to reproduce and distribute the software to the public, it is regarded as an exploitation of rights in the copyright that would otherwise be the sole prerogative of the copyright holder (OECD, 2010:227-228; Oguttu & Van der Merwe, 2005:313). The income received from acquiring these rights would be classified as royalties and will be taxable under Article 12 of the OECD MTC (Li, 1999:1428-1429; OECD, 2010:227-228; Oguttu & Van der Merwe, 2005:313).

Where the rights acquired are limited to those necessary to enable the user to operate the program, for example copying the program onto the user's computer hard drive or random access memory, these rights do no more than enable the effective operation of the program by the user and should be dealt with as business profits under Article 7 of the OECD MTC (Li, 1999:1428-1429; OECD, 2010:228).

Similarly, with regard to the electronic sale of digital products (music, videos, books or images), the OECD TAG on Treaty Characterisation of Electronic Commerce concluded that these transactions should not be classified as royalties as the essential consideration for the payment was to acquire a copy of the digital product and any use of the copyright by the act of copying the product was merely incidental to the process of downloading the digital product for the customers own use and enjoyment (OECD, 2001:20-21; Pinto, 2003:167; Wong, 2008:250).

Applying these principles to the income received by developers and platform providers from the sale of application software and digital products, even though this income may fall within Article 12 as consideration for the right to use a copyright of literary, artistic or scientific work, the end-users do not acquire the right to exploit the copyright in the software or digital products. The Apple end-user license agreement specifically states that the end-user may not rent, lease, lend, sell, redistribute, copy, disassemble, modify or sublicense the licensed application (Apple, 2016b). Similarly the Google Play terms of service state that an end-user may not sell, rent, lease, redistribute, broadcast, transmit, modify, sublicense or transfer any content or rights to the content to any third party (Google Play, 2015).

Therefore, in both the Apple and Google app stores, the rights acquired by users are limited to those necessary to operate the licensed applications. The income received by developers and platform providers from the sale of paid apps, in-app purchases and freemium apps would therefore not be classified as royalties under Article 12 of the OECD MTC and should be dealt with as business profits under Article 7.

3.3.2 Subscriptions apps

Under the subscriptions monetization model it was found that consumers typically pay for additional content in the app like the downloading of music and videos or the streaming of music and videos on a subscriptions basis. In this model revenue (being 70% of the proceeds) is received by the non-resident developer and a commission (being 30% of the proceeds) is received by the non-resident platform provider. In determining whether the income received by the developer and the platform provider from the sale of these digital goods and services should be classified as royalties, Article 12 of the OECD MTC Commentary provides some guidance.

According to the OECD (2010:230), where a user electronically downloads digital products (like software, images, sounds or text) for personal use or enjoyment, the payment is essentially for the limited use of the copyright to enable downloading, storage and operation on the user's display device and does not constitute royalties but should be dealt with as business profits under Article 7 (OECD, 2010:230; Wong, 2008:250). However, the OECD (2010:230) further states that where the payment is essentially for the granting of the right to use the copyright in the digital product that is electronically downloaded, the payment will be classified as a royalty. An example of this is where a book publisher acquires the right to reproduce a copyrighted picture it electronically downloads for the purpose of including on a book cover it is producing, the payment would be classified as a royalty as the transaction involves the acquisition of rights to use the copyright in the digital product rather than the mere acquisition of digital content (OECD, 2010:231; Pinto, 2003:169). The purchase and download of copyrighted digital products or the payment for access to streamed digital content on a subscriptions basis was specifically raised by the OECD TAG and was considered to fall under Article 7 dealing with business profits (OECD, 2001:31-32).

Applying this principle to the income received by developers and platform providers from the sale of digital content using the subscriptions model, it is clear that the end-users acquire the digital content for their own use or enjoyment. The right to use the copyright in the digital products are limited to enabling download, storage and performance on the users' mobile device. In terms of both the Apple end-user license agreement (Apple, 2016b) and the Google Play terms of service (Google Play, 2015),

the end users do not acquire any right to reproduce or redistribute the digital content purchased in the app store.

The income received by developers and platform providers from the sale of digital products using the subscriptions model, would therefore not be classified as royalties and should be dealt with as business profits under Article 7.

3.3.3 In-app advertising

Under the in-app advertising monetization model non-resident developers earn revenue by allowing advertisers to place ads in their apps. As the payments received by developers would not be regarded as consideration for the use of or right to use any copyright, any patent, trade mark, design or model, plan, secret formula or process, or information concerning industrial, commercial or scientific experience, it is submitted that the income from advertising will not be classified as royalties and should, therefore, be dealt with as business profits under Article 7 of the OECD MTC (OECD, 2001:28).

The above section considered whether the classification of income received by non-resident developers and non-resident platform providers from the sale of apps, digital goods and services in the app store to SA consumers, could be classified as royalties and, therefore, dealt with under Article 12 from a tax treaty perspective. It was found that this income under all the monetization models will not be classified as royalties in terms of the OECD MTC Commentary as the end users do not acquire any rights to reproduce or redistribute the software and copyrighted digital products but only acquire limited rights to enable downloading and storage for their own use and enjoyment. This income should therefore be dealt with as business profits under Article 7 of the OECD MTC.

The next section provides an overview of the PE concept as defined in Article 5 of the OECD MTC, which is used in SA tax treaties to determine if the business profits of a non-resident should be taxed in South Africa under Article 7.

3.4 The permanent establishment concept

Treaty rules provide that the business profits of an enterprise are taxable exclusively by the state of residence unless the enterprise carries on business in the other state through a PE. The PE concept thus determines whether a contracting state is entitled to exercise its taxing rights over the business profits of a non-resident (Hoffart, 2007:106; OECD, 2015a:26).

From a SA income tax perspective, a “permanent establishment” is defined in Section 1 of the Income Tax Act with specific reference to a permanent establishment in Article 5 of the OECD MTC. Therefore the meaning of a PE, as defined in Article 5 of the OECD MTC, is directly incorporated in SA domestic tax law. According to Oguttu and Tladi (2009b:76), although South Africa is not a member of the OECD, most of its tax treaties are based on the OECD MTC. Section 108(1) of the Income Tax Act together with Section 231(2) of the Constitution of the Republic of South Africa provides that once a tax treaty is approved by Parliament and published in the Government Gazette, its provisions are as effective as if incorporated into the Income Tax Act. It was also held in the case of *SIR v Downing* (1975) that South Africa should take cognisance of the guidelines issued by the OECD in its commentaries for the interpretation of the term “permanent establishment” (Oguttu & Tladi, 2009b:77).

The components of the concept of a PE as defined in Article 5 of the OECD MTC and its commentaries, is considered below in order to identify the requirements necessary for South Africa to exercise taxing rights over the business profits of a non-resident. These requirements will be applied to the app store in order to determine what difficulties arise with respect to the taxation of this income in South Africa under the PE concept.

Article 5 of the OECD MTC consists of seven paragraphs each addressing a different aspect of the PE concept. The different aspects can be summarised as follows:

- Article 5(1) and (2) – the general definition and examples of a PE.
- Article 5(3) – the construction clause.
- Article 5(4) – the exclusions from a PE.
- Article 5(5) and 5(6) – the agency clauses.

- Article 5(7) – the relationship of control.

Article 5(3) includes instances where building sites, construction or installation projects pertaining to the construction of buildings, roads, bridges or installation of new equipment will be considered a PE (Choudhary, 2011:45; OECD, 2014:27). Article 5(7) clarifies that the existence of a subsidiary company in a country does not in itself create a PE in that country for the parent company (OECD, 2014:27). For the purposes of this study, Articles 5(3) and 5(7) will therefore not apply to the app store and will not be considered further.

In addition to the above, the OECD developed specific guidelines contained in par. 42.1 to 42.10 of the OECD MTC Commentary whereby the activities of a website and server used in electronic commerce operations may be regarded as a PE (Cockfield, 2001:1190; OECD, 2010:110-113). As these guidelines will be relevant to the app store business model, it will also be considered together with the requirements of Article 5.

The following four aspects will now be explored further in order to determine what requirements are necessary for South Africa to exercise taxing rights over the income of non-resident platform providers and developers under the PE concept

- the general definition and examples of a PE;
- the exclusions from PE;
- the agency clauses; and
- the server PE.

3.4.1 Article 5(1) and (2) – the general definition and examples of a PE

In order for South Africa to exercise taxing rights over the income of non-resident platform providers and developers under the PE concept, the general meaning of a PE must first be established.

Article 5(1) of the OECD MTC (OECD, 2014:26) states that a

“Permanent establishment means a fixed place of business through which the business of an enterprise is wholly or partly carried on”.

The above general definition identifies three conditions necessary for the existence of a PE (De Koker & Brincker, 2010; OECD, 2010:92; Wong, 2008:41) in South Africa

- the existence of a place of business;
- the place of business must be fixed; and
- the business of the enterprise must be wholly or partly carried on through the fixed place of business.

Each of these conditions is considered in more detail below in order to determine their meaning in relation to the PE concept.

3.4.1.1 A place of business

While a “place of business” is not defined in the OECD MTC, the OECD MTC Commentary states that the term “covers any premises, facilities or installations used for carrying on the business of the enterprise whether or not they are used exclusively for that purpose” (De Koker & Brincker, 2010; OECD, 2010:93). According to the OECD (2010:93), it is immaterial whether these premises are owned, rented or otherwise at the disposal of the enterprise. It is also not required that the place of business be attached to the surface of the earth or that it is visible above ground; an underground pipeline may qualify as a PE (Olivier & Honiball, 2011:336).

This condition may apply to platform providers and developers to the extent that they operate through a place of business in South Africa. A critical analysis of the applicability of this condition is considered in par. 3.5.2.

3.4.1.2 A fixed place of business

According to Choudhary (2011:44) in order for a place of business to be fixed there must be a specific geographical point (the location test) and a certain degree of permanence at that geographical point (the duration test). The location test does not mean that the place of business must be physically connected to the land; rather there must be a link between the place of business and the specific geographical point (Pinto, 2003:73). The duration test requires that the place of business is not purely temporary in nature (Olivier & Honiball, 2011:338). The general rule concerning permanency is that

a PE would normally not exist where the business is conducted for less than six months (OECD, 2010:95).

This condition may apply to platform providers and developers to the extent that they have a place of business in South Africa that is fixed. A critical analysis of the applicability of this condition is considered in par. 3.5.2.

3.4.1.3 Business carried on through the fixed place of business

Article 3(1)(h) of the OECD MTC defines a business as including the performance of professional services and other activities of an independent character (OECD, 2014:25). The OECD Commentary further states that this definition is not exhaustive and the term's meaning should be derived from domestic law (OECD, 2010:81). As a "business" is not specifically defined in the Income Tax Act, its ordinary meaning must be referred to. The word "business" is defined as "a person's regular occupation, profession or trade" or "the practice of making one's living by engaging in commerce" (Oxford Dictionaries, 2016b).

In a SA context, a "trade" is defined in Section 1 of the Income Tax Act and includes every profession, trade, business, employment, calling, occupation or venture, including the letting of any property and the use of or the grant of permission to use any patent as defined in the Patents Act (57 of 1978) or any design as defined in the Designs Act (195 of 1993) or any trade mark as defined in the Trade Marks Act (194 of 1993) or any copyright as defined in the Copyright Act (98 of 1978) or any other property which is of a similar nature. The meaning of carrying on a business may therefore include the activities stated in the definition of "trade" in Section 1 of the Income Tax Act.

According to the OECD MTC (OECD, 2010:94; Oguttu & Tladi, 2009b:78), the words "through which" should be given a wide meaning and applies to any situation where business activities are carried on at a particular location that is at the disposal of the enterprise for that purpose. Olivier and Honiball (2011:341) state that the requirement that business must be carried on through a PE, does not mean that a PE will only exist if individuals are present. The presence of fully automated equipment operated by the

enterprise in a country may also constitute a PE (Olivier & Honiball, 2011:341). This is discussed further in par. 3.4.4.

Article 5(2) of the OECD MTC contains specific examples of PEs including a place of management, a branch, an office, a factory, a workshop and a mine, an oil or gas well, a quarry or any other place of extraction of natural resources (Choudhary, 2011:44-45; OECD, 2014:26). The OECD (2010:98) states that this list is not exhaustive and will only constitute a PE where the requirements of Article 5(1) are met.

In summary, the above analysis of the general definition and examples of the PE concept contained in Article 5(1) and (2) reveals that it is a very wide concept which focuses on a tangible physical presence. In addition, in order for a PE to exist in South Africa, this physical presence must be at a specific location with a certain degree of permanency and must be used by the enterprise for the purpose of carrying on its business activities at that location. All three conditions of the general definition may apply to platform providers and developers carrying on business through an app store in South Africa. A critical analysis of the applicability of the general definition of a PE to the app store is considered in par. 3.5.2.

3.4.2 Article 5(4) – the exclusions from PE

The second aspect to be considered with regard to the PE concept, are the activities that would be excluded from a PE and thus prevent South Africa from exercising its taxing rights over the income of non-resident platform providers and developers.

Article 5(4) of the OECD MTC excludes certain activities from the PE concept even if performed through a fixed place of business meeting the requirements of Article 5(1) and the examples in Article 5(2) (OECD, 2010:101). These activities include:

- The use of facilities for storage, display or delivery of the enterprises goods.
- The stock itself maintained for storage, display or delivery.
- The maintenance of and processing of stock belonging to another enterprise.
- A fixed place of business for the purpose of purchasing goods or collecting information for the enterprise.

- A fixed place of business solely for carrying on any activity of a preparatory or auxiliary nature (EY, 2015; OECD, 2014:27; Pinto, 2003:75).

The common feature in all the exclusions is that the activity carried on is preparatory or auxiliary in nature. In distinguishing what is preparatory or auxiliary in nature the OECD MTC Commentary states that the decisive criterion is whether the activity of the fixed place of business in itself forms an essential and significant part of the activity of the enterprise as a whole (OECD, 2010:102; Oguttu & Tladi, 2009b:78-79). A fixed place of business of which the general purpose is identical to the general purpose of the whole enterprise does not perform a preparatory or auxiliary activity (Choudhary, 2011:45; OECD, 2010:102).

3.4.3 Article 5(5) and 5(6) – the agency clauses

The third aspect to be considered is the creation of a PE by virtue of the activities of a dependent agent acting on behalf of a principal in a country. An understanding of the differences between dependent and independent agents is important as only the activities of a dependent agent will create a PE in South Africa and enable South Africa to exercise its taxing rights over the income from those activities.

3.4.3.1 Article 5(5) – the dependent agent

Even if the fixed place of business requirement in Article 5(1) and 5(2) is not met, the provisions of Article 5(5) will deem a PE to exist where a person (not of an independent status) habitually exercises an authority to conclude contracts on behalf of an enterprise provided the agent's activities are not specifically excluded under Article 5(4) (OECD, 2014:27; Olivier & Honiball, 2011:345; Schaefer, 2000:130).

An agent is regarded as having authority to conclude contracts when he is authorised to negotiate all terms and details of the contract in a binding way on the enterprise even if those contracts are not actually in the name of the enterprise (De Koker & Brincker, 2010; OECD, 2010:105-106). The phrase "habitually exercises" suggests that the presence of the enterprise is not merely transitory and the authority must be repeatedly exercised (Choudhary, 2011:46; OECD, 2010:105-106).

3.4.3.2 Article 5(6) – the independent agent

Although Article 5(5) specifically excludes agents of an independent status, Article 5(6) was inserted to provide additional clarity on what constitutes an independent agent. In terms of Article 5(6) of the OECD MTC, the activities of a broker, general commission agent or any agent of an independent status who acts in the ordinary course of his/her business will not create a PE for the principal (OECD, 2014:27; Olivier & Honiball, 2011:345).

A “broker” is defined as “an agent who buys or sells for a principal on a commission basis without having title of the property” and “a person who functions as an intermediary between two or more parties in negotiating agreements, bargains or the like” (Dictionary.com, 2016b). A “commission agent” is defined as “a person who transacts business on commission, typically on behalf of a principal from another country” (Oxford Dictionaries, 2016c).

According to the OECD MTC Commentary (OECD, 2010:107; Wittendorff, 2010:360), a person will fall within the scope of this paragraph if he is independent of the enterprise both legally and economically, and he acts in the ordinary course of his business when acting on behalf of the enterprise. An agent is regarded as economically independent when he does not carry on activities mainly on behalf of one principal and thus his main source of income is not dependent on that principal (De Koker & Brincker, 2010). An agent acts in the ordinary course of his business if he performs activities which economically belong to the sphere of his own business operations rather than to that of the principal’s enterprise (De Koker & Brincker, 2010; OECD, 2010:108).

The OECD MTC Commentary (2010:107) states that all the facts and circumstances must be considered when determining whether an agent’s activities constitute an autonomous business in which he/she bears risks and receives rewards from the use of his/her skills. The following additional factors highlighted by the OECD may indicate the independence of an agent:

- The agent is responsible to his principal for the results of the work but not subject to significant control with respect to the manner in which it is carried out.

- The agent is not subject to detailed instructions from the principal as to the conduct of the work.
- The principal relies on the special skill and knowledge of the agent (De Koker & Brincker, 2010; OECD, 2010:107-108).

From the above it is evident that many factors must be taken into account before concluding that an agency PE has been created in a country. The determination of an agency PE would not only require a review of the terms and conditions of the agency agreements concluded between agents and principals, but also a careful consideration of the actual activities and functions carried on by the agent in relation to the principal.

The agency PE may apply to developers as platform providers sell and distribute apps and digital content on their behalf in South Africa. A critical analysis of the applicability of the agency PE to the non-resident developer is considered in par. 3.5.3.

3.4.4 The server PE

The fourth aspect to consider is the guidelines provided by the OECD MTC Commentary regarding the application of the PE concept to computer equipment used in electronic commerce operations. The application of the fixed place of business and dependent agent requirements of a PE has proven difficult in an e-commerce environment. Choudhary (2011:40) states that the concept of a fixed place is meaningless in an e-commerce business as e-commerce businesses can sell products worldwide with limited physical presence in a consumer's country. In an attempt to address the shortcomings in the PE concept posed by electronic commerce transactions, the OECD developed specific guidelines by which a website or server may be regarded as a PE.

The guidelines may be divided into three categories as follows

- a website as a PE;
- a server as a PE; and
- an internet service provider as a PE (Oguttu & Tladi, 2009b:82-85).

Each category will be explained in further detail in order to determine when the activities of a website, server or internet service provider may be regarded as a PE in South Africa.

3.4.4.1 A website as a PE

A “website” is defined as “a location connected to the Internet that maintains one or more pages on the World Wide Web” (Oxford Dictionaries, 2016d).

According to the OECD MTC Commentary, an internet website consists of a combination of software and electronic data which is intangible in nature and does not have a location like physical premises or machinery which can be regarded as a “place of business” (Cockfield, 2001:1190; OECD, 2010:110).

A website in itself, therefore, cannot be regarded as a PE (OECD, 2010:110; Oguttu & Tladi, 2009b:83).

3.4.4.2 A server as a PE

A “server” is defined as “a computer that makes services, as access to data files, programs, and peripheral devices, available to workstations on a network” (Dictionary.com, 2016c).

According to the OECD MTC Commentary, a server is a piece of equipment on which a website is stored, with a physical location which may constitute a “fixed place of business” of the enterprise operating that server (Cockfield, 2001:1190; OECD, 2010:110). A server would only constitute a PE for the enterprise carrying on business through a website if the enterprise owns or leases and operates the server on which the website is stored and the server is fixed at a certain place for a sufficient period of time. The PE would therefore be located at the place where the server is located (De Koker & Brincker, 2010; OECD, 2010:111).

In addition, a server will not constitute a PE where the activities carried on through it are preparatory or auxiliary in nature under Article 5(4), provided those activities are not an essential and significant part of the business activity of the enterprise as a whole or other core functions of the enterprise are carried on through the server (OECD, 2010:111-112; Pinto, 2003:118-119). Examples of preparatory or auxiliary activities given by the OECD include

- providing a communication link between customers and suppliers;
- advertising of goods and services;
- relaying information through a mirror server for security and efficiency purposes;
- gathering market data for the enterprise; and
- supplying information (DTC, 2015:4; OECD, 2010:112).

According to Skaar (2000:192) the implication of the above examples suggests that where the activity conducted through a website located on a server is limited to the providing of information about the enterprise or its products sold, it most likely would be considered auxiliary or preparatory. However if the order taking, payment and delivery of the digital products is all facilitated by the server, this would be regarded as a core activity which would result in a PE (Choudhary, 2011:50; Skaar, 2000:192).

3.4.4.3 An internet service provider as a PE

An “internet service provider” is defined as “a company that offers access to the Internet and to email, usually for a monthly fee” (Dictionary.com, 2016d).

An internet service provider may host the websites of other enterprises on its own servers. An issue raised by the OECD, is whether the activities of an internet service provider could create a PE for the enterprise whose website is hosted on its servers, by virtue of the internet service provider being a dependent agent of the enterprise operating the website (OECD, 2010:112; Pinto, 2003:106-107). It was concluded that an internet service provider will not constitute a dependent agent of the enterprise to which the website belongs as it will not have authority to conclude contracts in the name of the enterprise and it would be regarded as independent and acting in the ordinary course of its business of hosting websites for many different enterprises (OECD, 2010:113; Oguttu & Tladi, 2009b:85).

The server PE may apply to platform providers and developers who use servers to carry on business through the app store in South Africa. A critical analysis of the applicability of the server PE to the app store is considered in par. 3.5.4.

From the above it was found that a non-resident may create a PE in South Africa in any of the following situations provided that the activities carried on are not preparatory or auxiliary in nature

- a fixed place of business in South Africa;
- the activities of a dependent agent in South Africa; and
- the activities of an owned or leased server in South Africa.

This section has therefore determined what the SA direct tax legislation applicable to non-resident app stores is and has addressed the first part of the secondary objective of this study as identified in par. 1.5.2 (ii).

The next section will consider the application of the following three main principles as identified in the SA direct tax legislation, to the internet app store, in order to determine the areas of difficulty with the application of the legislation in South Africa

- the general definition of a PE;
- the dependent agent PE; and
- the server PE.

3.5 The application of the PE concept to the app store

Before the PE concept is applied to the app store business model, a brief overview of the typical tax planning structure of the app store is considered, as the way in which platform providers like Google and Apple structure their businesses for tax purposes will affect the application of the PE concept to the app store business model.

3.5.1 The typical tax planning structure of the app store

The OECD published the following diagram illustrating the typical tax planning structure of the internet app store in Action One of its 2015 BEPS Report on Addressing the Tax Challenges of the Digital Economy (OECD, 2015a:178-180).

The illustration is a simplified example based on what a number of tax administrations have observed and is not exhaustive or considered to reflect the full scope of structures that may be used (OECD, 2015a:167).

Figure B.4. Internet app store

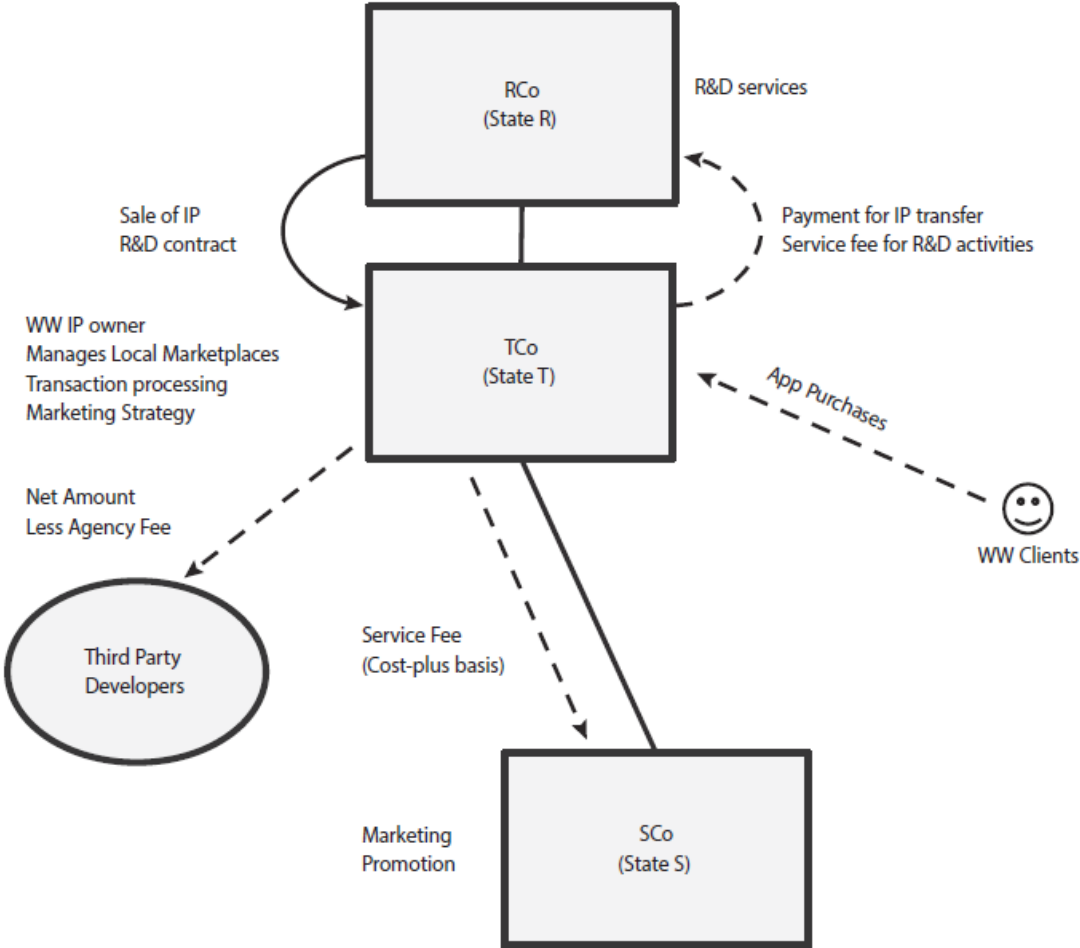


Figure 3-1: Typical tax planning structure of an internet app store (Source: OECD, 2015a:179)

The RCo Group is the creator of an OS for mobile devices and maintains an internet app store through which users of the RCo group’s mobile devices can pay to download applications developed by the RCo Group or by third party developers. Third party developers receive 75% of the revenues from sales in the app store, with the remaining 25% going to the RCo Group (OECD, 2015a:177-178). The illustration consists of the following role players: RCo, TCo, SCo, Third Party Developers and Clients.

A brief description of the roles of RCo, TCo and SCo is considered in Table 3-1.

ENTITY DETAILS	ROLE OF ENTITY IN THE APP STORE
<p>RCo Holding company of RCo Group Tax resident in State R</p>	<ul style="list-style-type: none"> • RCo developed the OS, internet app store and RCo Group applications sold in the app store. • RCo sold its rights to the technology used in developing and running the app store together with the development tools and software to TCo (its subsidiary). All risks associated with the development of the technology were contractually allocated to TCo. • RCo continues to upgrade and develop the technology used by TCo in return for a fee covering the R&D expenses.
<p>TCo Subsidiary of RCo Group Tax resident in State T (low tax jurisdiction)</p>	<ul style="list-style-type: none"> • TCo operates the application marketplace and handles all transaction processing with customers and third party developers around the world. • The app stores are hosted on servers owned by TCo and located in State T or on third party servers located in a country distinct from that of the customers. • The contracts for the purchase of applications are concluded electronically based on terms set by TCo.
<p>SCo Subsidiary of RCo Group Tax resident in State S</p>	<ul style="list-style-type: none"> • SCo promotes the RCo OS and internet app store to third party developers, sellers and prospective purchasers of mobile devices but is never formally involved in the sale of applications and/or negotiations of agency agreements with third party developers.

Table 3-1: The roles of the entities in the app store

(Source: OECD, 2015a:178)

The above legal structure significantly affects the RCo group's worldwide tax burden. As a result of this structure the direct tax consequences of the income from the sale of applications for the companies in the RCo group in State R, State T and State S can be summarised as follows:

- **State R**

All revenues from the sale of applications in State R are treated as income of TCo due to its role as counterparty to the transactions with local customers and administrator of the local app store (OECD, 2015a:179). As State R imposes corporate tax on income from a source in State R and does not have any controlled foreign company rules, RCo will not be subject to tax on the income earned by TCo from the sale of applications in State R (OECD, 2015a:180).

- **State T**

All the income from the sale of the applications worldwide will be subject to corporate tax in State T, which is in a low tax jurisdiction, due to TCo's role as counterparty to the transactions with customers and administrator of the local app store (OECD, 2015a:179).

- **State S**

All revenues from the sale of applications in State S are treated as income of TCo due to its role as counterparty to the transactions with local customers and administrator of the local app store (OECD, 2015a:179). State S cannot tax the profits derived from the app stores as it has no right to do so in terms of its domestic law or due to the absence of a PE in State S as the function of SCo in State S is limited to routine marketing and promotion services with no direct selling activity to State S customers (OECD, 2015a:179).

From the above, it can be seen that a group like RCo can structure its business in such a manner that minimal tax is paid in all jurisdictions in which it operates. In the illustration of the RCo group, one of the reasons why the worldwide profits from the app store are only subject to tax in State T (the low tax jurisdiction), is due to the absence of a PE in other states. This is as a result of the sales function of the app store being allocated to a subsidiary located in a low tax jurisdiction and the servers being owned

and operated in that low tax jurisdiction. This illustration can be likened to both Apple and Google. According to Duhigg and Kocieniewski (2012), Apple uses the subsidiary iTunes S.A.R.L located in Luxembourg to transact with customers worldwide. As a result, when songs, television shows and apps are downloaded by customers, the sales are recorded in this country at discounted rates (Cockfield *et al.*, 2013:188; Duhigg & Kocieniewski, 2012). Similarly, where consumers purchase from the Google app store in South Africa, the transaction is processed with the subsidiary Google Commerce Limited, a company located in Ireland, which has a corporate tax rate of 12.5% (Duhigg & Kocieniewski, 2012; Google, 2016).

The OECD's illustration specifically looks at the app store business model solely from the platform provider's perspective, omitting the tax consequences for the developers.

The next section will now consider the application of the PE concept to the app store business model from both the platform provider's and developer's perspective, taking into account the above typical tax planning structure. From the consideration of the PE concept in par. 3.4 it was decided to focus on the application of the following to the app store

- the general definition of a PE;
- the dependent agent PE; and
- the server PE.

3.5.2 Applying the general definition of a PE to the app store

The first consideration is whether a PE based on physical presence could be created in South Africa for the non-resident platform provider or developer in terms of the general definition of a PE in Article 5(1) of the OECD MTC.

As identified in par. 3.4.1 the general definition contains three conditions necessary for the existence of a PE in South Africa, namely

- the existence of a place of business;
- the place of business must be fixed; and
- the business of the enterprise must be wholly or partly carried on through the fixed place of business (Choudhary, 2011:43; OECD, 2010:92).

The activities carried on at that fixed place of business must not be merely preparatory or auxiliary in nature.

Both Apple and Google have physical premises at a fixed location in South Africa which may constitute a fixed place of business in terms of Article 5(1) of the OECD MTC. Apple has retail outlets located throughout the country, specifically for the sale of its mobile devices and accessories. Google recently opened an office in Johannesburg, South Africa (Haffajee, 2015). Although an “office” or “place of management” is specifically included as an example of a PE in Article 5(2), it must still meet the general definition of a PE in Article 5(1). It is, however, questionable as to what extent these locations are at the disposal of these companies for the specific purpose of running their internet app store businesses in order for the app store business to be regarded as being carried on through these premises.

Even if there were activities relating to the app store business carried on at these locations, it would need to be determined whether these activities form an essential and significant part of the app store business as a whole and are thus not preparatory or auxiliary (OECD, 2010:102). Based on the illustration of the typical tax planning structure of an internet app store in par. 3.5.1, it is submitted that the activities carried on at these locations would be limited to the marketing and promotion of the app store rather than direct sales of applications and would therefore be preparatory or auxiliary in nature (OECD, 2015a:179). It is unlikely that a fixed place of business under these circumstances would create a PE for the platform providers in South Africa.

Similarly, where a non-resident developer does not have premises at a fixed location in South Africa or the activities conducted at those premises are not considered a significant and essential part of its business activities as a whole, no PE would be created in South Africa for that developer.

3.5.3 Applying the dependent agent clause to the app store

The second consideration is whether a PE based on agency could be created in South Africa for the non-resident platform provider or developer in terms of Article 5(5) of the OECD MTC.

As identified in par. 3.4.3, the activities of an agent may create a PE for an enterprise under the following conditions

- the agent has and habitually exercises an authority to conclude contracts binding on the foreign enterprise; and
- the agent is not independent and does not act in the ordinary course of his business.

As platform providers do not make use of agents (persons who act on their behalf) in a country, Article 5(5) will not apply to them. However, it has already been found in par. 2.4 that platform providers act as agents or commissionaires of developers when sales are made to customers worldwide (Apple, 2014; Google Play 2016f). It must be determined whether the activities of platform providers as agents or commissionaires in South Africa would create a PE for a developer in South Africa. Before this is done, the differences between agency and commissionaires are considered briefly.

According to Parada (2013:60), an agency is a legal relationship in which one person, an agent, is authorised to act on behalf of another person, a principal, and empowered to do what a principal could lawfully do in person. In an agency relationship there is only one contract, i.e. between the principal and the third party. Under common law virtually all contracts made by an agent bind a principal even if the principal's existence is undisclosed (Parada, 2013:60).

According to Parada (2013:62), a commissionaire is an intermediary that sells products to customers in its own name but for the account of an undisclosed principal. In the commissionaire relationship there are two contracts, namely one between the principal and the commissionaire and one between the commissionaire and the third party customer. Since the commissionaire acts in its own name, it is the only one personally liable to the third party customer (Parada, 2013:62-63).

According to the OECD (2015b:9-10), a foreign enterprise that uses a commissionaire arrangement will only have a PE in terms of Article 5(5) to the extent that the contracts concluded by the commissionaire are binding on the foreign enterprise. Darby (2006:15) states that a commissionaire's actions are not legally binding on a principal as a customer cannot directly sue the principal since there is no contractual relationship between the parties. On the other hand, an agent acting on behalf of an undisclosed

principal binds the principal, and a customer may therefore sue the principal as a result of a contractual relationship between the two (Darby, 2006:15). In the 2010 case of Zimmer Limited, a UK parent company who sold orthopaedic products in France through its subsidiary Zimmer SAS as commissionaire, the French Supreme Court concluded that the sales contracts concluded by Zimmer SAS in its own name but on behalf of its principal, did not legally bind the principal in relation to its clients and accordingly Zimmer SAS could not be regarded as a PE of its principal (Delorme, 2010:1-2; Wittendorff, 2010:361).

Based on the above, it is submitted that the activities of Apple (more so as it uses commissionaire arrangements) and Google, made on behalf of developers, would only create a PE for non-resident developers in South Africa, to the extent that Apple and Google have the authority to bind the developers when transacting with customers. This is also provided that Apple and Google are not acting independently and in the ordinary course of their businesses.

The following factors indicate that platform providers are acting independently in terms of the guidance given by the OECD (2010:107-108):

- Platform providers act as intermediaries for the sale, marketing and distribution of applications on behalf of developers (Apple, 2014; Google Play 2016f). They therefore perform activities pertaining to an agent and are acting in the ordinary course of their businesses as agents.
- While platform providers must account for every sale made on behalf of a developer, they are not subject to detailed instructions or control as to how the work must be performed.
- Developers rely on the platform provider's software, operating systems and technological infrastructure in order to distribute and facilitate payment for the sale of their applications to customers (Apple, 2014; Google Play, 2016f). They therefore rely on the special skill and knowledge of platform providers.
- Platform providers perform activities for many developers around the world. They are not wholly reliant on one customer for their income.

Considering all these factors, it is unlikely that the sale and distribution of applications and digital content by a platform provider in South Africa would result in the creation of a PE in South Africa for the developer on the basis of agency.

3.5.4 Applying the server PE to the app store

The last consideration is whether a PE based on the operation of a server could be created in South Africa for the non-resident platform provider or developer in terms of paragraph 42.1-42.10 of the OECD MTC Commentary.

As identified in par. 3.4.4.2, a server would only constitute a PE for the enterprise carrying on business through a website if the enterprise owns or leases and operates the server on which the website is hosted (OECD, 2010:111; Oguttu & Tladi, 2009b:83). It is therefore submitted that a platform provider or developer would only create a PE in this instance if the internet app store were hosted on a server that it owned or leased and operated in South Africa. Furthermore the server must be located in South Africa for a sufficient period of time and the activities carried on through it must not be preparatory or auxiliary in nature (Cockfield, 2001:1190-1191; OECD, 2010:111-112). Par. 3.4.4.2 provides examples of instances where the activities carried out by a server may be considered preparatory or auxiliary.

There has been extensive criticism regarding the use of a server as a PE. According to Azam (2007:13) there is no justification for giving the sole right to tax income from e-commerce to the country where the server is located because often there is no real economic allegiance between the place of the server and the production of income. One of the main arguments against the server PE is the opportunities it presents for tax planning. Companies can reduce their worldwide tax liabilities by ensuring that servers which perform core activities, like placing orders and payments, are located in low or nil tax jurisdictions while servers located in target markets perform mere preparatory or auxiliary functions like advertising or collecting information (Cockfield, 2001:1196-1199; Pinto, 2003:121).

Alternatively, companies' websites may be hosted on foreign owned servers in source countries thus avoiding the server PE (Cockfield, 2001:1196-1199). There are millions of servers around the world which could potentially create PEs in multiple countries making the attribution of profits to these servers administratively unfeasible for tax authorities who have to determine the amount of value added provided through each servers' functions (Choudhary, 2011:51; Cockfield, 2001:1198; Cockfield *et al.*, 2013:131-132). Another issue raised by Pinto (2003:108,127) is that while servers may be located in a physical place they may be periodically moved from country to country, making it less likely for the server to be considered as fixed in terms of the PE definition.

According to the OECD (2010:124-125), several OECD member countries have expressed negative views regarding the use of a server as a PE. In the UK's view, a server used by an e-tailer, either alone or together with websites, could not constitute a PE. Chile, Greece and Portugal have also expressed reservations to the OECD Commentary on e-commerce (OECD, 2010:124-125; Oguttu & Tladi, 2009b:85-86). France adheres to the OECD principles regarding e-commerce and considers the existence of personnel in France operating a company's server to constitute a PE in France (DTC, 2015:10).

In the Indian case of ITO v Right Florists Pvt Ltd (2011), the taxpayer was a florist based in India who advertised on Google and Yahoo search engines and made payments for online advertising to Google Ireland Limited and Overture Services Inc. USA (Yahoo USA). In determining whether the payments received by Google Ireland and Yahoo USA were taxable in India, the Tribunal considered whether these entities could be said to have a PE in India. It was concluded that a search engine, which only has a presence through a website, cannot have a PE unless its servers were located in the same jurisdiction, which was not the situation in this case (DTC, 2015:13).

As a non-OECD member country, South Africa has not expressed any reservations to the OECD Model Convention; it can therefore be assumed that the SA courts could accept the OECD interpretation of servers as PEs (Oguttu & Tladi, 2009b:86).

From the above it can be seen that the hosting of an internet app store on a server owned or leased and operated in South Africa, may create a PE in South Africa under certain circumstances. While there is no guidance from SA tax authorities regarding the operation of a server PE in South Africa, based on the typical tax planning structure of the app store (as detailed in par. 3.5.1), it is possible that these servers may be located in low or nil tax jurisdictions so as to avoid PE status in South Africa.

3.6 The OECD BEPS Action 7 proposed amendments to the PE concept

In 2015, the OECD released its Action 7 BEPS Report on Preventing the Artificial Avoidance of Permanent Establishment Status which proposed changes to the PE concept in Article 5 of the OECD MTC in order to prevent the use of the following arrangements, which were considered to enable foreign enterprises to operate in a country without creating a PE (EY, 2015; OECD, 2015b:9-10)

- commissionaire arrangements; and
- the fragmentation of activities to make use of the specific activity exemptions.

A brief outline of the proposed changes relevant to this study is given below in order to determine what effect this could have on the PE status of non-resident platform providers and developers in the app store business model.

3.6.1 Commissionaire arrangements

A detailed discussion of commissionaire arrangements was provided in par. 3.5.3. The Action 7 Report proposes amendments to Article 5(5) of the OECD MTC to deem a PE to exist where a person habitually concludes contracts, or habitually plays the principal role leading to the conclusion of contracts that are routinely concluded without material modification by the enterprise; and these contracts are

- in the name of the enterprise; or
- for the transfer of ownership of, or the granting of the right to use property owned by that enterprise; or
- for the provision of services by that enterprise (EY, 2015; OECD, 2015b:16).

The proposed revision to the OECD Commentary clarifies that the provisions of the proposed Article 5(5) will apply to contracts for the transfer of ownership or the granting of the right to use the principal's property or the provision of services *even though these contracts are concluded by a commissionaire* on behalf of its principal and does not legally bind the principal to the third parties (EY, 2015; OECD, 2015b:20).

As a result of the above, the activities of commissionaires may now create a PE for their principals. The application of the proposed changes to the income received by non-resident developers is, however, not significantly different from that discussed in par. 3.5.3 as even though Apple acts as a commissionaire when transacting on behalf of developers, PE status may still be avoided due to the independent status of Apple.

3.6.2 The anti-fragmentation rule and the specific activity exemptions

As discussed in par. 3.4.2 the specific activity exemptions involve activities relating to the storage, display or delivery of goods and the purchasing of goods or collecting of information. The Action 7 report proposes to modify the list of exemptions in Article 5(4) such that *each exemption will be restricted to activities that are auxiliary or preparatory in nature* at the option of the country (EY, 2015; OECD, 2015b:28).

The proposed changes to the OECD Commentary define an activity of a preparatory nature as one that is carried on in contemplation of the carrying on of the essential and significant activity of the enterprise as a whole (OECD, 2015b:30). An auxiliary activity is one that is carried on to support without being part of the essential and significant part of the activity of the enterprise and does not require a significant portion of the assets or employees of the enterprise (EY, 2015; OECD, 2015b:30).

An example provided by the OECD (2015b:31) illustrates the effect of the proposed changes to an enterprise whose main business is the online sales of tangible goods. The presence of a large warehouse in a country where a number of employees work for the main purpose of storing and delivering the goods that the enterprise sells online may now constitute a PE as the activities constitute an essential part of the enterprises sales and distribution business such that it would not be preparatory or auxiliary in nature (EY, 2015; OECD, 2015b:30).

It is, however, unclear how the above example would apply to an entirely digital business model like the app store in which the advertising, purchasing, payment and delivery of digital products all occur online without the need for physical premises and to what extent this would apply to the server PE.

According to Hongler and Pistone (2015:14), only with regard to certain enterprises of the digital economy that sell physical goods and currently benefit from the exceptions of warehouses or showrooms would the proposed amendments to the PE definition limit the risk of BEPS or change the income allocation among countries. There would be little effect on enterprises that sell intangible goods and services (Hongler & Pistone, 2015:2).

In addition to the proposed changes to the specific activity exemptions, the Action 7 report proposes the inclusion of a new anti-fragmentation rule by adding a new sub-par. 4.1 to Article 5. The effect of the new anti-fragmentation rule is that a PE may exist if an enterprise or a connected enterprise carries on business activities at the same location or at different locations in the same country and the activities constitute complimentary functions that are part of a cohesive business operation and, when combined, could not be considered preparatory or auxiliary (EY, 2015; OECD, 2015b:39).

It is, however, unclear how this rule may apply to a digital business model like the app store where the tax planning structure enables the splitting of functions among servers located in different countries so as to make use of the preparatory and auxiliary exclusion as the anti-fragmentation rule applies specifically to the activities conducted at locations in the same country.

3.7 Conclusion

In this chapter it was found that the income from the sale of application software, digital goods and services and advertising space in the app store could not be classified as royalties but should be dealt with as business profits under Article 5 and 7 of the OECD MTC. In terms of Article 5 of the OECD MTC, South Africa could only exercise its taxing rights over the business profits of non-resident platform providers and developers from the sale of apps and digital content in apps to SA consumers if a PE was created in

South Africa for the platform provider or developer. The application of the PE concept to the income received by platform providers and developers from the app store revealed that a PE would be created in South Africa in very limited circumstances. This is due to the fact that the PE concept focuses on the existence of a physical presence or agency presence in South Africa which proves difficult to apply in the context of a digital business model like the app store. The typical tax planning structure of the app store also enables a PE to be avoided in the countries in which the digital goods and services are sold.

A PE based on a fixed place of business may be avoided by allocating the sales functions of the app store to a subsidiary physically located in a low tax jurisdiction. A PE for developers based on agency may be avoided as platform providers who act on behalf of developers in a country are likely to be independent. A server PE may be avoided by the app store being hosted on a server that is located in a low tax jurisdiction or by allocating preparatory and auxiliary functions to servers located in the countries where the apps are sold. As a result of these difficulties, it was found that the current SA direct tax legislation cannot be successfully imposed on the income from non-resident app stores.

This chapter determined what the applicable SA direct tax legislation for the income from non-resident app stores is, with a focus on the application of the PE concept to the app store business model in order to determine the difficulties with the application of the legislation. In so doing, it addressed the second secondary objective of this study as identified in par. 1.5.2 (ii).

Due to the difficulties of imposing direct tax on the income from e-commerce transactions under the PE concept, various potential alternatives have been raised by the OECD and academics in the tax field. The following chapter considers two of these potential alternatives in the context of the app store, namely a new PE nexus based on significant economic presence and a withholding tax on digital transactions. These alternatives will be applied to the app store business model in order to determine the challenges faced with each alternative.

CHAPTER 4: THE ALTERNATIVES TO IMPOSE DIRECT TAX ON THE INCOME FROM NON-RESIDENT APP STORES

4.1 Introduction

The previous chapter considered the application of the PE concept to the income of non-resident platform providers and developers from the sale of apps and digital content in the app store. It was found that the intangible nature of app store transactions and the typical tax planning structure of the app store made it possible for the app store to sell to consumers in South Africa without having a physical or agency presence in South Africa, which prevented South Africa from imposing direct tax on this income. The result was that this income was taxed in the country of residence of the platform providers and developers which were found to be in low tax jurisdictions in the case of platform providers.

In order to address the difficulties of the current PE concept to appropriately account for income from digital business models like the app store, various potential alternatives have been suggested by the OECD and various academics in the field. This chapter seeks to provide an analysis of the two most prominent alternatives raised by the OECD to impose direct tax on income from the digital economy, namely a new PE nexus based on significant economic presence and a withholding tax on digital transactions (OECD, 2015a:107-115). The aim of the analysis is to determine the areas of difficulty with the specific application of these alternatives to the app store. In doing so, this chapter will address the secondary research objective as identified in par. 1.5.2 (iii).

4.2 Source-based taxation and electronic commerce

As both the potential alternatives of a new PE nexus and a withholding tax on digital transactions advocate using the source-basis of taxation to tax the income from electronic commerce transactions (Hongler & Pistone, 2015:3; Pinto, 2003:191,207), it is fitting to begin the chapter with a brief overview of the theoretical basis for source-based taxation and its continued relevance to electronic commerce transactions. As identified in par. 3.2, the source-basis of taxation entitles a country to tax income when

the activities or property that generated that income took place or is located within its borders.

One of the principles underpinning source-based taxation is the benefit theory, which asserts that as a taxpayer receives certain benefits and services from the country in which its income originated, that country should be compensated for the cost of providing those public services by obtaining the right to tax the taxpayer's income (McLure, 2000:6:3; Pinto, 2007:288). The benefits provided by source countries include education (the availability of labour), police, fire and defence protection, operational legal infrastructure and specific government policies such as maintaining stable exchange rates and low interest rates (Avi-Yonah, 1997:521; Pinto, 2003:19).

There has been differing views regarding the applicability of the benefit theory to electronic commerce. According to McLure (2000:6:5-6), the application of the benefit theory in a pre-digital world suggests that a physical presence is probably needed as most of the public services mentioned benefit businesses that have a physical presence in a country. Hongler and Pistone (2015:21) state that one of the reasons why a physical presence was needed for source taxation is that when the benefit theory was developed and the PE definition was implemented, there was neither a digital world nor computers, therefore, the application of the benefit theory focused on physical benefits which were provided to enterprises with a physical presence.

However, scholars have suggested that even in the absence of a physical presence in a source country, there are significant benefits provided to non-resident enterprises carrying on business digitally in a country which should not prevent a source country from exercising its taxing rights on the business profits of these enterprises in order to be compensated for providing these benefits (Hongler & Pistone, 2015:22; Olbert & Spengel, 2016:15).

The benefits which enable these digital enterprises to offer their products online include the following

- a legal system;
- the enforcement of customers' payments;
- the protection of intellectual property rights;

- a telecommunications infrastructure;
- a stable business environment;
- the supply of energy and waste recycling;
- consumer protection laws; and
- infrastructure for the physical delivery of goods (Hongler & Pistone, 2015: 22; OECD, 2015a:26; Pinto, 2003:22).

Another argument in favour of source-based taxation of electronic commerce relates to the problems associated with an exclusive residence-based system. As identified in par. 3.2.1, a person other than a natural person would be taxed on a residence basis where the person is incorporated or formed in a country or if its “place of effective management” is in that country. According to McLure (2000:6:7), the place of effective management test used throughout the world as a test for residence can be easily segregated from the place where production occurs. In addition, determining the residency of e-commerce companies can be difficult as a physical presence of a central place of management and control is limited due to the mobility of the company (Azam, 2007:9). Cockfield *et al.* (2013:464-465) state that the accuracy of the place of effective management test declines in a globalised business as there may not be a single location where management decisions are made; they may be made in many jurisdictions or through video conferencing. The place of incorporation under the residence test is also open to abuse as companies can be located in tax havens in order to reduce or escape taxation (Azam, 2007:9; McLure, 2000:6:7; Wong, 2008:45-46).

According to Schaefer (2000:135), an exclusive residence based tax system would also create an imbalance between wealthier developed countries and poorer developing countries. As developed countries are predominantly net exporters of e-commerce, a residence based system would disadvantage developing countries as they would no longer be able to tax the income of foreign companies that carry on business within their borders due to this income being taxed solely in the country of residence (the developed countries) (Schaefer, 2000:135; Wong, 2008:46). It is unlikely that this would be acceptable to developing countries as it adversely affects their tax revenues and does not amount to a fair sharing of the tax base (Schaefer, 2000:135; Wong, 2008:46).

Baez and Brauner (2015:5) state that the current norms of the international tax regime suggest that source taxation is not justified for companies in the digital economy given that their principal participation with a source country is the supply of goods and services to its customers. However, the mere volume of the digital economy and the flexibility of its business models to operate in a way that increasingly escapes taxation at source or altogether, supports the claims of source countries for source-taxation of this income. The arguments for source-taxation of income from the digital economy is, therefore, two-fold and includes firstly countering BEPS and secondly ensuring that a fair and legitimate balance between source and residence taxation is maintained (Baez & Brauner, 2015:5).

Based on the above arguments it can be concluded that source-based taxation remains relevant and justifiable for e-commerce transactions. However, due to the current focus on physical presence under the PE concept and the difficulties of its application to digital business models like the app store, it has been suggested that source needs to be redefined specifically to deal with e-commerce. In order to address the challenges associated with taxing e-commerce transactions from a direct tax perspective, the OECD raised two potential alternatives in its 2015 BEPS Action Plan. The next section briefly considers the parts of the OECD BEPS Action Plan which will apply to the app store and the relevance of this Action Plan to South Africa.

4.3 The OECD 2015 BEPS Action Plan

The OECD BEPS Action Plan was initiated in response to concerns regarding the tax planning strategies of multinational enterprises which sought to exploit gaps in countries' domestic tax laws in order to shift profits to low or nil tax jurisdictions (OECD, 2015a:11). The action plan was also a direct response to a request by the Group of Twenty ("G20"), an international forum for economic co-operation consisting of 19 countries, including South Africa (OECD, 2016a).

In 2013 the OECD published its first report entitled "Addressing Base Erosion and Profit Shifting" in which it described studies showing the impact of the profit shifting of multinational companies (Cavelti, Jaag and Rohner, 2016:6). Based on this report, the OECD launched its comprehensive Action Plan on BEPS in which it identified 15

actions required to address BEPS. Action One of the BEPS Action Plan was entitled “Addressing the Tax Challenges of the Digital Economy” and the aim of this action was to

- identify the difficulties posed by the digital economy to the application of the current international tax framework; and
- develop detailed options to address these difficulties from both a direct and indirect tax perspective (OECD, 2015a:16).

The relevance of the OECD BEPS Action Plan in the SA context is that even though South Africa is not a member of the OECD, as a member of the G20 it fully endorses the BEPS Action Plan (OECD, 2015a:16). In this regard, the following declaration was made by the G20 Leaders at their meeting in St. Petersburg in 2013:

“In a context of severe fiscal consolidation and social hardship, in many countries ensuring that all taxpayers pay their fair share of taxes is more than ever a priority. Tax avoidance, harmful practices and aggressive tax planning have to be tackled. The growth of the digital economy also poses challenges for international taxation. We fully endorse the ambitious and comprehensive Action Plan – originated in the OECD – aimed at addressing base erosion and profit shifting with mechanism to enrich the Plan as appropriate...” (DTC, 2015:5-6; OECD, 2015a:16-17)

From an indirect tax perspective, changes have already been made to the SA VAT legislation with effect from 1 June 2014 in order to ensure that foreign suppliers of electronic services are required to register for VAT in South Africa (South Africa, 2014). An “enterprise” is defined in paragraph (vi) of Section 1 of the Value-Added Tax Act (89 of 1991) as including the supply of electronic services by a foreign supplier where at least two of the following conditions are met:

- The recipient of the electronic service is a SA resident.
- The payment for the electronic service was made from a SA bank account.
- The supplier of the electronic service has a business, residential or postal address in South Africa.

The changes to the indirect tax legislation indicate South Africa’s commitment to cooperate with the OECD BEPS initiatives regarding the digital economy.

The Final Report on BEPS Action One was published in 2015 and included various potential alternatives to address the tax challenges created by the digital economy. Two of the most prominent of these potential alternatives were

- a new PE nexus based on significant economic presence; and
- a withholding tax on digital transactions (DTC, 2015:23; OECD, 2015a:13).

The OECD also raised a third potential alternative of an equalization levy which would be imposed on the value of digital goods or services paid for by customers and collected by the foreign enterprise or a local intermediary (OECD, 2015a:116). The equalization levy would be different to a corporate income tax but similar to an excise duty (not being a tax on income) which could be levied outside of domestic income tax legislation and tax treaties (Committee on Taxation of E-Commerce, 2016:77; OECD, 2015a:117). It could, therefore, be implemented without any changes to tax treaties. As this study focuses on the alternatives to impose *direct tax* on the income from non-resident app stores, the equalization levy would not be an alternative to impose direct tax and is therefore not considered further in this study.

While the OECD has not recommended the adoption of any of the potential alternatives at this stage, they have not been disregarded either. The report suggests that countries may adopt any of the alternatives in the short term, however, it also states that additional work will be performed on this action with the final outcome reported on by the year 2020 (Harnekar, 2016:49; OECD, 2015a:13). These options, therefore, still remain potential alternatives that may affect SA direct tax legislation in the near future should the OECD endorse them. The following section considers the first potential alternative to impose direct tax on the income from non-resident app stores, a new PE nexus based on significant economic presence.

4.4 A new PE nexus based on significant economic presence

This section considers the central features of the new PE nexus based on significant economic presence which was raised by the OECD in Action One of its 2015 BEPS Report on Addressing the Tax Challenges of the Digital Economy. In developing this alternative, the OECD considered the working paper by Hongler and Pistone (2015). As this working paper forms the basis of the OECD's proposal, it will also be considered in

this section. This section also provides an analysis of the features of the new PE nexus in relation to the app store business model in order to determine the areas of difficulty with the application of this alternative to the app store.

The notion of an adapted PE based on economic presence is not entirely new. Hinnekens (1998:195) was one of the first to suggest the possible policy approach of a “virtual permanent establishment”. The “virtual permanent establishment” approach sought to adopt a lower threshold for source-based taxation by creating a tax nexus in source countries even in the absence of a fixed place of business in that country (Hinnekens, 1998:195; Pinto, 2003:191). Hinnekens (1998:197) suggested that the virtual PE would still require a continuous and commercially significant business activity to be carried on in the market country which implied a combination of both quantitative and qualitative factors. Quantitative factors would include the level and volume of sales transactions and qualitative factors would include the presence of infrastructure such as websites and servers (Pinto, 2003:197). The finding of a virtual nexus would be based on a bundled facts and circumstances determination (Hinnekens, 1998:197).

The new PE nexus raised by the OECD in the 2015 BEPS Action Plan bears similarities to the possible approach suggested by Professor Hinnekens more than a decade ago. According to the OECD (2015a:107), this new PE nexus would create a taxable presence in a country when a non-resident has a significant economic presence in a country. The significant economic presence would be based on a combination of revenue-based, digital and user-based factors which indicates that an enterprise is interacting in a purposeful and sustained manner with the economy of that country using technology (OECD, 2015a:107; Olbert & Spengel, 2016:14). A brief overview of each factor is considered below as this will form the basis of the application to the app store.

4.4.1 Revenue-based factors

According to the OECD (2015a:107), the revenue generated from the customers of a country on a sustained basis is one of the clearest indicators of significant economic presence. In determining the revenue factor, it must first be determined what transactions will be covered and the level of the monetary threshold. In terms of the transactions covered, the OECD suggests including only revenue from digital

transactions with a country's customers conducted through an enterprise's digital platform which implies that the contract of sale must be concluded on an automated system (Harnekar, 2016:32; OECD, 2015a:107). Hongler and Pistone (2015:24) suggest that the new PE nexus could include any transaction where the non-resident provides access to

- an electronic application;
- a database;
- an online marketplace;
- a storage room to users in the source country; and
- offering advertising services on a website or electronic application used by users in the source country.

With regard to the level of the threshold, the proposal suggests that the revenue threshold be framed in absolute terms, in local currency and set at a high enough level to minimise the administrative burden of accounting for cases where minimal tax revenue would be collected (Harnekar, 2016:32; OECD, 2015a:107).

4.4.2 Digital factors

In addition to the revenue factors described above, the OECD suggests also including the following digital factors as part of the test of significant economic presence:

- **A local domain name** – the establishment of a localised domain name in a country by a non-resident enterprise indicates that an enterprise is targeting users in that country as it is more likely that a local user would use a local website.
- **A local digital platform** – the presence of a local website or digital platform offering goods and services in a country's local language with local marketing such as targeted discounts and promotions, and local terms of service indicates that a non-resident enterprise intends to interact with the customers in that country.
- **Local payment options** – the presence of a seamless purchasing experience where prices are reflected in a country's local currency with taxes, duties and fees already calculated and the option of using a local form of payment indicates that a non-resident enterprise intends to purposefully participate in a country's economic life (Cavelti *et al.*, 2016:15; Committee on Taxation of E-Commerce, 2016:66; Hongler & Pistone, 2015:24; OECD, 2015a:109).

4.4.3 User-based factors

In addition to the above digital factors, the OECD considers the following user-based factors to also be important indicators of participation in the economic life of a country:

- **Monthly active users** – this factor essentially determines the number of registered users which are habitually resident in a country that log into a company’s digital platform in a 30 day period.
- **Online contract conclusion** – this factor determines the number of contracts concluded through a digital platform with customers who are habitually resident in a country in the taxable year.
- **Data collected** – this factor takes into account the volume of digital content collected through a digital platform from users and customers resident in a country in a taxable year. The data would include personal data, user-created content, product review and search histories (Committee on Taxation of E-Commerce, 2016:70-71; Harnekar, 2016:33; Hongler & Pistone, 2015:25; OECD, 2015a:110).

When applying this potential alternative, the OECD states that there must at a minimum be a revenue factor combined with a selection of other digital or user-based factors and the choice of which other factors to use is driven by the unique features and economic attributes of each market (Harnekar, 2016:33; OECD, 2015:111). According to the OECD (2015:111), an important consideration is that there must be a link between the revenue-generating activity and the significant economic presence evidenced by the other factors. Even though the revenue generated from a country may exceed the threshold, there is less likely to be this link where negotiation with customers takes place outside the market country and the non-resident only has a passive website for providing product information with no functionality for transacting with customers (OECD, 2015:111).

From the above it can be seen that a number of factors would need to be considered in order to conclude that a PE based on significant economic presence has been created in a source country. These factors may prove to be difficult to apply in practice to the various business models in the digital economy. The next section considers the application of the new PE nexus to the app store in order to determine the difficulties which may arise.

4.5 Application of the new PE nexus to the app store

In order to facilitate an analysis of the new PE nexus in the app store context, it is worthwhile considering a standard definition for the new PE nexus which could be incorporated in tax legislation. In order to implement the virtual PE proposed by Professor Hinnekens in 1998, Pinto (2003:195) suggested expanding the existing definition of a PE in Article 5 or including a separate provision like Article 17 of the OECD MTC (which deals with the income of entertainers and sportspersons) in order to allocate taxing rights over e-commerce profits to the source country. Hongler and Pistone (2015:25) suggest expanding the existing Article 5 to include a new Article 5(8) defining the new PE nexus as follows:

“If an enterprise resident in one Contracting State provides access to (or offers) an electronic application, database, online marketplace, storage room or offers advertising services on a website or in an electronic application used by more than 1,000 individual users per month domiciled in the other Contracting State, such enterprise shall be deemed to have a permanent establishment in the other Contracting State if the total amount of revenue of the enterprise due to the aforementioned services in the other Contracting State exceeds **R5,000 000** per annum.”

The above definition has been adapted in order to apply this alternative to the app store in South Africa. This definition will be applied to the app store to firstly determine the extent to which a PE may arise in South Africa for a platform provider or developer selling apps and digital content to SA consumers, and secondly the analysis will highlight the areas of difficulty with the application of this alternative to the app store.

4.5.1 Application to the platform provider

As identified in par. 3.3 when apps and digital content are sold in the app store, 30% of the revenue is received by the platform provider. The effect of the new PE nexus on the platform provider can be summarised as follows:

- **Digital factor:** As the app store is essentially a virtual marketplace for the sale of software applications and digital content that are digitally downloaded onto users' mobile devices (Pon, 2015:14; Roma & Ragaglia, 2016:173), it follows that the sales

of the platform provider to SA consumers would meet the requirement to provide access to an online marketplace or offer an electronic application or advertising in an electronic application.

- **User-based factor:** In accordance with the above definition, a PE would only be created for the platform provider where the digital platform is used by more than 1,000 individuals in South Africa per month.
- **Revenue factor:** In accordance with the above definition, a PE would only be created for the platform provider where the total amount of revenue from the sale of apps and digital content in South Africa exceeded R5 000 000 per annum.
- **Other factors:** As both the Google and Apple platforms have separate national app stores in South Africa (Pon, 2015:115) with local payment options and prices reflected in SA currency, this indicates that they intend to purposefully participate in the economic life of South Africa and further supports the creation of a PE in South Africa.

The view of Hongler and Pistone (2015:57) is that the income from the platform provider (30% of each app sold) clearly relates to a digital presence in a source country and would fall within the new PE nexus. Based on the above, it can be concluded that a PE is likely to arise in South Africa for the platform provider under the new PE nexus provided the revenue and user-based thresholds are met.

4.5.2 Application to the developer

As identified in par. 3.3 when apps and digital content are sold in the app store, 70% of the revenue is received by the developer. The effect of the new PE nexus on the developer can be summarised as follows:

- **Digital factor:** While the developer does not provide access to an online marketplace (this is done by the platform provider), the developer does make use of the online marketplace to promote and sell its apps (Heitkoetter *et al.*, 2012:1-2). The sales of the developer to SA consumers would therefore meet the requirement to offer an electronic application or advertising in an electronic application.

- **User-based factor:** The above definition suggests that a PE would only be created for the developer where the electronic application is used by more than 1,000 individuals in South Africa per month.
- **Revenue factor:** The above definition suggests that a PE would only be created for the developer where the total amount of revenue from the sale of apps and digital content in South Africa exceeded R5 000 000 per annum.

The working paper by Hongler and Pistone (2015) does not address the implications of the new PE nexus for the developer. However, the above suggests that a PE is also likely to arise in South Africa for the developer under the new PE nexus provided the revenue and user-based thresholds are met.

The application of the new PE nexus definition to the app store seems fairly straight forward in general terms; however, various challenges and criticisms have been raised by commentators. These challenges are considered below.

4.5.3 Challenges for platform providers and developers

The new PE nexus would effectively mean that platform providers and developers would need to submit tax returns in every country in which their revenue from the sale of apps and digital content is above the monetary threshold. This would be a significant compliance burden for platform providers and developers given the global reach of the app store; Apple acts as agent or commissionaire in 151 countries and Google Play operates in 134 countries worldwide (Apple, 2014; Pon *et al.*, 2014:65). This would also necessitate the maintaining of accounting records in the source country's currency and according to its tax legislation (Pinto, 2003:219). Another criticism is that as the new PE nexus is determined by a revenue threshold, it could result in loss-making businesses having a tax compliance burden in a country (Hongler & Pistone, 2015:27).

In order to determine whether the threshold has been exceeded, non-resident businesses would also need to determine the country of residence of its consumers; the OECD has suggested this could be done through the tracking of internet protocol and card billing addresses (OECD, 2015a:105). In the context of the app store, it may be relatively easy for platform providers to determine both the location of its customers and

the revenue generated in each country given that both the Apple and Google platforms have national app stores in each country in which they operate and consumers are restricted to using their national app store which is determined by the location of their bank account or mobile carrier (Pon, 2015:115). Furthermore, app data analytics companies such as App Annie, which is used by the top developers to track the performance of their apps, could also assist developers in determining the market information for each country in which they sell apps (App Annie, 2016a:26). There would, however, be a cost involved for developers.

There is also uncertainty as to who would be a “user” for the application of the user-based and revenue-based factors, particularly in the internet advertising business model. Hongler and Pistone (2015:25) suggest that the user-based factor should be based on users and not consumers as the more users a company has in a source country the higher the level of value creation and infrastructure used by the non-resident in the source country. Basing the factors on users and not consumers, may create specific difficulties when applied to the in-app advertising monetization model as it implies that platform providers and developers would need to calculate what percentage of their advertising revenue was triggered by the amount of users who clicked on an ad in a specific country rather than the location of the customer (the advertiser) from which the income was received. It therefore may be more practical to use the residence of the customer (advertiser) to determine the revenue threshold in this case (Hongler & Pistone, 2015:54).

Another uncertainty arises when an enterprise has both a PE based on physical presence and significant economic presence in a country; the question arises whether that enterprise could be considered two taxpayers in the source country (Hongler & Pistone, 2015:38; Olbert & Spengel, 2016:16). This uncertainty is relevant to a company like Apple that may have a physical presence in a country through the manufacture and sale of its mobile devices as well as an economic presence from the sale of digital content through the app store (Apple, 2015:1). Additional guidance is needed in this respect before the new nexus can be implemented.

4.5.4 Challenges for tax authorities

In addition, tax authorities may also face difficulties in enforcing the new PE nexus as they would need to identify foreign enterprises who sell digitally in a country without any physical presence (OECD, 2015a:105). While the identification of non-resident platform providers (Apple and Google) selling in South Africa is relatively easy due to their widely known local websites with local domain names, it will be harder to identify non-resident developers who sell apps and digital content in South Africa as their identity and residency is mostly only known by the platform providers. In this regard it has been suggested that a mandatory registration system is introduced in order to identify companies that meet the factors for a new PE (OECD, 2015a:107).

Another difficulty arises for tax authorities to determine whether the platform providers' and developers' sales in South Africa have reached the minimum threshold as it is unlikely that their accounting records would be available in South Africa. It may be possible to obtain this information from third parties like customers or payment intermediaries but this would depend on privacy or financial laws (OECD, 2015a:105). In order to verify the extent of the sales activity of platform providers and developers in South Africa, SA tax authorities may seek the exchange of information about the non-resident platform providers and developers from other tax authorities. The OECD Convention on Mutual Administrative Assistance in Tax Matters, of which South Africa is a party, provides for the co-operation among countries in the assessment and collection of taxes through exchange of information and recovery of foreign tax claims (DTC, 2015:30; OECD, 2016b). However, the effectiveness of this tool would depend on the SA tax authority's knowledge of the location of platform providers and developers and the information retained or accessible by the other tax authorities (OECD, 2015a:105).

4.5.5 Profit attribution challenges

Another consideration with regard to the new PE nexus is the attribution of profits to the significant economic presence. Article 7(1) of the OECD MTC states that even though an enterprise may have a PE in a source country; the source country may only tax the profits that are attributable to that PE (OECD, 2014:28). The determination of the profits attributable to a PE is a two-step process which involves the following:

- Firstly, a PE must be treated as separate and independent to the enterprise it is a part of by performing a functional and factual analysis to identify the functions it performs, the assets it uses and the risks it assumes.
- Secondly, in determining the value to be allocated to these functions, assets and risks, any transactions the PE has with associated enterprises must be priced at arm's length in accordance with the OECD Transfer Pricing Guidelines (De Koker & Brincker, 2010; OECD, 2010:135).

The current rules of allocating profits to a PE based on an analysis of the functions, assets and risks of the enterprise would no longer be suitable for the new PE nexus (Hongler & Pistone, 2015:32; OECD, 2015a:112; Olbert & Spengel, 2016:15). According to the OECD (2015a:111), as the new PE nexus associates significant economic presence with little physical presence in terms of tangible assets and personnel in a country, it is unlikely to involve the carrying on of functions in the traditional sense. Adjustments would therefore need to be made to the existing rules to address the income from the new nexus or alternative methods of attribution would be needed. In this regard the OECD considered the following two alternative options:

1. **Fractional apportionment** – this option involves apportioning the profits of the enterprise to the digital presence based on a predetermined formula or various allocation factors. As this method results in a departure from the existing international framework and it would lead to different results for the traditional and new PE nexus, it was not pursued further by the OECD (Harnekar, 2016:34; OECD, 2015a:112).
2. **Deemed profit method** – this option determines the deemed net income of a non-resident by applying a ratio of presumed expenses to the non-residents revenue, based on the related industry and type of product supplied (OECD, 2015a:112). However, this option creates challenges for large multinationals operating in many lines of business that would need to apply multiple industry specific ratios to the business. It may also result in a taxable profit in a country even where the company is in a loss-making position (Harnekar, 2016:34; OECD, 2015a:113).

Without any consensus at this stage on the appropriate method of attributing profits to the new PE nexus, there remains a challenge for platform providers and developers to determine profits attributable to each country in which they have a significant economic

presence, especially as they are likely to have little assets or significant personnel functions in the source country which could facilitate a functional analysis under the current attribution rules.

4.5.6 The principle of neutrality

It was decided at the 1998 Ottawa Ministerial Conference on Electronic Commerce that the taxation framework principles which applied in conventional commerce should also apply to electronic commerce (OECD, 2015a:17). One of the principles of this framework is the principle of neutrality which states that “taxation should seek to be neutral and equitable between forms of electronic commerce and between conventional and electronic forms of commerce. Business decisions should be motivated by economic rather than tax considerations. Taxpayers in similar situations carrying out similar transactions should be subject to similar levels of taxation” (OECD, 2015a:17).

There are differing views regarding the application of the neutrality principle. The TAG stated that the introduction of a virtual PE would violate the neutrality principle where this option results in different outcomes for traditional and electronic forms of commerce (OECD, 2001:17). Cavelti *et al.* (2015:16-17) state that applying different parameters to different business models would lead to discrimination and arbitrary results. Traditional business models would be taxed according to physical connection while e-commerce business models would be taxed according to the location of its customers. An example is provided of a steel producer and a software developer who are both resident in the same country and sell goods to a non-resident company. The steel producer ships goods overseas while the software developer transmits products digitally to customers. While both the steel producer and the software developer do not have a physical presence in the non-resident country, the introduction of a digital PE would mean that the software developer could be subject to tax in the source country while the steel producer is not (Cavelti *et al.*, 2015:16-17).

Pinto (2003:199), however, argues that non-neutral outcomes are also created when traditional business models are taxed in a source country on the basis of physical presence while e-commerce business models that obtain substantial profits from a source country escape taxation in that country due to the lack of a physical presence. The introduction of a virtual PE would ensure that these e-commerce businesses face

the same tax burden as foreign enterprises operating through a fixed place of business and domestic enterprises that are residents in the source country, thus supporting the neutrality principle (Pinto, 2003:199).

In summary, this section considered the main features of the first potential alternative to impose direct tax on the income from non-resident app stores. The above analysis revealed that there are a number of difficulties and uncertainties with regard to the application of the new PE nexus in general and to the app store which indicates that clearer guidance is needed before this alternative can be effectively implemented. The next section will consider the application of the second potential alternative to impose direct tax on the income from non-resident app stores, a withholding tax on digital transactions, in order to determine the difficulties with this option.

4.6 A withholding tax on digital transactions

The second alternative raised by the OECD in Action One of the 2015 BEPS Action Plan was the introduction of a withholding tax on digital transactions. In developing this alternative, the OECD considered some elements of the recent working paper by Baez and Brauner (2015). This section provides an analysis of the features of a new withholding tax on digital transactions in relation to the app store business model in order to determine the areas of difficulty with the application of this alternative to the app store.

The option of a withholding tax on digital transactions has been raised previously by various scholars. Avi-Yonah (1997:537) proposed the introduction of a withholding tax at the corporate tax rate on sales provided through electronic means with the option of a refund should the taxpayer file a tax return on a net basis. A base-erosion withholding tax was proposed by Professor Doernberg which would permit a source country to withhold tax on any payment that is considered to erode the country's tax base (Pinto, 2003:174,177). According to Pinto (2003:177-178) a payment was considered to erode the source country's tax base if it were either deductible by the purchaser in the source country or it was included as part of his cost of goods sold. Hence under the base-erosion approach, private consumers would not be subject to the withholding tax as they generally would not deduct these costs for tax purposes (Pinto, 2003:182).

Finally, Pinto (2003:207-210) proposed the imposition of a refundable withholding tax by the source country on all international transactions where goods and services are provided electronically (e.g. computer software) or purchased through electronic means (e.g. physical goods) to the extent that the gross sales of the non-resident seller exceeds a set monetary threshold. The more recent work by the OECD (2015a) and Baez and Brauner (2015) on a withholding tax on digital transactions bears similarities to these proposals which were raised in the past. The new withholding tax on digital transactions raised by the OECD would be imposed on certain payments made to non-resident suppliers of goods and services ordered online or the use of the withholding tax as a collection mechanism and enforcement tool to support the new PE nexus option (Baez & Brauner, 2015:4; OECD, 2015a:113).

The recent working paper by Baez and Brauner (2015:2,13) proposes a globally standard 10% withholding tax on base-eroding payments made to non-resident vendors for electronic commerce goods and services with specific exemption from the withholding tax for non-residents who are registered on a net-taxation basis. As the scope of the withholding proposal by Baez and Brauner (2015) is intended for business to business (B2B) transactions, it would not apply to a business to consumer (B2C) business model such as the app store (Baez & Brauner, 2015:3, 12; Olbert & Spengel, 2016:17). This proposal will therefore not be considered in detail in this study. However, the refundable withholding tax proposed by Pinto (2003) would apply to B2C transactions and will therefore be considered further in this study in order to facilitate an analysis of this alternative in respect of the app store.

Pinto (2003:207-210) proposed the imposing of a refundable withholding tax by the source country on all international transactions where goods and services are provided electronically (e.g. computer software) or purchased through electronic means (e.g. physical goods) to the extent that the value of that enterprise's gross sales exceeds a set monetary threshold.

This withholding tax would include the use of a gross sales threshold and would work as follows:

- Where the seller's gross sales into a country is below the minimum threshold, the seller would need to file a tax return in the source country in order to receive a full refund for the taxes withheld. The seller would, therefore, not be subject to any tax in the source country.
- Where the seller's gross sales exceeds the minimum threshold, the seller would be subject to withholding tax in the source country. However, the seller may elect to file a tax return in the source country in order to be taxed on a net-basis instead (Avi-Yonah, 1997:537; Oguttu & Tladi, 2009b:94; Pinto, 2003:210).

Figure 4-1 below is an illustration of the refundable withholding tax approach.

THE REFUNDABLE WITHHOLDING TAX ON DIGITAL TRANSACTIONS

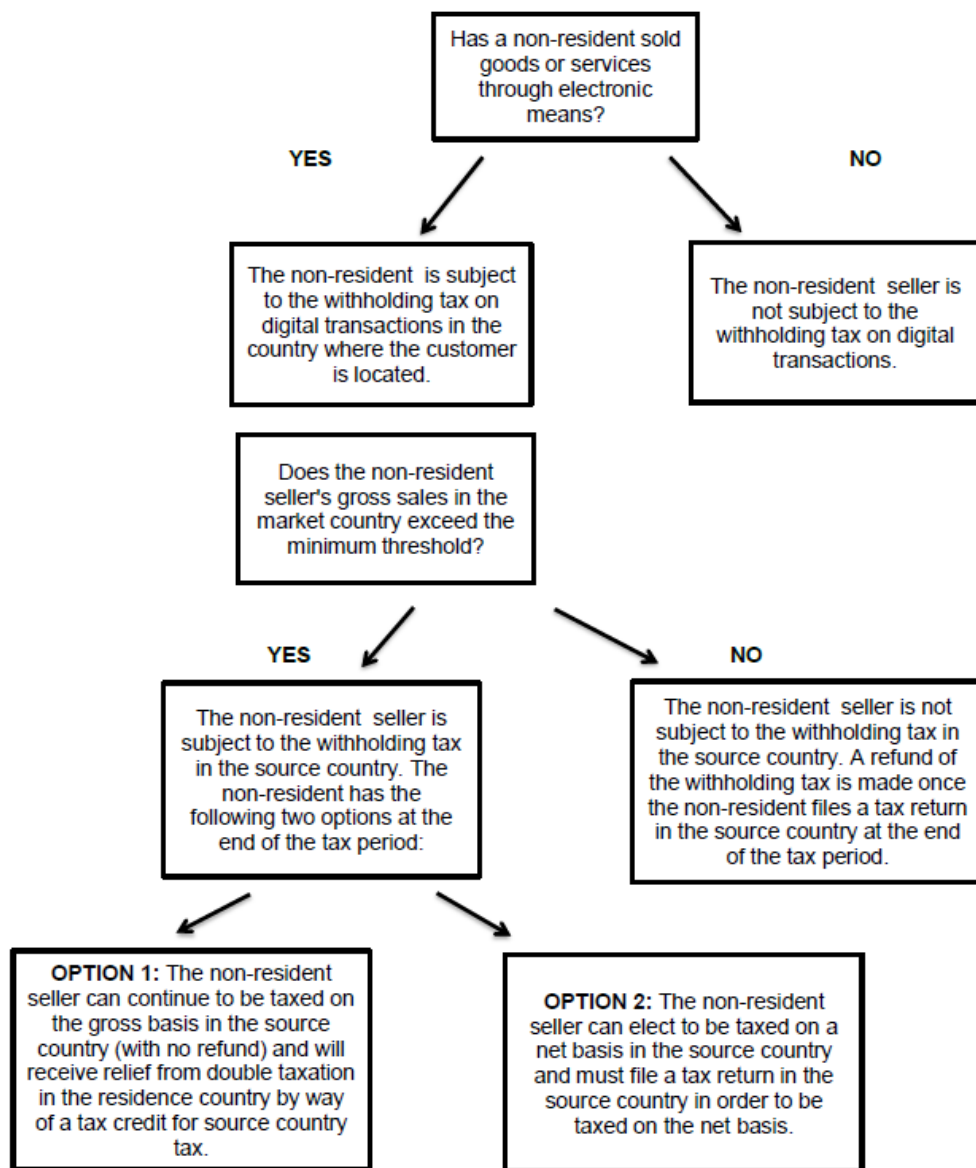


Figure 4-1: The refundable withholding tax on digital transactions
(Source: Compiled by author)

According to Pinto (2003:211-221), there are four central issues to consider when developing a refundable withholding tax on digital transactions

- the determination of a numerical threshold;
- the rate;
- the ability to adopt net-filing; and
- the implementation of the withholding tax mechanism.

Each of these central features will be considered in further detail in order to gain an understanding of how this withholding tax would operate.

4.6.1 The determination of a numerical threshold

The refundable withholding tax approach proposes the use of a numerical threshold, total gross sales, in a source country in order to determine tax nexus in a source country (Oguttu & Tladi, 2009b:94; Pinto, 2003:211). According to Pinto (2003:212), the advantage of the use of a gross sales threshold is that a quantitative criterion would offer clarity and certainty in determining nexus. In addition it is proposed that a high threshold is used in order to reflect that significant business operations are required for source country taxation and to prevent a business from being taxed in every country in which it operates which would be administratively expensive, inefficient and would stifle the growth of e-commerce (Pinto, 2003:213-214).

4.6.2 The rate

Another important consideration in a withholding tax based system is the rate that is used. Pinto (2003:218) suggests that a low rate is used in order to ensure that where the taxpayer is subject to tax on the same income in the residence and source countries, a full credit for source country taxation would be received in the residence country. Another reason for the use of a low rate is due to the fact that withholding would not only affect enterprises whose income exceeds the minimum threshold, but also those enterprises that are below the threshold but must file a tax return in order to receive a refund (Pinto, 2003:219-220).

4.6.3 The ability to adopt net-filing

The withholding proposal suggests the use of an option to file tax returns in a source country on a net basis (Pinto, 2003:219). The net filing option would apply in the following three instances:

1. Firstly, the net filing option would enable those taxpayers whose gross sales were below the minimum threshold but were still subject to withholding tax to receive a refund of the tax withheld at the end of the relevant period.

2. Secondly, the net filing option would enable those taxpayers whose gross sales exceeds the minimum threshold to elect to be taxed more favourably on the net basis at the end of the period (Pinto, 2003:219-220).

4.6.4 The implementation of the withholding tax mechanism

In order to facilitate the implementation of the withholding system, it is firstly suggested that a mechanism is established in order to identify and record sales made in the source country, the country in which the consumer is located (Pinto, 2003:221). In this regard, Pinto (2003:222) suggests the use of credit card billing addresses supplied by customers when they make purchases digitally or the use of a digital certificate.

The second consideration with regard to implementation is how the withholding will be facilitated. It may be feasible to impose a withholding burden on businesses, however, requiring withholding from customers would be more challenging as consumers do not have the experience or incentive to declare and pay the tax and enforcement of small amounts of tax from large volumes of consumers may be administratively burdensome (Baez & Brauner, 2015:17; OECD, 2015a:114). It is therefore suggested that the withholding tax be collected by a local collecting agent like a financial intermediary (OECD, 2015a:114; Wong, 2008:271). Pinto (2003:223) states that these intermediaries should be compensated for the additional costs of withholding the tax by retaining a portion of the tax which would create an incentive to assist in the withholding process.

Figure 4-2 below illustrates how the withholding mechanism may work.

The Pinto Proposal is illustrated with an example, as follows:²¹

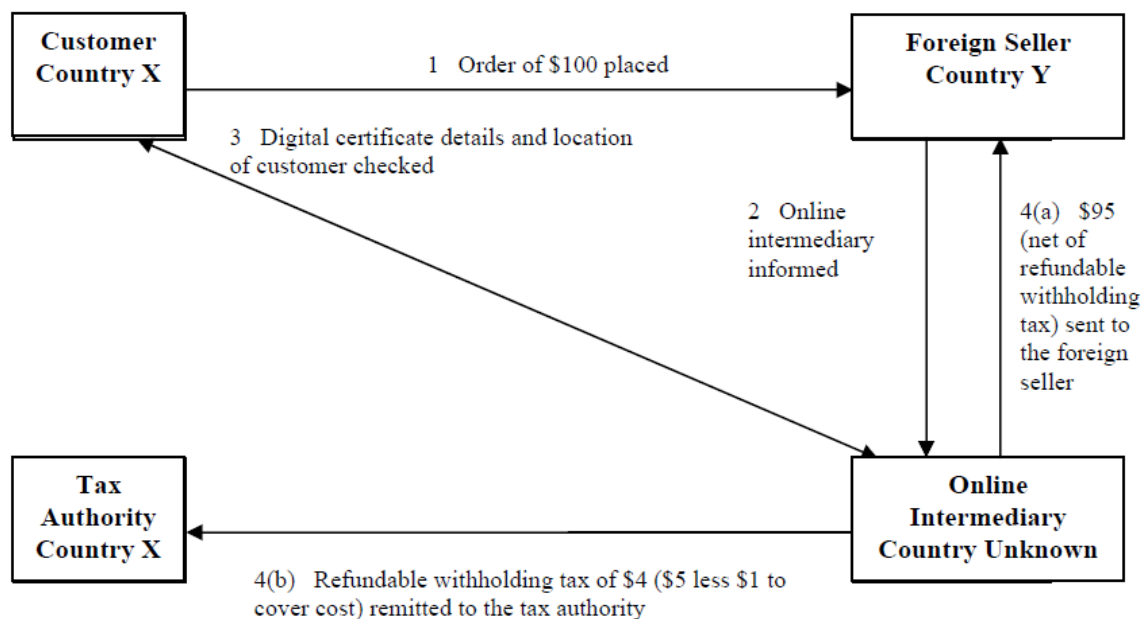


Figure 4-2: Example of the withholding tax mechanism

(Source: Wong, 2008:272)

The above figure illustrates the proposed process to withhold tax in the source country as follows (Pinto, 2003:223-224):

- A customer in country X purchases electronic goods for \$100 from an online retailer located in country Y. The withholding tax on digital transactions is levied at 5% in country X and the online intermediary retains 1% of that amount in order to cover the costs of collecting the withholding tax.
- The customer places an order with the online retailer in country Y.
- The online intermediary is informed of the purchase and obtains a digital certificate from the customer in order to confirm the country in which they are located.
- The online intermediary then processes the payment (net of withholding tax of 5%) to the online retailer. The balance of 1% is withheld by the intermediary in order to cover the collection costs while the remaining 4% is remitted to the tax authority of the country in which the customer is located.
- The tax authorities would then record the transaction and retain the tax withheld until the end of the tax period when the online retailer determines whether their gross sales exceed the minimum threshold and they are therefore eligible for a refund or possible filing on a net basis.

Based on the above analysis, it is evident that there are a number of factors to consider when implementing the proposed refundable withholding tax including the determination of a gross sales threshold.

The next section considers how this withholding tax may apply to a business model like the app store and the practical difficulties with the application of this alternative.

4.7 Application of a withholding tax on digital transactions to the app store

The application of the above withholding tax to the app store would result in the withholding of tax on every payment made by consumers in South Africa to non-resident platform providers and developers for the purchase of apps and digital content from the app store. The introduction of the new withholding tax on digital transactions has however raised a number of concerns and criticisms among commentators. This section will consider the difficulties with the introduction of this withholding tax from a general and app store perspective.

With regard to collection of the withholding tax, the OECD suggests the use of a financial intermediary as a collection agent for the withholding tax in the source country. In order for the financial intermediary to identify when tax should be withheld on a transaction, the OECD suggests the use of a supplementary registration system whereby non-residents must designate a dedicated bank account for all payments received from local customers and the intermediary will withhold from any payments made to that bank account (Baez & Brauner, 2015:17; OECD, 2015a:114).

Figure 4-3 below illustrates how the withholding mechanism may work for the app store business model in South Africa.

WITHHOLDING TAX MECHANISM FOR THE APP STORE

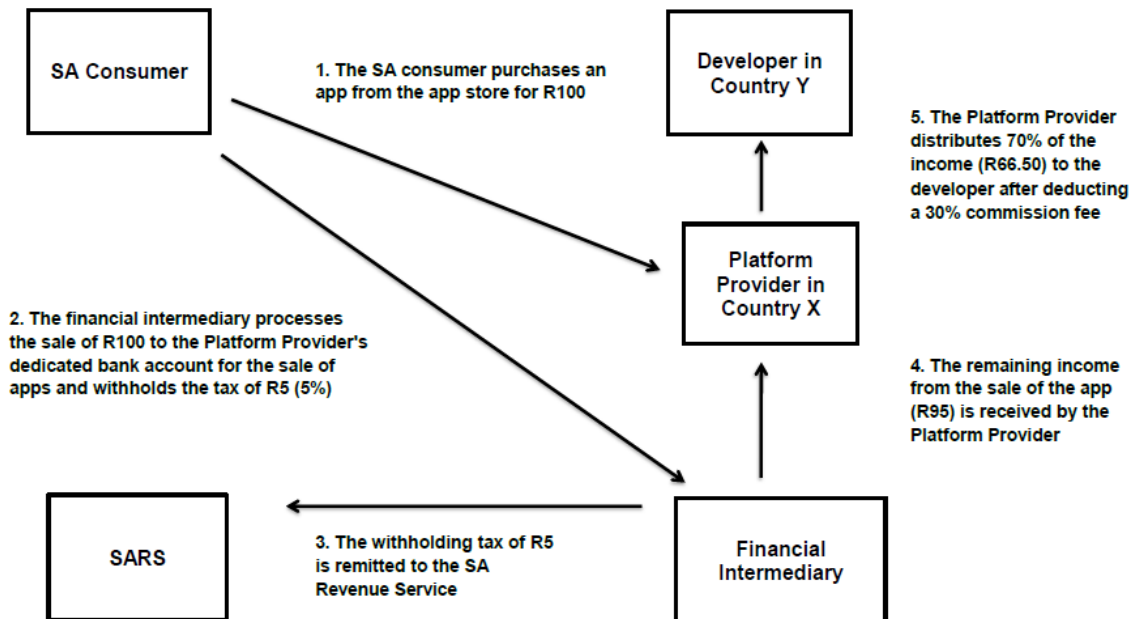


Figure 4-3: The withholding tax mechanism for the app store
(Source: Compiled by author)

As illustrated above, the following process would be followed when applying the withholding mechanism to the app store:

1. The platform provider as administrator of the app store and agent acting on behalf of developers in South Africa would be required to register and designate a dedicated bank account in South Africa where income from the sale of apps and digital content to SA consumers is held.
2. When a SA consumer makes a purchase in the app store, the financial intermediary processes the payment to the platform providers dedicated bank account and withholds a 5% withholding tax on the sales proceeds.
3. The financial intermediary remits the 5% withholding tax to the SARS.
4. The remaining 95% of the proceeds is received by the platform provider who then withholds 30% of this amount as a commission fee and remits the remaining 70% to the developer in country Y.
5. The SARS retains the tax withheld until the end of the tax period when both the platform provider and developer will assess whether their gross sales to consumers

in South Africa exceeds the minimum threshold. If it is below the threshold, the platform provider and developer would be required to file a tax return in order to receive a refund of tax withheld. If it is above the threshold, the platform provider and developer may elect to be taxed on a net basis and will be required to file a tax return on the net basis.

While this process in simplified terms may seem fairly straightforward, there are a number of challenges that may arise, which will be addressed next.

4.7.1 Challenges for platform providers and developers

The refundable withholding approach creates timing issues with regard to receiving refunds in that small businesses that are below the minimum threshold will need to wait till the end of the period in order to receive a refund of the tax withheld and large businesses would need to wait until the end of the period in order to file on the more favourable net basis (Pinto, 2003:225). This would be a financial burden for small developers in the app store who would bear the cost of the withholding tax upfront and must wait until the end of the period in order to receive a refund of the tax withheld. The platform providers would have to wait until the end of the period in order to elect to be taxed on the net basis.

There will also be a significant compliance burden for businesses to properly comply with the withholding regime (Oguttu & Tladi, 2009b:94; Pinto, 2003:227; Wong, 2008:285). Under the proposal, non-resident platform providers would need to open dedicated bank accounts in each country in which its customers were located in order to identify the transactions which should be subject to the withholding tax. Platform providers and developers would also need to submit tax returns in every country in which they sell apps and digital content in order to either receive a refund of tax withheld or to be taxed on the net basis. This could be extremely burdensome given the global reach of the app store. The Google Play store operates in 134 countries worldwide and Apple's App Store reaches 151 countries worldwide (Apple, 2014; Pon *et al.*, 2014:65).

Another challenge is with regard to the option for non-resident sellers to file on a net basis should their gross sales exceed the minimum threshold. In determining the net income which is to be taxed on the net basis, the proposal does not address how to determine which expenses should be deductible against the foreign income generated in the source country (Wong, 2008:286). As both platform providers and developers would receive income from domestic and foreign customers, the allocation of expenses among domestic and foreign income may prove a challenge without the appropriate guidance. Wong (2008:287-288), therefore, suggests the need for deduction rules in order to provide clarity as to which expenses may be deductible against the foreign income which will assist in the effective collection of tax under the net basis.

4.7.2 Challenges for tax authorities and financial intermediaries

The first challenge relates to the determination of an appropriate monetary threshold. A suitable threshold must be set in order to capture a sufficient amount of revenue from e-commerce transactions. Wong (2008: 279) states that should the threshold be set at a low level, every small dot com company would be subject to the tax in the source country; however, where it is set too high, this will result in small businesses being taxed in the residence country. According to a survey conducted by VisionMobile (2015:17), it was found that only 10% of developers earned above \$100,000 per month. Should the withholding tax be set at a high level, it is likely that not many developers would be subject to this withholding tax which would be a loss for the source country as individually the revenue received by these developers may be inconsequential, however, when combined it may be significant.

In addition to compliance costs of non-resident sellers, there would also be additional administrative costs for tax authorities to ensure that the new withholding system is enforceable (OECD, 2001:53; Oguttu & Tladi, 2009b:94; Pinto, 2003:227). An effective registration system would need to be set up for non-residents to register their dedicated bank accounts from which withholding tax would be deducted as well as ensuring an appropriate tax return system is in place.

There would also be additional administrative and compliance burdens for the financial intermediary that would be required to withhold tax on every sale of apps and digital content through the app store and possibly submit withholding tax returns in the source country. The traditional role of a financial intermediary such as a financial institution, credit card company or online payment agent is to transfer the payment from the purchaser to the vendor; the payment can be made directly to an “e-money” account with the payment service provider or directly to the vendors bank account (Baez & Brauner, 2015:17; OECD, 2015a:190). The use of a financial intermediary creates additional difficulties in that the intermediary may not have access to all the data required to perform its withholding obligations (Baez & Brauner, 2015:17). The financial intermediary usually collects and stores data such as the vendor and purchasers information (name, address, bank details) but would not have any information regarding the nature of products in order to determine with certainty that the withholding tax applies (OECD, 2015a:191, 114).

Another observation noted by Wong (2008:282) is that in the event of the short payment or non-payment of the withholding tax, it is unclear who would be held liable, the seller or the financial intermediary. Where the financial intermediary is not located in the country of the purchaser, it is not certain how the source country would impose and enforce a claim on cross-border tax debts should the financial intermediary fail to remit the tax to the source country tax authorities (Wong, 2008:282).

All these challenges point to a need for greater clarity regarding the practical implementation of the withholding mechanism before its successful implementation.

4.7.3 The principle of neutrality

Another criticism of the withholding tax is that it is against the principle of neutrality in that it implies different tax systems for cross-border electronic commerce and traditional cross-border trade; business profits from electronic transactions would be subject to the monetary threshold while business profits from non-electronic transactions would be subject to the physical presence test (OECD, 2001:53; Wong, 2008:28). Furthermore, where the withholding tax applies only to B2B e-commerce and does not address private consumption, this would generate non-neutral outcomes as non-resident

businesses can transact with customers in a country free of tax and thus gain a competitive advantage over traditional businesses (Baez & Brauner, 2015:17; OECD, 2001:53). Pinto (2003:227), however, argues that while it may be ideal to subject both traditional and electronic commerce to the same tax treatment, the different treatments may be justified on the basis that the problems associated with e-commerce are unique and there is, therefore, no need to extend the same tax treatment to other transactions which can be dealt with under existing tax rules like the PE.

Therefore, although the suggested withholding tax could produce non-neutral outcomes, there are valid arguments for straying from this principle.

4.7.4 International consensus and double taxation

A consideration for both the new PE nexus and the withholding tax alternatives is the issue of international consensus. Where countries resort to a unilateral action before international consensus is reached on how the new PE nexus may be implemented, this would result in double taxation (Hongler & Pistone, 2015:38). Cockfield (2003:417) noted that, when considering the alternative of a quantitative economic presence PE, the lack of an internationally accepted interpretation would lead to different interpretations by tax authorities around the world which would ultimately create greater uncertainty, increased assessments, litigation and double taxation internationally. Capital importing countries would take a broad interpretation in order to allow their tax authorities to tax non-residents while capital exporting countries would take a more narrow approach (Cockfield, 2003:417).

Pinto (2003:229) states that in order to avoid double taxation, it would be necessary to alter double tax treaties in order to ensure that the refundable withholding tax on digital transactions is creditable by residence countries. This would be a costly and time-consuming process (Pinto, 2003:229). Baez and Brauner (2015:23) state that the success of the withholding tax is dependent on the collaboration and agreement among countries on a standard tax regime for the digital economy. The DTC also supports this view in the SA context and has stated that the work on the PE rules is best addressed in a multi-lateral and co-ordinated manner (DTC, 2015:27).

4.8 Conclusion

In this chapter it was found that in terms of the benefit theory source-based taxation remains justifiable and relevant for digital business models such as the app store. However there are difficulties in the way source is currently defined when specifically applying the PE concept to electronic commerce transactions. The main concerns regarding the digital economy include the fair allocation of taxing rights among source and residence countries and the ability of current digital business models to facilitate BEPS.

In view of these concerns, the OECD raised two potential alternatives in Action One of its 2015 BEPS Action Plan in order to address the direct tax challenges of the digital economy. Both the alternatives of a new PE nexus based on significant economic presence and a withholding tax on digital transactions shift the source of income to the country of the consumers which is a significant departure from the current international tax framework.

An analysis of the central features of both alternatives and their application to the app store revealed that there are a number of administrative, compliance, interpretational and enforcement challenges with the implementation of these proposals. For this reason it is advisable that countries do not unilaterally incorporate these alternatives into their tax legislation until the work by the OECD on the digital economy is concluded and international consensus has been obtained regarding these alternatives.

Although the debate on how best to impose direct tax on the digital economy has been ongoing for many years, significant progress has been made with the introduction of the OECD BEPS Action Plan and recent research papers. There is however still some practical challenges which require clarity before the successful implementation of these alternatives.

This chapter therefore described and analysed the two potential alternatives to impose direct tax on the income from non-resident app stores and identified the associated difficulties with each alternative. In so doing, it addressed the third secondary objective of this study as identified in par. 1.5.2 (iii).

CHAPTER 5: CONCLUSION

5.1 Introduction and objectives of the research

The main objective of this research as identified in par. 1.5.1 was to consider the potential alternatives to impose direct taxes on the income from non-resident app stores and to identify the challenges with its application in South Africa. The following secondary objectives as identified in par. 1.5.2 were set in order to address the main objective:

- To gain an understanding of the app store business model, the parties to the transactions and the types of goods or services provided in the app store.
- To determine the SA direct tax legislation applicable to non-resident app stores and to identify the difficulties with the application of the legislation to the app store.
- To describe and analyse the potential alternatives to impose direct tax on the income from non-resident app stores and to consider the challenges that may be faced with their application to the app store.

This chapter summarises the key findings of the research and the achievement of the research objectives as outlined in each of the previous chapters. Thereafter, suggestions will be made for further research and a conclusion drawn on the potential alternatives to impose direct tax on the income from non-resident app stores.

5.2 Conclusion: The app store business model

The first secondary objective, which was to gain an understanding of the app store business model, the parties to the transactions and the goods or services sold, was considered in chapter 2. In par. 2.2 it was found that the emergence of the app store in 2008 began with the introduction of the smartphone, namely the Apple iPhone in 2007. Since the launch of the Apple App Store and Google Play Store in 2008, the app store business has exploded into a multi-billion dollar industry globally which is only expected to grow even more in future.

Par. 2.3 identified the main role players in the app economy to be platform providers, developers, consumers, network operators and device manufacturers which all play a vital and interdependent role in the success of the app store. Par. 2.4 examined the different app store business models of Apple and Google as well as their roles as platform providers. It was found that Apple has a closed system platform in which access to the Apple App Store is restricted to Apple device owners while Google has an open platform where access to the Google Play Store is open to any smartphone device which uses the android OS. In addition, Apple generates revenue by charging for apps and services in the app store while Google generates revenue mainly from advertising in free apps and offering various paid services in Google's own apps.

It was further noted that when an app or digital content is sold in the app store, the platform provider distributes the apps on behalf of developers to consumers. The legal relationship between platform providers and developers is that of agent or commissionaire and principal; Apple acts as a commissionaire when apps are sold on behalf of developers in South Africa and Google acts as an agent. Furthermore, in both the Google and Apple app stores, digital products are licensed to consumers for their personal use and these digital products may not be resold, redistributed or sub-licensed to the general public.

It was found in par. 2.7 that there are many ways in which a developer can generate revenue from an app, through charging for the app, selling additional content or services in the app or by advertising in the app. A diverse selection of digital goods and services may be sold in an app including books, movies, music, streaming services, games, software and cloud storage. The monetization models used by developers to generate revenue are paid apps, in-app purchases, freemium apps, subscriptions and in-app advertising. For every sale of apps and digital content in the app, using the paid, in-app purchases, freemium and subscriptions models, the platform provider receives a 30% commission while the developer receives the remaining 70% of the proceeds. In addition, revenue is received by developers when ads are displayed in their apps using the in-app advertising monetization model.

5.3 Conclusion: The difficulties in applying the current SA direct tax legislation to non-resident app store income

The second secondary objective, which was to determine the SA direct tax legislation applicable to non-resident app stores and to identify the difficulties with the application of the legislation to the app store, was considered in chapter 3.

In order to determine the SA direct tax legislation applicable to both non-resident platform providers and developers when apps and digital content are sold to SA consumers, it was first necessary to determine the character of the income received by platform providers and developers. It was found in par. 3.3 that the income received by both platform providers and developers should not be classified as royalties under Article 12 of the OECD MTC as the end users do not acquire any rights to reproduce or redistribute the software and copyrighted digital products but only acquire limited rights to enable downloading and storage for their own personal use and enjoyment. This income should therefore be dealt with as business profits under Article 7 of the OECD MTC.

It was found that the applicable SA direct tax legislation in a tax treaty context is the PE concept as defined in Article 5 of the OECD MTC. In terms of Article 5 of the OECD MTC, a non-resident platform provider or developer would only be subject to direct tax in South Africa if the activities of these parties created a PE in South Africa. It was found in par. 3.4 that a PE may be created in South Africa in the following three instances, provided that the activities carried on are not preparatory or auxiliary in nature

- a fixed place of business in South Africa;
- the activities of a dependent agent in South Africa; and
- the activities of an owned or leased server in South Africa.

Par. 3.5 considered the application of the PE concept to the non-resident platform provider and developer. It was found that neither the platform provider or developer would have a PE based on a fixed place of business in South Africa due to the typical tax planning structure of the app store which ensures that, should there be any activities of the app store carried on in a source country, it would be limited to marketing and promotion of the app store rather than direct sales of applications and would therefore

be preparatory or auxiliary in nature. A PE would also not be created for the developer on the basis of the activities of a dependent agent in South Africa as the platform providers are likely to be considered independent and acting in the ordinary course of their businesses when transacting on behalf of developers. Furthermore, as Apple acts as commissionaire on behalf of developers in South Africa, this creates additional difficulties as contracts concluded by commissionaires are not considered legally binding on the developers which is a requirement of the dependent agent rule in Article 5(5). Finally, a PE would not be created for the platform provider or developer on the basis of the activities of a server in South Africa as the typical tax planning structure of the app store may ensure that servers are not located in the source country or are not owned by the platform provider or are allocated activities of a preparatory or auxiliary nature.

As a result of the above difficulties, it was therefore found that the current SA direct tax legislation cannot be successfully imposed on the income from non-resident app stores. Platform providers and developers may earn significant revenues from the operation of the app store in source countries (as illustrated in par. 2.5.2) without having a PE in these countries. The income from the app store would therefore not be taxed in source countries but would be subject to direct tax in the country of residence of the platform providers and developers which in the case of platform providers Apple and Google, this was found to be in low-tax jurisdictions (par. 3.5.1).

Two concerns are raised with regard to this approach; firstly, that it results in an unfair sharing of the tax base and secondly, that it creates opportunities for BEPS. Commentators have therefore suggested that the PE concept be redefined in order to address e-commerce business models.

5.4 Conclusion: The alternatives to impose direct tax on the income from non-resident app stores

The third secondary objective which was to describe and analyse the potential alternatives to impose direct tax on the income from non-resident app stores and to consider the challenges that may be faced with their application to the app store was considered in chapter 4.

In terms of the OECD 2015 BEPS Action Plan, the two most prominent alternatives to impose direct tax on the income from non-resident app stores are

- a new PE nexus based on significant economic presence; and
- a withholding tax on digital transactions.

Par. 4.4 and 4.6 described the central features of the new PE nexus based on significant economic presence and the withholding tax on digital transactions. The application of these alternatives to the app store was considered in par. 4.5 and 4.7 in order to identify the challenges with these alternatives. The challenges which were identified are summarised in Table 5-1 below.

New PE nexus	Withholding tax on digital transactions
Challenges for platform providers and developers	
<ul style="list-style-type: none"> • Compliance burden of maintaining accounting records in order to submit tax returns in the source country. • Possibility of loss-making developers having a compliance burden in the source country due to the revenue threshold. • Difficulties in determining the country of residence of customers. • More clarity required regarding the implementation of the user-based factor particularly regarding in-app advertising. • Lack of guidance where platform providers and developers have a PE based on physical and significant economic presence in a country. 	<ul style="list-style-type: none"> • Financial burden on small developers who must pay withholding tax upfront and wait until the end of the period to receive a refund. • Compliance burden of opening a dedicated bank account in the source country and submitting tax returns in every country in which apps are sold. • Challenge of determining the appropriate allocation of expenses among foreign and domestic income should the net basis of taxation be elected.

New PE nexus	Withholding tax on digital transactions
Challenges for tax authorities and financial intermediaries	
<ul style="list-style-type: none"> • Difficulties of tax authorities to identify non-resident developers and platform providers that meet the requirements of the new PE nexus. • Difficulties of obtaining information regarding non-resident developers and platform providers from other tax authorities. 	<ul style="list-style-type: none"> • Tax authorities must determine a suitable threshold in order to sufficiently capture revenue. • Administration costs for tax authorities to institute a new withholding tax system. • Administrative and compliance burden for financial intermediaries to withhold tax and the challenge of determining when the withholding tax applies. • Lack of clarity regarding the person liable in the event of non-payment of the withholding tax.
Other challenges	
<ul style="list-style-type: none"> • The current attribution rules cannot effectively allocate profits to the new PE nexus. • A unilateral change to tax laws by countries without international consensus may lead to double taxation. 	<ul style="list-style-type: none"> • The withholding tax would require a change to double tax treaties in order for the tax to be creditable by residence countries.
<p>The proposals may be seen to violate the Ottawa Frameworks principle of neutrality as they call for different approaches for traditional and e-commerce business models.</p>	

Table 5-1: Challenges with the alternatives to impose direct tax on app store income

(Source: Compiled by author)

Thus, these two potential alternatives raised by the OECD could be considered to impose direct tax on the income from non-resident app stores in South Africa but there are still some implementation challenges which need to be addressed before it could become a reality in South Africa.

5.5 Suggestions for further research

This study focused on the application of the PE concept which is used in SA tax treaties to allocate taxing rights over the business profits of a non-resident to South Africa. This study did not involve a detailed analysis of the SA source rules in case law and the deemed source rules in Section 9 of the SA Income Tax Act which ensures that the income of non-residents is taxed in SA under domestic tax legislation. A detailed study on the application of the SA source rules to the income from app stores could be researched further in order to provide recommendations for new source rules that cover the income from non-resident app stores.

In addition, with regard to the online advertising business model, this study was limited to advertising in apps from the perspective of the developer. Further research could be performed in respect of the operation of the mobile advertising/online advertising business model in South Africa, with consideration of other parties such as ad networks.

The study also did not consider the application of an equalization levy on digital transactions which was raised by the OECD in the 2015 BEPS Action Plan as this was not an alternative to impose direct tax. Further research could be performed with respect to this alternative and its application to the app store.

Finally, as this study focused on the sale of digital goods and services through the app store, further research could be conducted on the application of the current PE rules to e-commerce businesses in which physical goods are sold through the app store to SA consumers. This research could specifically consider the application of the amendments to the PE concept proposed under Action 7 of the OECD 2015 BEPS Action Plan (refer par. 3.6).

5.6 Conclusion

While the problems with taxing the digital economy has persisted for many years, the significant growth in recent years of new business models like the app store necessitates a serious reconsideration of the potential alternatives to impose direct tax on these transactions. Although some progress has been made by the OECD with the introduction of the 2015 BEPS Action Plan, there are still some practical challenges that require clarity before any of the potential alternatives can be implemented.

A withholding tax approach may be easier to implement in the app store context given that South Africa already has various withholding tax systems in place and has already implemented a VAT registration and collection system for e-commerce transactions which could assist in designing the withholding tax on digital transactions.

Therefore, at this stage although two potential alternatives were identified to impose direct tax in South Africa on the income from non-resident app stores, no particular alternative can be implemented until it has been further developed to deal with the challenges associated with its implementation. It is therefore advisable that South Africa waits for the OECD to finalise its work on the digital economy before implementing any of the alternatives at this stage. Until the difficulties with imposing direct tax on the digital economy are addressed in an internationally accepted and co-ordinated manner, any unilateral action by South Africa would result in double taxation.

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