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**The Value Creation of Digital Business Models:
Can The User Be The New Nexus?**

Dissertation to obtain a Master's Degree in Law, in the
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“...but in this world, nothing can be said to be certain, except death and taxes”,

Benjamin Franklin

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Quoting

This dissertation follows the quoting provisions of Portuguese Norms 405-1 and 405-4 of the Portuguese Quality Institute. Throughout this work all relevant references are identified in the footnotes, in full when referenced for the first time and in abbreviated for after that, in the following format: AUTHOR, Abbreviated title..., page. All references are listed in full in the bibliography.

The body of this dissertation, including spaces and notes, occupies a total of 80.920 characters.

Abstract

This dissertation aims to investigate the value creation of digital business models, their impact and reliance on users. It is analyzed how digital business models are the new economy and the international tax system is not able to keep up with certain changes. Resulting on losing their tax sovereignty to bigtech enterprises. Therefore, the study seeks to explode the obstacles the international tax regime endures and as a response reflecting whether if the user could or not be considered the new nexus of the international tax regime.

The research begins by acknowledging the different digital business models, emerging business models, how they operate and highlighting its importance for the economic development of the world. Additionally, it is examined the controversial concepts of user participation and value creation as two important key features of the digital economy.

Therefore, the study continues by combining digital business models with the international tax regime, exploring the theoretical frameworks which led to endless issues that have been discussed for the last decades and as a consequence the continuous international and European proposals for the resolution of the digital challenges.

Finally, the dissertation continues by analyzing a practical case study, where it is taken into consideration a multinational enterprise, from a financial and management perspective, drawing conclusions about the challenges when the question of “could the user be the next nexus?” is called into question.

Resumo

Esta dissertação tem como objetivo investigar a criação de valor dos modelos de negócio digitais, o seu impacto e a sua dependência dos utilizadores. Analisa-se como os modelos de negócio digitais são a nova economia e como o sistema fiscal internacional não é capaz de acompanhar certas mudanças. O resultado é a perda de soberania fiscal para as empresas bigtech. Por conseguinte, o estudo procura explorar os obstáculos que o regime fiscal internacional enfrenta e, como resposta, refletir se o utilizador pode ou não ser considerado o novo nexo do regime fiscal internacional.

A investigação começa por reconhecer os diferentes modelos de negócio digitais, os modelos de negócio emergentes, o seu funcionamento e a sua importância para o desenvolvimento económico do mundo. Além disso, são examinados os conceitos controversos de participação do utilizador e de criação de valor como duas importantes características-chave da economia digital.

Assim, o estudo prossegue combinando os modelos de negócio digitais com o regime fiscal internacional, explorando os enquadramentos teóricos que conduziram às infindáveis questões que têm sido discutidas nas últimas décadas e, conseqüentemente, às contínuas propostas internacionais e europeias para a resolução dos desafios digitais.

Por fim, a dissertação prossegue com a análise de um caso prático, onde é considerada uma empresa multinacional, numa perspetiva financeira e de gestão, retirando conclusões sobre os desafios quando se coloca a questão de "poderá o utilizador ser o próximo nexus?"

Abbreviation List

ADS – Automated Digital Services

BEPS – Base Erosion and Profit Shifting

B2B – Business to Business

B2C – Business to Consumer

C2C – Consumer to Consumer

DST – Digital Services Tax

EU – European Union

EUR – Euro

G20 - The Group of Twenty

IP – Intellectual Property

IT – Information Technology

ITR – International Tax Regime

META – Meta Platforms, Inc

MNEs – Multinational Enterprises

OECD – Organization for Economic Co-operation and Development

PE – Permanent Establishment

R&D – Research and Development

RPAI – Residual Profit Allocation by Income

UN – United Nations

VPN - Virtual Private Network

1. Introduction

These days, social media platforms, online search engines, and e-commerce services have become part of our daily lives. Because of the increased demand in the digital economy, digital companies are growing faster, and this trend is set to continue exponentially.¹ Digitalization has transformed many aspects of human life, and consequently, it brought a positive impact on the function of the economy², as most traditional businesses shift to digital businesses by establishing online shops to expand their products and services worldwide.

Digital technologies have brought benefits from a tax perspective. They create new opportunities for tax administrations to collect all transactions that leave behind some kind of electronic trail. As an example, the decreasing use of physical cash and increased use of digital currencies allowed governments to track transactions which they wouldn't be able to do if physical cash was still the main payment type. Moreover, digitalization increased the ability of the government to reclaim information, to transmit this information across international databases, and transparency agreements.³ Therefore, from a tax practical perspective, the demand for MNEs to comply with electronic reports that disclose important information to track transactions from blockchains and supply chain transactions.

From the other side of the spectrum, the digital world and taxes usually do not coexist in the same sentence. Not because in theory, they do not relate to each other, but rather because one is in the present, the digital world, and the other, taxes, insists on being in the past. The fast evolution of the digital economy, the unstoppable creation of new possibilities to develop a business, and its involvement in our society, more specifically how reliance on users, and data of the users, to gain profits and sustain their business is the new currency and the tax system is not able to keep up with these drastic changes in the economy.

For example, technology has made it possible for a non-resident company to relate with customers in a jurisdiction without any significant physical presence (or “nexus”) in that country. This ability to maintain a significant economic presence (e.g. online sales), but escape the physical presence (e.g., brick-and-mortar establishment), weakens one of the fundamental standards of the international tax system.

¹ Proposal for a Council Directive on the common system of a digital service tax on revenues resulting from the provision of certain digital services, COM (2018) 148 final, Page 1

² OECD (2015), “*Addressing the Tax Challenges of the Digital Economy – Action 1: 2015 Final Report*”

³ James Aim (2021), “*Tax Evasion, technology, and inequality*”, Page 9

Digital business models are so dissimilar from traditional business models. From its value chain to the value creation, how they easily operate in the global economy without any physical barrier? How a mere group of users of an app can increase the value of a certain company without its conscience knowledge? How do companies rely so much on the “*demand side*”⁴ but do not have the recognition? And how the value creation of every single digital company differs from one to another, making it impossible to have a “*one rule fits all*”.

The international tax regime was shaped around the idea of a traditional business model, where everything is fixed, physical and immovable. The truth is that it has worked for some decades, although it has some issues. Nonetheless, as business models continued to evolve due to access to the internet the international tax arena did not evolve together.

As a result, jurisdictions around the world are losing profits from multinational enterprises (MNEs), because currently there is no legislation in place for the applicability of taxing the digital world. In other words, the digital world is the modern tax haven. Nevertheless, I believe that aligning value creation to taxation is the key fundamental principle to consider when a restructuring of the international tax law occurs.

This master’s thesis aims to combine both concepts, digital business models and taxes in the same sentence. However, it is no easy task to transform the paradigmatic international tax regime, its rules, and its principles.

Although the value creation is an abstract concept, the digital business models rely on the user participation and the active user role to improve and develop their business. Because this relationship between the user and big tech companies is a non-monetary transfer, it is just seen as a mere exchange of interests. Nonetheless, there is a party who is profiting off another, containing personal data that is analyzed, stored, and used. The international tax system must be seen with “*new eyes*”, changing the paradigmatic source vs. residence and develop new possibilities taking into consideration all the key features digital and traditional business models rely on.

In the first chapter, it was discussed how the digital business models operate, the emerging of new business models, their characteristics, and its involvement with the user, more specifically how can the user be part of the value creation of a business.

⁴ Market Jurisdiction

Throughout the second chapter, it was combined the disputes arising from the digital world, when they enter in the international tax arena, more specifically the principles that are not in accordance with the 21st century and what to expect from an international and European proposals on finding a solution of the tax challenges of the digital economy.

In the third chapter, it was analysed the question “could the user be the new nexus?”, where it was provided arguments in favour and against the concept to better understand the consequences of the concept from both ends of the spectrum.

In the last chapter, it was given a practical approach to the master thesis, where a business model – *Meta* - was studied from a management and financial perspective, and it was applied the concept of the user as a nexus.

2. The Global Economy: Digital Business Models

2.1. Globalization and Digitalization – New Ways of Living

Explaining globalization in a few words and in a linear way is no easy task. More than a phenomenon, globalization is a reality, our reality. It is hard to imagine a world where physical borders were so important. Living in the 21st Century, we take for granted this trend – but the truth is that not so long-ago physical borders were too important and the disconnection between countries around the globe was a reality, not just in terms of geography but also when it comes to economy.

In its complexity, globalization is not just about having a global economy. In the beginning, some scholars believed that globalization was just about economic trade. But globalization is about knowledge, culture, communication, social and economic aspects. We live in a world where we can communicate with another person from the other side of the world in one second, without the need to leave the comfort of our house.

Additionally, the information flow travels at the speed of lighting, therefore, we are the generation of knowledge. Most human beings are exposed to a large quantity of knowledge with just one click. Schools and Universities are no longer the only education providers. There is a wider expansion of information available to more people, and as a result, the knowledge belongs to everyone, not just an elite group or a smaller percentage of the population.

Digitalization is also part of globalization, probably the most important part of it. With digitalization, we now know a world with no physical borders – the world never seemed so small thanks to cyberspace. Nowadays borders are not important, their only job is for organizational aspects.

*“Digitalization is creating a second economy that is vast, automatic and invisible—thereby bringing about the greatest societal upheaval since the Industrial Revolution. Data has become massive and has moved from monthly, to weekly, to daily and hourly with regard to a large number of transactions made by millions of customers and entities across the ecosystems of organizations.”*⁵

⁵ Annabeth Aagaard (2019), “*Digital Business Models Driving Transformation and Innovation*”, Page 21

We live in two different parallel worlds. The first one is **the physical world** where we live as we used to live for millions of years. Humans still have the same physical limitations and physical borders; we live in a society organized and ruled by laws. The second one is **the digital world**, this is a recent world where there are no physical borders, the knowledge available is unlimited and its monetary costs to its access are limited to zero or near to zero, there are fewer regulations and the freedom of it is wider.

Nevertheless, none of the worlds functions the same. For example, in the digital world, everything is in constant change probably thanks to the low regulation regimes it has upon them⁶, and the fact that connects the entire globe. Every month in cyberspace, there is a new trend that opens the doors to new business models and new opportunities to be living off the digital world – it is a gift that keeps on giving. Whereas, if we observe the physical world is not as dynamic. Probably because we live in a society and therefore the laws applicable are less likely to change in the near future. We look at the physical world as longevity.

The expansion of the digital world is positively unthinkable. Studies show that individuals using the Internet (% of the population) from the OECD Countries grown from 26,97% from the year 2000 to 87,34% from the year 2021. In the last 21 years there was a growth of 60,37%.⁷

Moreover, from 2007 to 2022, the share of internet users who have purchased online, all individuals between ages of 16 to 74, from the European Union, increased from 46% 75%, respectively.⁸ As a result, jurisdictions must not ignore the power of digitalization and the upcoming unknown changes and opportunities.

Having examined digitalization and globalization in a nutshell, there is a need to consider the whole world. Meaning, yes, we must acknowledge all the different countries in the world but the only way we can make a change and be better prepared to ensure that we have the resources to face all the dynamic changes of the cyberspace is by thinking international and not regional, otherwise it can be generated a trade war.

More recently, due to the COVID-19 pandemic, we accelerated the process of becoming more digital. In a perspective of consumption and lifestyle, due to its incapacity of leaving our houses, people turned to their only possibility available –the internet, from UberEats to working

⁶ Even though, in the latest years we are seeing more regulations and laws being implemented not just in the point of view of the businesses but also in the point of view of the consumer.

⁷ <https://data.worldbank.org/indicator/IT.NET.USER.ZS?locations=OE> , consulted in 05-08-2023

⁸ <https://goingdigital.oecd.org/en/indicator/22> , consulted in 05-08-2023.

remotely. And although, in 2023, there are no longer more restrictions of circulation, some of the behaviors adopted during the pandemic will continue in the long term and thus will affect the economy. Now, more than ever, working remotely is a flexibility that companies offer to their employees, therefore a specific employee can be working for a Dutch company nonetheless is working remotely in Portugal. In a point of view of coordination, as I stated before, jurisdictions must think and develop strategies that take these examples into account.

As it was stated before, these phenomena's (globalization and digitalization) brought a lot of changes in different fields of our lives. Although, we must do a micro examination into the implications it brought to the taxation world, more specific to the international tax field.

All of these changes brought challenges to the international business income taxing rules, which have been created for more than a hundred years. Giving the opportunity for base erosion and profit shifting (BEPS), therefore policy makers must restore the broken system and ensure that profits are taxed where economic activities take place and value is created.⁹

2.2. Emerging of New Business Models

The cyberspace is a new way and a new place to do business. Traditional businesses are becoming digital, in other words, traditional businesses are transferring their physical presence to the digital space using information and communication technology (ICT). They are seeking to stay relevant, be more effective and compete in the same rules as other digital companies. One example is Netflix that extended its original DVD rental-by-mail delivery business by offering online on-demand video streaming services to its subscribers for a fixed rental fee¹⁰.

Not only there are businesses transforming themselves into digital but there are businesses which have never known the existence of the physical world.

The way in which digital economy generates profit is totally dissimilar from how traditional business models would make profits. For example, the music industry – if a person would like to hear the new Taylor Swift Album, nowadays all that is needed is a technological device with connection to the Internet. From there, you can choose from a variety of possibilities on how

⁹ OECD (2021), *"Tax Challenges Arising from the Digitalisation of the Economy – Global Anti -Base Erosion Model Rules (Pillar Two)"*, Page 3

¹⁰ <https://www.businessmodelsinc.com/en/inspiration/blogs/netflix-how-a-dvd-rental-company-changed-the-way-we-spend-our-free-time> , consulted in 05-08-2023

to hear it. You can access Spotify or YouTube, for example and stream the music for “free”. But, 20 years ago, the reality was different, even though Taylor Swift had not released any album, but to hear an artwork from your favorite musician, the most effective solution would be to purchase a physical album in a music store.

These are some of the new business models with its tax address associated to the digital world:

- **Payment Services**, cash has long been the traditional means of conducting economic transactions. Cash is being replaced by credit cards, debit cards, and smart-phone payment applications, all of which leave an electronic trail. For example, “MbWay”¹¹ acts as an intermediary between the online purchaser and the seller by allowing the payment of an online purchase or transaction between two parties.¹² Crypto-Assets, such as Bitcoin, can be transferred without interacting with traditional financial intermediaries and without any central administrator having full visibility on either the transactions carried out.¹³
- **Electronic commerce** has been defined as “*the sale or purchase of goods or services, conducted over computer networks by methods specifically designed for the purpose of receiving or placing of orders. The goods or services are ordered by those methods, but the payment and the ultimate delivery of the goods or services do not have to be conducted online. An e-commerce transaction can be between enterprises, households, individuals, governments, and other public or private organizations.*”¹⁴

The e-commerce can be divided into three models:

- **Business to Business models (B2B)**, business sells products or services to another business. This includes online versions of traditional transactions in which a wholesaler purchases consignments of goods online, which it then sells to consumers from retail outlets.¹⁵

¹¹ Portuguese payment service

¹² OECD (2015), “Addressing the Tax Challenges of the Digital Economy – Action 1: 2015 Final Report”, Page 57

¹³ OECD (2022), “Crypto-Asset Reporting Framework and Amendments to the Common Reporting Standard”, Page 6

¹⁴ <https://www.oecd-ilibrary.org/sites/1885800a-en/index.html?itemId=/content/component/1885800a-en> , consulted in 08-08-2023

¹⁵ OECD (2015), “Addressing the Tax Challenges of the Digital Economy – Action 1: 2015 Final Report”, page 55

- **Business to Consumer models (B2C)**, business sells products or services to a consumer. This type of business includes vendor with no physical stores with just a presence on the internet through a website, for example, Amazon. The goods can be tangible (i.e., clothing) or intangible (i.e., music purchased on iTunes)¹⁶. This type of businesses is focused more on the customers' perspective due to its characteristics. B2C models, more specifically business whose sell intangibles, can operate remotely and therefore do not need an intermediate, such as transportation, retailers, and others to deliver the product to the consumer.

- **Consumer to Consumer models (C2C)**, individual consumers sell or rent their assets, this is becoming a more common, especially with the rise of the Peer-to-Peer (P2P) Network or gig economy, the sharing economy, the on-demand economy, the matching economy and so on. In this type of business there is a direct link between the buyer and the seller to engage in a transaction across a digital platform, By employing internet and mobile phone platforms that reduce transaction costs, this model enables individuals to easily offer and enjoy goods and services.¹⁷ Businesses such as, Uber, connects a driver to a passenger through an digital platform using a mobile phone, this creates a short-term relationship, thus the Uber driver is performing a “gig” (or job), and a gig worker¹⁸ becomes an independent contractor.¹⁹ Other recent examples are Airbnb (home sharing), eBay (sales), Postmates (service). These relationships are transforming the traditional way between supplier and consumer.

- **Online advertising** uses the Internet as medium to target and deliver marketing messages to customers. Based on consumer's preferences and behaviour, online advertising is shown to be a sophisticated way to target perfect consumers to a specific product. Advertisers pay to displays ads in digital platform. For example, on Facebook, the ads which are shown in the scroll page are not standard, meaning they are not the

¹⁶ OECD 2015, page 55

¹⁷ Shu-Yi Oei and Diane M. Ring (2017), “*The tax lives of Uber drivers' evidence from the internet discussion forums*”, Page 58

¹⁸ Gig workers, “*whose services are engaged via platforms and generally performed offline, as in ride-hail, food delivery, home repair, and care work.*” (Steven Vallas and Juliet B. Schor (2020), “*What do platforms do? Understanding the Gig Economy*”, Page 275)

¹⁹ James Aim (2021), “*Tax Evasion, technology, and inequality*”, Page 7

same for every user. Facebook using a software analyse behaviours of the user and as a result the ads shown are based off what the consumer is seeking for or may be interested in.

- **Blockchain technology**, A “blockchain” is a list of records (“blocks”) that are linked (“chained”) using cryptography, forming an open “distributed ledger” that can record transactions between two parties in a verifiable, permanent, and unalterable way. There are four main characteristics of a blockchain: disintermediation (so lack of centralized information), pseudo anonymity (so lack of information on users), tamper-resistance (so transactions cannot be undone), and autonomy (so automatic execution of transactions). Blockchains are being used in multiple areas, but one of the most prominent is in the development of “cryptocurrencies”, a digital asset that is typically used as a decentralized medium of exchange. The most widely recognized cryptocurrency is Bitcoin, but in recent years there has been a massive growth in these instruments. At present, it is estimated that there has been more than 6000 “altcoins” or cryptocurrencies, a number that is rapidly rising.
- **Supply chain** is a system which begins in the supplier and finishes in the consumer. The “chain” of information, organizations, activities is what moves the product or service from the supplier to its final consumer. It includes activities such as design, production, marketing, distribution, and supply to the final consumer.²⁰
- **Biometrics** - is the measurement of various aspects of human physiology, or distinctive and measurable characteristics use to describe individuals. In many cases these biometric identifiers are fixed (or largely fixed) personal identifiers, like fingerprints, facial features, DNA, and the like. The use of facial recognition technology is an outstanding illustration of the examples in such biometric -driven technology may be employed.²¹ *“Facial recognition technologies empower the brick-and-mortar retailers to acquire intelligence about store traffic, the age or gender composition of their customers, and their in-store movement patterns.”*²²

²⁰ Annet Wanyana Oguttu, (2022), “The parallel Rise of Multinational Enterprises and the Historical Development of International Tax Rules -Introspection for the New Rules to Tax the Digital Economy”, Page 10

²¹ James Aim (2021), “Tax Evasion, technology, and inequality”, Page 8

²² Gandomi, (2014), “Beyond the hype Big Data concepts, methods, and analytics”, Page 138

Examples include financial information, consumers spending patterns, individual health records, social networks, criminal activities, and administrative data.

- “Deep learning” is a catch-all term that includes various digital forms of data analysis. Techniques that can be applied to “big data” include data mining, machine learning, text analytics, cognitive computing, quantum computing, computational research, and artificial intelligence (AI). Indeed, AI can even now anticipate and predict specific modes of tax evasion, based upon individual characteristics, tax return information, and underlying “patterns” in the data.

2.2.1 Features of Digital Business Models

The following features are fundamental to the digital economy, and they are fundamentally the pillars that new business models rely on:

- a) **Mobility**, from its intangibles, users, and consumers to its business functions, digital business models rely heavily on mobility.
 - i. **Intangibles** are the core contributor to the value creation and economic growth for companies, for example, software and Research and Development (hereinafter “R&D”).²³ Under existing taxing rules, the possibility to transfer intangibles rights (legal ownership) is easily possible, from an intragroup perspective or to a third party.
 - ii. **Users and consumers** more than ever carrying commercial activities remotely. Meaning an individual resident in country A, during his vacation purchase an application in country B, and uses it in country C. For example, the use of a VPN enables the individual to use a platform anonymous and the increasing difficulty of identifying and locating the user.
 - iii. **Business functions**, with the characteristics stated before, business do not have sunk costs associated with their business. Therefore, they can manage their

²³ OECD 2015, page 65

global operations on an integrated basis from a central location without the need to have a physical presence in the market jurisdiction.²⁴ Furthermore, some companies whose business is directly connected to the Internet are able to increase in size but maintain the same amount of personnel required to manage their operations.

b) **Reliance on data and user participation**, the use of personal data and big data is common for business in the digital economy:

- i. **Personal data**²⁵ The use of a product or a service by a user may provide data about the user which will bring added value to the business both in improving existing products and services or in providing products or services to another group of customers²⁶. The reliance on personal data is mostly used in social networking-focused business models, the collaboration between the users and the platform is the key value driver of the business. For example, “apps” which include social media platforms such as Instagram, TikTok, Facebook, Snapchat, and many more, can gather massive amounts of data on their users. A company like Facebook may collect well over 100.000 data points each year for each of its users, a collection of information that will grow over time and may be linked to individuals who do not even have a Facebook account.²⁷
- ii. **Big data** represents the data that is too large for traditional data processing methods. For example, big data sizes are reported in various multiple terabytes and petabytes. In the past few years, 90% of the big data was generated. For instances, just Google search engine represents 77% of the 5 billion searches performed over the internet in a single day. Facebook is one of the largest social media networks where approximately 1.5 billion users are actively browsing or uploading data every day with uploading up to 300 million photos, posting 5,10,000 comments are required to manage, process, and generate valuable information from this massive amount of data.²⁸

²⁴ OECD 2015, page 65

²⁵ Gathers information related to an individual

²⁶ OECD 2015, page 68

²⁷ James Aim (2021), “Tax Evasion, technology, and inequality”, Page 7

²⁸ R Rawat and R Yadav, (2021), “Big Data Analysis, Issues and Challenges and Technologies”, Page 2

- c) **Network effects**, suggests that the decisions made by some users have an impact in other users. The welfare of the existing users is increased even though there is no explicit agreement compensation. For example, in Tiktok, a media sharing platform, all content is generated and created by the users, therefore the experience of users is improved as additional users join and share their content.²⁹ These business models are successful due to the contribution of their users, because if we were just to consider the software on its own, the value of the business would be reduced.
- d) **Multi-sided business models**, a multi-sided platform is a support that eases transactions or interactions between two or more interdependent customer or user groups.³⁰ Multi-sided business models allow defining and organizing the value transactions made on the platform between the firm and the user groups based on a market scape in which multiple groups of persons interact, consume goods and services, and the decisions of each group of persons affect the outcome of for the other groups of persons through a positive or negative externality.³¹
- e) **Tendency toward monopoly or oligopoly**, driven by economies of scale and scope, many sectors are largely dominated by monopolistic companies which usually arise from technological advances.³² Companies like Amazon, Apple, Alibaba, Facebook, Google, Microsoft dominate their markets. This ability to gain full control over a specific market is due to patent or other intellectual property rights a company might have.
- f) **Volatility**, no or near to zero sunk costs are required to for an individual for using the network, the barriers to entry for new Internet-based business are limited. These factors have combined to innovation enables companies, in a short period of time, to scale up and dominant part of the market.

²⁹ OECD 2015, page 71

³⁰ Guy Parmentier and Romain Gandia, (2017) "Redesigning the business model: from one-sided to multi-sided", Page 7

³¹ OECD 2015, page 71

³² James Aim (2021), "*Tax Evasion, technology, and inequality*", Page 5

After an analysis of the different business models, we must consider two distinct conclusions. First, the information flow is dissimilar from the traditional business models, although there can be an absence of information in certain transactions, for example using a VPN, a user will not be associated with their actual presence. In most platforms, the user to access digital platforms must be registered and therefore give some of their personal data. This way, governments and tax authorities from different jurisdictions can detect a type of transaction.

Second, digital business models all rely on the same three characteristics:

- i. Cross-jurisdictional scale without mass.
- ii. Heavy reliance on intangible assets, and
- iii. Importance of data, user participation and their interactions with IP

Comparing to the traditional business models, there are specific details that differ a digital business model from another. For example, digital companies have their business value placed where upstream activities like product design, R&D or where production of core components occur, alongside in the downstream activities where marketing or branding occurs. This means that knowledge-based intangible assets, such as software, organizational skills and IP have become increasingly important for competitiveness.³³

Also, the user contribution for the business is important in terms of gathering data, and thus being a core contributor for the creation of value of some businesses.

2.3. The concept of value creation

Although, the key features of the digital business models have reached a global consensus, there is no consensus on their importance to the location of value creation and the identity of the value creator.³⁴

Before digitalization, the value creation in traditional business models was simpler, it was based on source and residence approaches. Nonetheless, in the digitalized business models, the

³³ OECD 2015, page 40-44

³⁴ OECD 2018, page 25

focus of the value creation is on the consumer, which directly or indirectly, creates revenues for the firm.³⁵

The truth is that there is no objective definition of value creation. A wide range of elements can contribute for the value creation of a business without any thresholds or other formal restrictions. Given its ambiguity, there are different views in what can fit into the concept of value creation, being a vague and a political concept.³⁶

Even though, as stated previously, that without the user participation in business models, such as network platforms, gig economy - the software used by itself would have less value and therefore digital companies would benefit and generate less profits. Some countries acknowledged that the user participation is a central part of the digital business models, playing an important role as drivers of the value creation. These countries point to the participation of users which allows digital businesses to collect massive amounts of data because of the intensive monitoring of user's active contributions and behaviour.³⁷

Other countries view the user participation has a nonmonetary agreement. Meaning, exchange of users' data for the allowance of entering a digital platform. These countries are not in favor that the action by the digitalised business to source data from users is an activity to which profit should be attributed to the digitalised business solely because the data acquired may be valuable.³⁸

For example, social networks create returns by selling advertising space to third parties that wish to advertise to users on the platform and by potentially licensing user data collected to third parties.³⁹

For better understanding consider the following comparison: Advertising billboards on the highway – the advertising space can be rented by an entity which wishes to publicise a product or even their own brand, therefore drivers will be exposed to that publicity and can choose, if interested, considering buying a good or service. The difference between the highway and Instagram is the type of products are showed to the consumer. Meaning, that in the highway

³⁵ Rupal Maheshwari, (2023) "Are the revenue sourcing rules of the OECD's Pillar One Fulfilling the Objective of Taxing Value Creation?", Page 2

³⁶ Aleksandra Bal, (2018) "(Mis)guided by the Value Creation Principle – Can New Concepts Solve Old Problems?", Page 3

³⁷ OECD 2018 -Interim Report, page 25

³⁸ *Id.*

³⁹ OECD 2018, page 48

the advertising is standard, everyone sees the same publicity, whereas in a social media network the advertising is based on a consumer's behaviour.

Digital business models have a massive impact in the value creation because it stopped being clear where is the value created in their value chain. They made it possible to accelerate production by using technology to facilitate the market access and modified their market (specific country) business models to a global model with combined functions and value chains that are centralized at a global level, depending on their necessity.⁴⁰

From an economic perspective, "value" is correlated to the "*maximum willingness to pay*", i.e., the maximum sum of wealth that the demand is ready to pay for a certain good or service. Nonetheless, not all valuable goods need to be paid for. Such as nature provides goods, (e.g., sunshine, rain, wind) without being remunerated in pecuniary terms.⁴¹ The "value creation" paradigm lends itself more to evolutionary reform in dealing with the challenges posed by the digitalized economy.

2.3.1 User Participation

According to the OECD, there are three levels of user participation, (i) The first level of engagement must be a low amount of effort required for the actions of bookmarking, tagging and filtering to be considered user participation. (ii) In the second level is needed the writing of reviews and the uploading of photos or videos, which are actions often encompassed by the term "content creation". (iii) The third level of engagement implies actions, directly aimed at enlarging the platform by adding friends, creating communities, networking and creating critical magnitude.⁴²

In addition, the OECD graded the levels of user participation in terms of value chain, value shops and value network:

- 1) **Value chain**, it is a methodical way of examining all the activities that a firm performs from design, produce market, to deliver and support its products and how each of these

⁴⁰ A. Oguttu, (2022) "The Parallel Rise of Multinational Enterprises and the Historical Development of International Tax Rules – Introspection for the New Rules to Tax the Digital Economy", Page 11

⁴¹ Johannes Becker and Joachim Englisch, (2019) "*Taxing Where Value is Created: What's 'User Involvement' Got to Do with It?*", Page 166

⁴² Elena Végelyt, 2020 "*Deconstructing User Participation: Why in the Digital Era Advertising Income Is Different from Other Business Income*", Page 180 International Transfer Pricing Journal

functions interacts. In this category, can be included businesses such as online retailers, or Google and Yahoo where users browse, which are used to enhance customer service and targeting.⁴³

- 2) **Value networks**, *“rely on a mediating technology: a technology used by platform operators to link customers interested in engaging in a transaction or relationship (whether for financial consideration or not).”*⁴⁴ This would be the case of multi-sided platforms which rely on user-generated data, therefore the user participation is quantified as medium. The highest user participation in digital business models is considered the social media platforms, where users both create content and take active actions to expand the platform’s network.
- 3) **Value shops**, *“operates in single-sided markets where interactions take place with one specific type of user or customer, it is characterised by the use of an intensive technology applied in order to solve a specific customer demand or problem.”*⁴⁵ For example, cloud computing, where users only participate passively, as data storage does not require user-generated data and the user is not participating in the value creation of the business.⁴⁶

When comparing to traditional business models, it is noted that the user takes on a unique and active role in digital business model. The user’s role changed the way business is done. The focus stopped being the physical stores and therefore strategic implementation of physical infrastructures. The focus changed to the user, more specifically how can a certain business reach to the customers by accessing users’ data, such as preferences, behaviours, and capabilities.⁴⁷

2.3.2 Collecting data from users

The reliance of the users’ data in digital business models is different from one to another, in the sense of collection of data, processing and selling data. Due to these distinct treatments, we should take into account two types of user-generated data:

⁴³ Id.

⁴⁴ OECD 2018, page 40

⁴⁵ OECD 2018, page 40

⁴⁶ Elena Végelyt, 2020 “Deconstructing User Participation: Why in the Digital Era Advertising Income Is Different from Other Business Income”, Page 180

⁴⁷ Rita Calçada Pires, 2011, “Tributação Internacional do Rendimento Empresarial gerado através do comércio eletrónico”, Page 433

- On one hand, the collection of data from users or consumers is not a new topic. From traditional to digital businesses, data on a passive user participation have always been collected. This type of data is referred to data on user digital activities, such as preferences timing and reaction, meaning that there is no voluntary input from the user. This collection of data on a user's digital activity is performed in activities such as marketing and consumer behaviour analysis. To enhance the business performance.⁴⁸
- On the other hand, the active user participation is related to data that requires user effort for its generation including listings, reviews, photos, videos and lists of connections. Platforms such as Instagram, Twitter, Tiktok, Youtube, Snapchat and many more.

One of the ways user participation can translate into value for digital business is through data.

2.3.3 User Participation as Part of the Value Creation

The OECD and EU Commission had expressed their favourable opinion about the role that the user involvement should play in the alignment of the tax base regarding the profits generated by multinational firms in the digitalized economy. Users of online platforms provide inputs that contribute to the production and profit of the firm – *“digitalization has reshaped the role of users, allowing the possibility for them to become increasingly involved in the value process”*.⁴⁹

There are still opinions when it comes as the user in value creation. Some scholars defend that value creation is not a precise science. It is rather about how to create an experience for customers to obtain a market share and to maximize profits. The value created by the group and individual group members cannot always be easily projected into monetary terms, since the realization of profit or loss depends on many factors of the business' performance and economic conditions. Customers and their data can have some intrinsic value as such for businesses. However, their role in the profit production of MNEs rest on the way the MNEs use that value and how they can monetize it to realize earnings.⁵⁰

⁴⁸ R. Petruzzi & S. Buriak, (2018), “Addressing the Tax Challenges of the Digitalization of the Economy – A Possible Answer in the Proper Application of the Transfer Pricing Rules? ”, Page 19

⁴⁹ OECD, *Tax Challenges Arising from Digitalization*, supra n.9 at 55

⁵⁰ Svitlana Buriak, 2020, “A new taxing right for the market jurisdiction: Where are the limits?”, Page 302

I do not agree with the affirmations in the previous paragraph. I believe that value creation can be a subjective concept, but there is a fine line between what is part of the value creation, and as consequence be important for the business of a company. Some scholars compare traditional and outdated concepts with circumstances that are relevant in the present day. Denying that the user is not an active play in providing profits to a certain business is an idea that I can not agree with. I consider that even though the user does not contribute with monetary terms to the business there is still a value inserted in their data that is hard to value. MNEs have all the interest in selling this data because it is how they generate profits.

As stated in the subchapter 2.3.1. *User Participation*, businesses changed due to how the value chain evolved. Users are the goal of every bigtech company, and therefore there is a link between profits and user participation.

When bringing this line of thought to the international tax regime there can be some topics, therefore, in the next chapter, it will be analysed what are the main issues in the international tax system when they met with the value creation of digital business models.

3. Disputes between Digital Business Models and The Current International Tax Regime

3.1. Issues of the International Tax Regime

Before explaining the most relevant issues, the current international tax regime (hereinafter *ITR*) incurs, we must reflect on the complexity subject it is presented. ITR has in its genesis allocation of taxing rights among jurisdictions. Due to its highly political and economically interest, the fundamentals of the current allocation methods have been fixed for a century. Such allocation has been based on two broad dimensions: source and residence.

3.2. Theoretical Framework: The Nexus Concept

3.2.1 Dichotomy of Allocating Taxing Rights: Residence vs. Source

A tax nexus can be considered, under the international tax regime, a connection between a country which wants to exercise its taxing right with the taxpayer or when are connected to the origin of the taxable object. Meaning, a nexus can be used when there is sufficient presence of a taxpayer (being a person or legal entity) in a state to be subject to that state's tax jurisdiction.⁵¹

From an international tax law perspective, a nexus can be divided into two parallel principles: (i) Nationality, a nexus based on the connection of the taxpayer (ii) Territoriality, a nexus based on the link between the taxpayer or income and the territory of a certain jurisdiction. In the territoriality "nexus", there is a subcategory: (a) residence, being a connection with the taxpayer (b) source criterion, nexus created in a relation to a given category of income with a connection to the territory of the country.⁵²

It is noted that the idea of *economic allegiance* of a business to a certain jurisdiction was utilized as a primordial principle for the allocation of taxing rights. Which leads to the international acceptance of the permanent establishment (PE) concept. Which is ensured in article 7 of the OECD Model:

⁵¹ Erik Guedes Franklin Dantas Lourenço, (2022) "Tax Challenges of the Digital Economy: An Evaluation of the New OECD Nexus Rule Based on Revenue Thresholds", Page 2

⁵² Id.

*“Profits of an enterprise of a Contracting States shall be taxable only in that State unless the enterprise carries on business in other Contracting State through a permanent establishment situated therein. If the enterprise carries on business as aforesaid, the profits that are attributable to the permanent establishment in accordance with the provisions of paragraph 2 may be taxed in that other State.”*⁵³

Article 7 of the OECD Model Tax Convention is the centre piece of the problem in the allocation of taxing rights, because in its first part gives the taxing right to the residence state and in the following part states that if the source state does have a PE, then it has the right to tax part of the profits attributable to a PE located in its jurisdiction.

From a technical approach, the early OECD work only considered the developed countries and their primordial right to always be the claimer of taxing the profits which where were subject to tax in non-resident states.

For the source state, the ability to tax part of the profits which were produced in its country, it is necessary to prove that a taxpayer carries on a business activity that is integrated into the economic life of the source state. If that is proven, then according to the benefit principle, which is understood as *“a jurisdiction’s right to tax rests on the totality of benefits and state services provided to taxpayers that interact with a country”*⁵⁴, is regarded as compensation for the costs sustained by the local state in developing the infrastructure used by the non-resident taxpayer to generate the income.

When we investigate the international tax system, it is visible that its rules and principles were designed in the last century. MNEs were taxed based on the physical presence they have in a market jurisdiction, creating a nexus and therefore the ability for the market jurisdiction to tax the corporate profits the non-resident company has.

The dichotomy between the source and the residence in the allocation of taxing rights has not maintained with the expansion of the global economy, the expansion of the service provision, the constant development in information technology (IT), the growing importance of new factors of production and advances in e-commerce which differ in all new business models.⁵⁵

⁵³ OECD Model Convention on Income and on Capital, 2017

⁵⁴ D. Pinto, (2006), “The need to reconceptualize the Permanent Establishment Threshold”, Page 267

⁵⁵ João Francisco Bianco and Raimon Tomazela Santos, (2016), “A change of Paradigm in International Tax Law: Article 7 of Tax Treaties and the Need to Resolve the Source versus Residence Dichotomy”, Page 2

An increasing demand by the European Union members to claim the right to tax at least a portion of profits obtained by the US MNEs, such as Twitter, Apple, Google, Facebook, and Spotify, from the abuse of their consumer market, even without the characterization of a PE in their territory. This phenomenon which still does not have one universally correct answer, will continue to grow and therefore the pressure to find a solution unilaterally or multilaterally by the EU members could create a threat of a trade war.

3.3. When the International Tax Regime Meets the 21st Century

Given what was stated in the previous subchapter, the international tax regime is unfit to be effective and compliant with the 21st century. In one hand, international tax is still in the past and did not evolve with the economy over the years, and on the other hand the economy is in the present. Therefore, we are trapped in time and the failure to evolve continues to be a reality. Meanwhile, MNEs have ensured in most cases in releasing themselves from state bonds by using complex structures to avoid taxes and obtain gains of the digital era⁵⁶.

From the PE concept, Source vs. Residence, physical presence relevance to allocate taxing rights to tangible assets. These are concepts which no longer are relevant and as stated in Chapter I – The Global Economy: Digital Business Models, the characteristics of the digital business models which rely on intangibles, user participation and no presence in the market jurisdiction are totally dissimilar from the mechanisms of ITR.

For digital companies, business value is placed where activities like product design, research and development (R&D) or where production of core elements occur, as well as in activities where marketing or branding occurs. This means that knowledge-based intangible assets, such as software, and intellectual property (IP – which includes patents, trademarks, copyrights, brand names and know-how) have become increasingly important factor for competitive advantages.⁵⁷

In recent years, there has been an increase in the number of case law regarding tax avoidance, tax evasion and aggressive tax planning from MNEs, which take opportunity from the broken and complex system and use it in their advantage.

⁵⁶ A. Oguttu, (2022), “The Parallel Rise of Multinational Enterprises and the Historical Development of International Tax Rules – Introspection for the New Rules to Tax the Digital Economy”, Page 10

⁵⁷ *Id.*

As an example, the Google case, where Google shifted €63 billion in profits from Ireland and the United States of America using the infamous “double-irish” arrangement in 2019. The tax arrangement made available for Google Ireland Holdings Unlimited Company to transfer out via interim dividends and other payments. The company was incorporated in Ireland but tax domiciled in Bermuda at the time of the transfer.

Google Ireland Holdings Unlimited Company was an intellectual property licensing company with turnover derived from the licensing of IP to subsidiaries – the reliance on the intangibles was what made it possible for the Google to utilize this tax arrangement.⁵⁸

Nevertheless, these issues surrounding tax challenges in the digital world have not been ignored by states and international institutions, which in the recent years have been working on trying to create a solution for this problem.

Recently, several proposals have been made to alter the status quo of the allocation of the taxing rights. All the following proposals have something in common, they all seek to enhance the efficiency of the taxing rights of the market jurisdictions.⁵⁹ The market jurisdiction is defined to be the location of either the direct or indirect purchaser of a good or service, or of the user of certain digital platforms.

The enthusiasm for distributing tax duties to the jurisdiction where a market operates stems from the notion that individuals who use specific digital platforms like social media sites, search engines, and online marketplaces play a role in generating value for the companies running these platforms by actively contributing.

Moreover, the application of the present corporate tax rules to the digital economy has led to a non-alignment between the place where the profits are taxed and the place where value is created, specifically in business models which heavily reliant on user participation.⁶⁰

From an economic approach, both supply and demand add value. The supply, representing the firm which provides services or goods, add value via its functions, the use of their assets and assuming risks. Nonetheless, the demand side, in this case the user also adds value by perceptive whether the firm’s product exceeds the inputs.⁶¹

⁵⁸ <https://www.irishtimes.com/business/technology/google-used-double-irish-to-shift-75-4bn-in-profits-out-of-ireland-1.4540519> , consulted in 21-08-2023

⁵⁹ Richard Collier, Michael P. Devereux and John Vella, (2021) “Comparing Proposals to Tax Some Profit in the Market Country”, Page 406

⁶⁰ COM(2018) 148 Final

⁶¹ S.C. Morse, (2018) Value Creation: A standard in Search of a Process, Page 8

The concept “value creation” is abstract and not concrete, that gives space for ambiguous. But if we think about value creation, it is part of the value chain of every business, from the production to the distribution.

It is important to refer that the tax challenges in the digital world is not a new hot topic in the international tax field, the problem with these challenges are the ongoing attempts and failures from international institutions, single jurisdictions, and scholars. It occurs because of the ongoing changes the digital world faces, and how there is no common universal solution to tax all digital MNEs because all of them operate in different manners and have their value chain built in different ways. Nonetheless, there are some characteristics which are common to most of them.

3.4. European and International Consensus? The Four Proposals

3.4.1 The OECD Unified Approach (*Pillar One*)

OECD with political support of the G20 member countries developed various projects to try to solve the problematic ongoing discussions of the international tax regime. One of the most ambitious projects was the BEPS (Base Erosion and Profit Shifting) Project which includes 15 Action Plans. Two of those Action Plans are related to the digital economy:

- Action 1 “*Addressing Tax Challenges in the Digital economy*”, where it is debated the issue of MNEs being able to develop their business in a market jurisdiction and have a significant economic presence in the consumer market without paying any income tax, due to the lack of sufficient nexus under the current international tax rules, and
- Action 7 “*Digital PE*”, where is as discussed, the possibility of expanding the definition of the concept of PE, such as the attribution of the concept in a more flexible and fluid way, and therefore diluting the classical concepts of a fixed place of business and a dependent agent.⁶²

Following six years of debate and non-common consensus, in October 2021, the OECD published its “*Statement on a Two-Pillar Solution to Address the Tax Challenges Arising from*

⁶² João Francisco Bianco and Ramon Tomazela Santos, (2016) “A Change of Paradigm in International Tax Law: Article 7 of Tax Treaties and the Need to Resolve the Source versus Residence Dichotomy”, Page 7

the Digitalisation of the Economy". The proposal aims at modifying the existing international tax system by adding a new taxing right to market jurisdiction. The scope is correspondent to all MNEs whose revenues are above EUR 20 billion and profitability above 10%.⁶³ The revenues which arise from the final customer of the finished goods are incorporated into that jurisdiction. For example, revenues resulting from the provision of services, such as Advertising Services, online intermedian Services. Revenues based on licensing, sale or other alienation of Intangible Property or User Data, are totally or partially sourced to the market jurisdiction.⁶⁴

Such nexus for the allocation of Amount A, the market revenue threshold must be equal to or greater than EUR 1 million for jurisdictions with a Gross Domestic Product (GDP) equal or greater than EUR 40 billion; or EUR 250.000, for jurisdictions with a GDP less than EUR 40 billion.⁶⁵

This new taxing right would be based on "sufficient economic presence" in the market jurisdiction. This would shift the primordial principle of international tax regime from physical presence to economic presence, and therefore the international tax system would be more in line with the economy.

For the profit allocation in the market jurisdiction, it will be used a formula⁶⁶ to proportionality allocate the fair profits to the jurisdiction. Therefore 25% of the residual profits defined as profit in excess of 10% of the revenue will be allocated to the market jurisdiction.⁶⁷

⁶³ Progress Report on Amount A of Pillar One, Public consultation 11 July – 19 August 2022

⁶⁴ Progress Report on Amount A of Pillar One (Two-Pillar Solution to the Tax Challenges of the Digitalisation of the economy)

⁶⁵ Id.

⁶⁶ $Q = (P - R * 10\%) * 25\% * L / R$

Q = profit amount of the Covered Group to be allocated to a specific market jurisdiction.

P = Adjusted Profit Before Tax of the Covered Group

R = Revenues of the Covered Group

10% = Profitability Threshold

25% = Reallocation percentage of the profit

L = amount of Revenues of the Covered Group that arise in that specific market jurisdiction

Progress Report on Amount A of Pillar One (Two Pillar Solution to the Tax Challenges of the Digitalisation of the Economy)

⁶⁷ Id.

3.4.2 The United Nations' Article 12B Proposal

Article 12B of the UN Model allocates taxing rights to source states regarding gross income arising from automated digital services (ADS). This proposal does not cover consumer-facing businesses, as in terms of application been set, again as reflected in the OECD's Pillar One.

According to Article 12B (5) of the UN Model, ADS relates to any service provided by way of the internet or digitally or electronically through a network where there is little or minimum human intervention on the part of the suppliers of the service.

From this proposal, there are three outputs we can take away:

- a) Article 12B limits its scope to source countries from withholding tax on payments from ADS (except for when those payments already qualify as royalties or fees for technical services under article 12 or 12A of the UN Model). The tax rate is negotiated bilaterally by way of tax treaties, with a reduced rate applying if the recipient is the beneficial owner and a resident of the other contracting state, although the draft recommends what it regards as a modest rate of 3%-4% of the gross amount.⁶⁸
- b) An alternative net basis of taxation may apply in the source state at the request of the owner of the relevant ADS income. This works on the basis of the profitability ratio (relevant annual profits divided by annual revenue) of that owner's ADS segment (or group accounts, if there is no segment data) being applied to the gross revenue arising in the source state, with 30% of the resulting net profits being treated as the profits that are taxable in that state.
- c) There is an exclusion from the new allocation of taxing rights under article 12B when the relevant ADS income is attributable to a PE.

3.4.3 Devereux et al.'s residual profit allocation by income (RPAI)

The RPAI is based on the division of the routine and residual profits and allocating different taxing rights for those to concepts. Similarly, to Pillar One of the OECD, the RPAI also aims at allocating taxing rights to the market jurisdictions. Although, it differs from each other in the sense that RPAI considers all the residual profits to the market jurisdiction whereas Pillar One only applies a portion of the residual profits to the market jurisdiction.

⁶⁸ Article 12B (4) UN Model (2021), para 15, para 16 of the commentary

The RPAI would use existing transfer pricing techniques, such as the cost-plus method, to identify routine. Residual profit would then be allocated based on the “residual gross income”.

The RPAI also differs in how it would be administered. Unlike Pillar One and other RPA schemes, it would not start by apportioning the total residual profit (or gross revenue). Instead, it would take a “bottom-up” approach. In a first step, all business function, and activities within a multinational business (research and development (R&D) activities, manufacturing activities, general and administrative activities, sales and marketing activities, etc) would be allocated a routine profit and taxed in the countries where these functions and activities are performed. In the second step, the residual profit would be calculated in each market country as the sales minus the costs of sales, including any routine profit associated with these costs. Any costs that cannot be attributed directly to the sales in a particular country would be apportioned to market countries where functions and activities take place, there is no need for the residual profit allocated to market countries to be subsequently deducted from profit elsewhere.⁶⁹

3.4.4 DST Directive

After some failed tentative to find a global solution for a new nexus, some European countries has unilaterally implemented solutions to remedy the lost revenues they have been experiencing in the recent years, and to try to tax digital MNEs for exploitation of their consumer market.

As an interim solution, one of the most successful unilateral measures implemented was Digital Tax Services (DST Directive), which aims to tax certain digital businesses within market jurisdictions, collecting revenue through consumption taxes. Although, this would only be applied until an international agreement is concluded. The European Commission issued the DST proposal directive on March 21st, 2018. The proposal was aimed to create a fair playing field in the digital market, furthermore they rely on the paradigm that tax should be paid where value is created, in which according to the European Commission is where user participation in the platform is located.⁷⁰

⁶⁹ Richard Collier, Michael P. Devereux and John Vella, 2021, Comparing Proposals to Tax Some Profits in the Market Country, Page 407

⁷⁰ Bedalli R. Zegarra, 2020 “*The Interaction between VAT and the Digital Services Tax Regime in Market Jurisdictions: Is the DST Filling the Gap Regarding the Taxation of the Digital Economy*”, Page 2

Nonetheless the DST directive collected revenues through consumption taxes, which is different from direct taxes which collects taxes from corporate profits. In my point of view, the DST Directive had a simpler approach to the digital world because it is regarded to indirect taxes and not income taxes, and consequently not limited by tax treaties. And due to this type of tax being subjected to the consumer, the source vs residence was not a hot topic that enter the conversation.

From a practical approach, the DST directive applies 3% tax on revenue derived from digital businesses that rely heavily on user participation.⁷¹ Countries like Austria, France, Italy, Portugal and the United Kingdom have adopted this unilateral measure and transcript to their domestic law.

The scope of the directive qualifies entities whose meet two conditions: a) their worldwide revenues reported in the financial statements is above EUR 750 million. And b) the total amount of taxable revenues obtained within the EU should exceeds EUR 50 million, during the financial year.⁷²

Given this scope, it is noted that the DST Directive aims at taxing the bigtech companies whose meet these thresholds, such as Alibaba, Amazon, eBay, Airbnb, Alphabet Inc (Google, Youtube), Booking, among others.⁷³

Nonetheless, all the countries which are part of the Unified Approach must withdraw all the existing DSTs and other relevant similar measures and standstill of future measures are an integral part of achieving Pillar One's goal of stabilising the international tax planning.⁷⁴

⁷¹ COM(2018) 148 final

⁷² Article 4, COM (2018) 148 final

⁷³ Bedalli R. Zegarra, 2020 *"The Interaction between VAT and the Digital Services Tax Regime in Market Jurisdictions: Is the DST Filling the Gap Regarding the Taxation of the Digital Economy?"*, Page 1

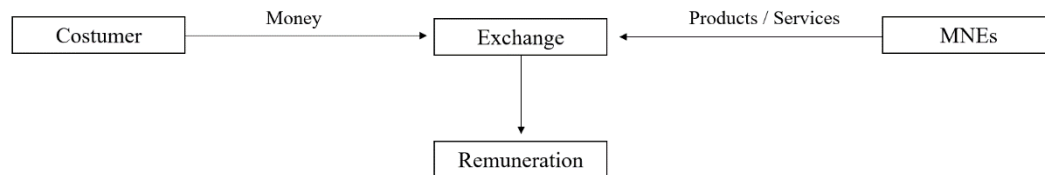
⁷⁴ Pillar One Amount A: Draft MLC Provisions on DSTs and other relevant similar measures 2022

4. Could the User Be the New Nexus?

After analyzing the different proposals and directives which have been discussed and implemented around the globe, through my research I found that the discussion is centered around the allocation of the taxing rights to the market jurisdiction but not in a perspective that I was hoping to find. The discussion is aligned with the value creation of a user in the business, in other words, if the customer brings added value to the business, and therefore becomes part of the value chain. From this last idea, this master thesis aims to how in a social media platform (or a networking platform) the user could or not be considered as a new nexus.

I believe the user is without a doubt an essential part of the value creation of the digital business models, for example networking platforms, more specifically their software, would not improve by itself, the user involvement in the platform brings a continuous intangible input to the firm that is not remunerated. For better understanding, please view the graphic below:

Figure 1: Simplistic Digital Business Model



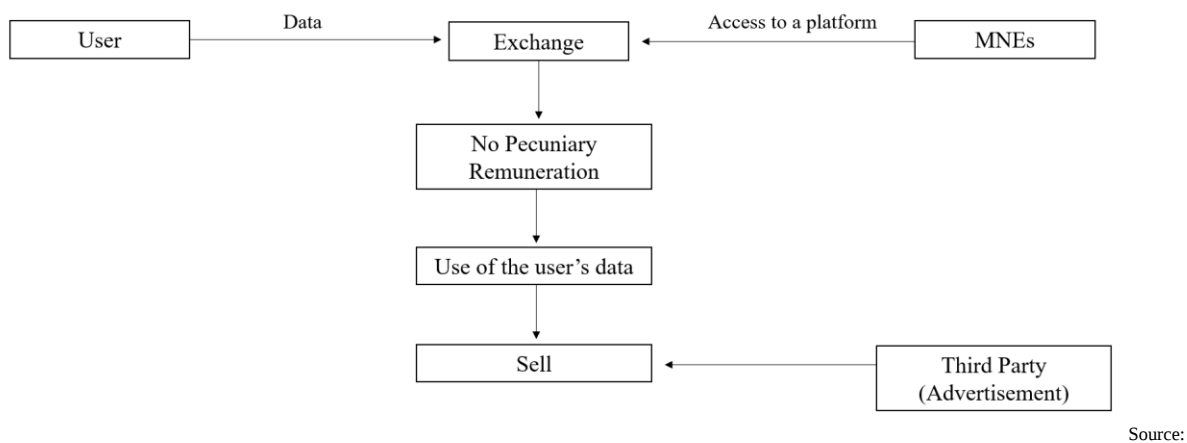
Source 1: Francisco Dias

In the first figure, it shows a simplified business model, where the costumer is willing to pay a certain amount of money for an exchange of a product or service of a company. This can be applied in the case of a subscription fee, for streaming platforms (e.g. Netflix, HBO Max, Hulu, Disney+), a purchase of clothes through a website (e.g. Zara, Pull and Bear, Vinted), or even a purchase in a physical store (e.g. vinyl CD).

All the cases illustrated above have something in common – the use of a pecuniary payment of the exchange of a good or service, either being purchased from a website, where a certain type of brand does not have a physical store in a certain jurisdiction, only with the access through a website it is possible for the complete the purchase of that item. Or a purchase from a physical store where the costumer goes physically to the store to buy a certain good.

Nevertheless, this is not the only way businesses operate and gain revenues. In recent years, there has been an increasing supply of businesses which operate for “free”. This means, businesses which provide a type of service for the exchange of the user’s data. View the following figure for better understanding:

Figure 2: Simplistic Digital Business Model



Source 2: Francisco Dias

As it is illustrated in the figure above, the user is willing to provide their data for the exchange of the access of a certain platform, there is no pecuniary remuneration involved in this part of the value creation. In exchange, the company is given the authorization by the user to track their movements, preferences and based the collection of the user’s data, the sale of the data to a third party which then will be exposed to that user in their “feed” page.

These platforms, in the majority of the cases are considered network platforms - social media platforms (Instagram, Twitter, Tiktok, Snapchat, Facebook, Tinder). As it was explained in subchapter “4.2) *Collecting Data from User*”, the user plays an active role in the content creation of the business and therefore is an important player in the value creation of a digital business model. Although, its role is not yet defined, but I believe that the user can be considered as a possible nexus for the international tax system.

The discussion of the user’s role in the value creation is not new. From the OECD Transfer Pricing Guidelines, it was made clear that the user’s involvement for the aligning of the value creation the profits across the countries. In many digital business models, value is created

through user contributions, which are not considered in the current nexus rules.⁷⁵ To the BEPS Project “*digitalization has reshaped the role of the users, allowing the possibility for them to become increasingly involved in the value creation process*”⁷⁶.

The focus on the value creation has been declining after the publication of the Final Report on Action 1 (2015). In the Inclusive Framework on the OECD/G20 BEPS Project approved in January 2020, the value creation was not discussed. Although, the OECD proposal of October 2019 on OECD’s “Unified Approach” briefly referred value creation. The Pillar One Blueprint of October 2020 stated that value may arise in different business models of automated digital services and consumer-facing businesses.

I believe that if there is a multilateral recognition of the user as part of the value creation of the business, the following step to consider in the international tax regime is the consideration of the user as a nexus, nevertheless there are challenges that also arise with this assumption.

Furthermore, to better defense my line of thought please consider the following the arguments I consider, in favor and against, when of the user as a new nexus is in discussion of the context of social media platforms.

1) *Arguments In favor*

- **Capturing Digital Value**, given the success of the digital economy, many businesses generate value by collecting, analyzing and selling user’s data. If the user would be considered as a nexus, this could help by capturing a portion of its value for the market jurisdictions which now is difficult to obtain. Considering the user as a nexus can help ensure that jurisdictions benefit from these activities can claim a fair share of tax revenue.
- **Enhanced Tax Base**, considering the user as new nexus can broaden the tax base for market jurisdictions. By capturing revenue from digital businesses that did not have a physical presence, countries can generate additional tax revenue to support public services and infrastructure development.

⁷⁵ “Proposal for a Council Directive Laying down rules relating to the Corporate Taxation of a Significant Digital Presence”, COM (2018) 147 final (21 Mar. 2018) and Treasury, *supra* n.1.

⁷⁶ OECD, Tax Challenges Arising from Digitalisation, *supra* n. 9, at 55.

- **Enhanced Transparency and Accountability**, user-based taxation can increase transparency in the digital world. By attributing tax obligations to user activities, it provides a clear and measurable criterion for tax liability. By giving the burden of a nexus to a user, the opportunity of tax avoidance, tax evasion and aggressive tax planning could drastically be reduced, due to the non-beneficiary user perspective that subject.
- **Fairness and Equity**, Digital businesses often operate globally without a physical presence in the market jurisdiction where they gain profits. Treating user activities as a nexus for taxation could help distribute tax obligations more fairly and ensure that companies contribute to the economies where they derive value from user interactions.
- **Simplicity and Efficiency**, the user-based nexus could simplify tax compliance for digital businesses by providing a clear and objective threshold for determining tax obligations. It could reduce complexity and administrative burdens associated with determining physical presence.

2) *Arguments Against*

- **Potential Impacts on Innovation and Investment**, defining the user as a nexus can lead to tax competition among jurisdictions to attract digital businesses. Jurisdictions may have the incentive to different criterias to incentivize businesses, potentially creating a fragmented tax system. Therefore, this can increase the risk of double taxation and/or tax disputes between jurisdictions.
- **Correlation between the user's data and a specific country**, given the current digital system, a user can easily use a VPN which does not track the user's geographical position. Therefore, in these cases the user-based nexus can failed to be sufficient. Other problem related to the user's location is what should be the residence to consider: (i) IP address, (ii) customer's billing address, (iii) payment details.⁷⁷

⁷⁷ Aleksandra Bal, (2018) "(Mis)guided by the Value Creation Principle – Can New Concepts Solve Old Problems?", Page 5

- **Parallel with the existing tax rules,** there are already several proposals for the taxation of the digital economy, in the EU and worldwide, therefore it should be considered all of those measures to avoid disputes. Taking the example of the subparagraph where the user's location is taken into consideration – the customer's billing address – it is already considered when applying for VAT purposes. The question remains, should it be considered that address when it comes to income taxation, otherwise it can be created a situation where a company ended up with costumers located in different countries for income tax and VAT purposes.
- **Data privacy of the user,** if the user was to be considered as a new nexus and to determine its value in the business chain of a MNEs, some information related to the user's personal data must be made available to tax authorities.
- **International approval and consequence disapproval of a multilateral convention,** considering the user as a new nexus of the international tax system can be considered as an overnight change for a regime which has to consider all jurisdictions around the world. The user as a nexus will benefit market jurisdictions and redistribute the profits which are only being taxed in the resident jurisdictions.

5. Practical Approach

A relevant question I kept wondering throughout my master thesis is if the assumption of the user as a nexus could be applied in practical terms and if it is relevant. To try to answer that same question, I developed a case study where it was selected a social media platform – *Meta* – where it was studied its business model, financial statements, and other relevant information which are in the scope of this master's thesis.

Social media businesses are exponentially growing, the daily time spent on social networking by internet users worldwide from 2012 to 2023 is 90 and 151 minutes respectively, increasing around 1 more hour per day.⁷⁸

5.1. Meta's Business Model

In October 2021, Facebook, Inc. (hereinafter "*Facebook*") changed its corporate name to Meta Platforms, Inc. (hereinafter "*Instagram*"), a Delaware corporation which its subsidiaries, Facebook⁷⁹, Instagram⁸⁰, Messenger⁸¹, WhatsApp⁸² and other products.

⁷⁸ <https://www.statista.com/statistics/433871/daily-social-media-usage-worldwide/> , consulted in 06-08-2022.

⁷⁹ "Facebook helps give people the power to build community and bring the world closer together. It's a place for people to share life's moments and discuss what's happening, nurture and build relationships, discover and connect to interests, and create economic opportunity. They can do this through News Feed, Stories, Groups, Watch, Marketplace, Reels, Dating, and more." Meta Annual Report 2021

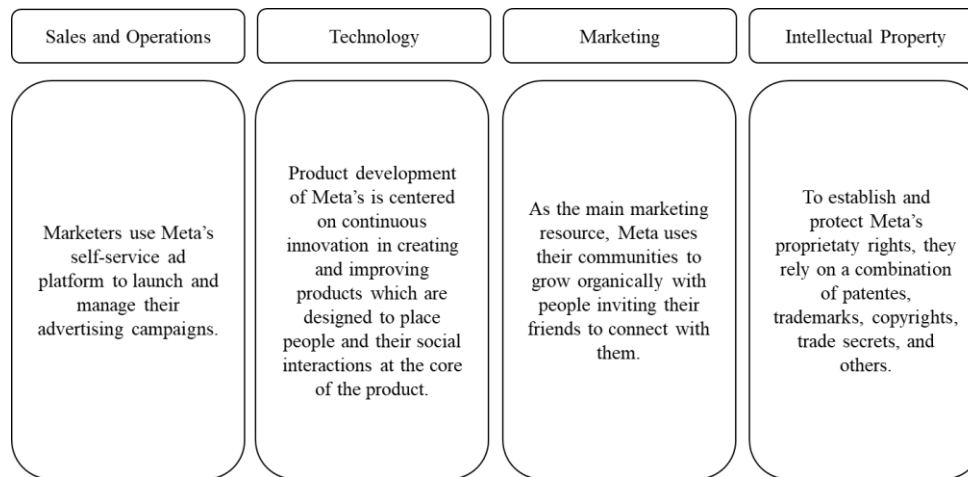
⁸⁰ "Instagram brings people closer to the people and things they love. Instagram Feed, Stories, Reels, Video, Live, Shops, and messaging are places where people and creators can express themselves and push culture forward through photos, video, and private messaging, and connect with and shop from their favorite businesses." Meta Annual Report 2021

⁸¹ "Messenger is a simple yet powerful messaging application for people to connect with friends, family, groups, and businesses across platforms and devices through chat, audio and video calls, and Rooms." Meta Annual Report 2021

⁸² "WhatsApp is a simple, reliable, and secure messaging application that is used by people and businesses around the world to communicate and transact in a private way." Meta Annual Report 2021

From the information available in Meta's Annual Reports, the following are the main characteristics of their business model:

Figure 3: Meta's business model characteristics



Source: Meta

Based on these four characteristics which cross over with the main characteristics of the digital business models analyzed in the prior chapters, it is noted the influence that the user has on this business model. Such as, considering the marketing element, the structure of the business model is carried out by the user. Being the user the main marketing resource by inviting people to join a network platform.

Moreover, Meta acknowledges the impact and risks the user has on the business. More specifically, the risk related to product offering, for example the ability to add and retain users and maintain levels of user engagements within their products. *"If we fail to retain existing users or add new users, or if our users decrease their level of engagement with our products, our revenue, financial results, and business may be significantly harmed"*.⁸³

Meta's business is based on building technology that helps people connect, build communities, and grow businesses. Meta's products allow people to connect and share with friends and family through a mobile device, a computer, a virtual reality (VR) headsets, wearables, and in-home devices.⁸⁴ With these products, people are able to share their opinions, ideas, photos, and videos.

⁸³ Meta Annual Report 2021, Page 14

⁸⁴ Meta Annual Report 2021, Page 8

Most of Meta's revenue is generated from selling advertising placements to marketers. Ads, that are exposed to users in the platforms, enable marketers to reach people based on factors, such as behaviors, interests, age, gender, and location.

Marketers purchase ads that can appear on multiple platforms, for example, Instagram, Messenger, and Facebook, which generate revenue from sales of consumer hardware products, software, and content. In Meta's annual report, it is acknowledged that substantially all their revenue comes from advertising. Therefore, if there is a loss of marketers, or reduction in spending by marketers, it could harm Meta's business.⁸⁵

The following table shows the consolidated financial statement of Meta for the year 2022 and 2021:

Figure 4: Meta's consolidated financial statements in 2022 and 2021

<i>In billions, except percentages and per share amounts</i>	2022	2021	Variation (%)
Revenues	\$ 116,609	\$ 117,929	(1)%
Costs and Expenses	\$ 87,665	\$ 71,176	23%
Income from Operations	\$ 28,944	\$ 46,753	(38)%
Operating Margin	25%	40%	
Provision for Income Taxes	\$ 5,619	\$ 7,914	(29)%
Effective Tax Rate	19%	17%	
Net Income	\$ 23,200	\$ 39,370	(41)%
Diluted Earnings per Share (EPS)	\$ 8,59	\$ 13.77	(38)%

Source: Meta

In 2022, the revenues of Meta were more than 115 billion dollars, compared with 2021, there was a decrease of 1%. To better understand, the revenue generated by Meta can be divided into the following segments:

Figure 5: Meta's Revenues in 2022 and 2021

<i>In billions, except percentages and per share amounts</i>	2022	2021	Variation (%)
Revenue:			
Advertising	\$ 113,642	\$ 114,934	-1,12%
Other revenue	\$ 808	\$ 721	12,07%
Family of Apps	\$ 114,45	\$ 115,655	-1,04%
Reality Labs	\$ 2,159	\$ 2,274	-5,06%
Total revenue	\$ 116,609	\$ 117,929	-1,12%

⁸⁵ Meta Annual Report 2022, Page 6-10

Income (loss) from operations:

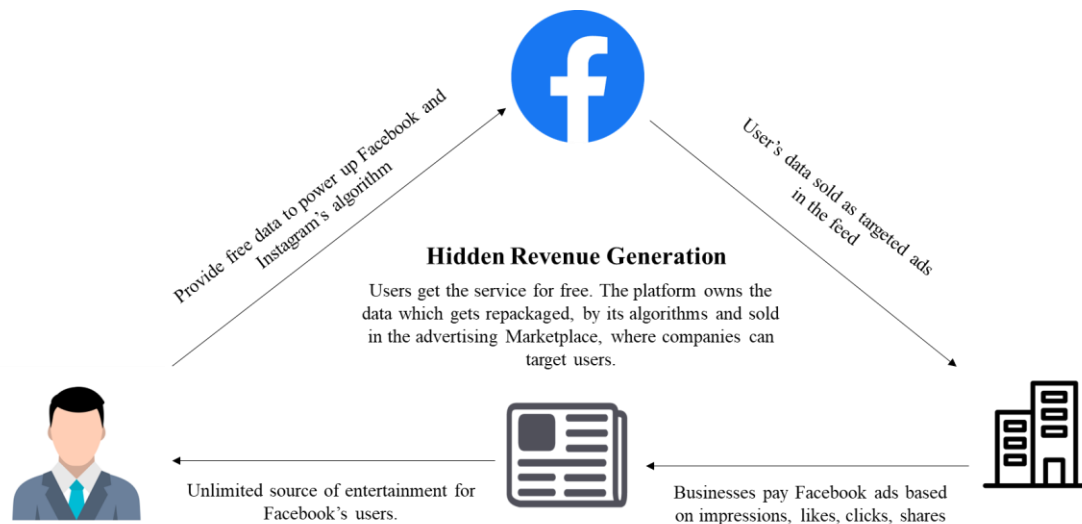
Family of Apps	\$ 42,661	\$ 56,946	-25,09%
Reality Labs	\$ -13,717	\$ -10,193	34,57%
Total income from operations	\$ 28,944	\$ 46,753	-38,09%

Source: Meta

The aim source of income made by Meta's in 2022 is advertising. This means that marketers are still investing in ads that Instagram or Facebook will show a certain type of user that product or service.

From my understanding, and to better demonstrate how the user is a burden in Facebook's business model consider the following graphic:

Figure 6: Facebook's Business Model



Source 3: FourWeekMBA.com⁸⁶

By examining Facebook's business model, we can correlate a direct line with the proposal of the user as a nexus.

Firstly, the user is an essential player in the business (something that was already discussed). After analyzing the risks of the business model, there is a dependency from the user activity that Facebook's is feeding off.

Secondly, I firmly believe that data is the new currency in the digital economy. There is an exchange that is not classically remunerated, meaning there is no money involved but data is the primary asset that the digital economy has. But because it is a hard to value intangible,

⁸⁶ <https://fourweekmba.com/tiktok-revenues/> , consulted in 06-08-2022.

which means that there is few or no comparable in the market, it is impossible convert into monetary terms.

Thus, this data allows the third parties to buy user's data without any tax liability. In the value chain, there is a moment where occurs exchange of data for money. In my point of view, this "operation" should be taxed, because it will be transformed into revenue for the firm, and as it is visible in the financial statements – "*advertisement*" is the primarily income of social media platforms.

6. Conclusion

After analysing and reflecting on the user as a new nexus for digital business models, I cannot give a straightforward answer to the title of my master thesis, probably depends. The international tax regime is a very complex field, where the interests of the various jurisdictions are considered. That same decision will be fatal for one or more jurisdictions, either in a positive or negative outcome.

For example, if the user is to be considered as a new nexus, the demand side (or market jurisdictions) will have a positively aftermath because, the user which has proven to be an important part of the value creation and therefore part of the digital business models will be assigned as a taxing right. Thus, profits made in a certain market jurisdiction (outside the resident jurisdiction) can be claimed by that same jurisdiction. Consequently, the resident jurisdiction will loss tax sovereignty over digital businesses. Thus, a political interest comes into play, which I believe to be the crucial one.

Another difficult approach I endure in my research process is connecting the value generated to the location of the user. When looking at a digital business model, there is a different approach in the generation of profits, so it must be looked at from a different perspective but keeping in mind the existing international tax principles and rules.

Digital companies have a wide range of big and personal data available, with that they have mechanisms related to the treatment of that data. For example, the Meta business model analysed in this master thesis showed that it is used a user geographic criterion, where the data regarding the geographic location of the user is estimated based on several factors: 1) user's IP address and 2) self-disclosed location. Nonetheless, there are factors such as the use of a VPN that affect the successful outcome for this application.

I firmly believe that the concept of the user as a nexus is possible, but not with the existing international tax system. There are several proposals which aim at changing the status quo but I believe that all of them do not consider the stakeholders in the process of generating profits. All of them just look at the end goal, which is taxing the profit, and therefore there will continue to be different approaches that MNEs will consider continuing tax avoidance, evasion and aggressive tax planning.

OECD has come out in several statements, as it as mentioned before in this thesis, that the value creation must be aligned with taxation. The user as a nexus is a strategic and sustainable

solution – (i) the user is and will continue to be a central player in digital business models. (ii) the user as a nexus would ensure that MNEs do not try to scam the international tax regime because they do not have the power to change the location of the user. (iii) for the user to be considered as a nexus a significant economic presence of a business in that location.

But data knows no geographic barriers, and asking for MNEs to change the way they monetarize their data for taxing purposes could be considered as “*marching to the beat of your own drum*”. Therefore, it is difficult to claim that the user would be a fit decision when considering a new nexus. Probably, it would be possible if there was a simplification of the tax regime of the EU and worldwide members, to promote a robust, efficient, and fair business tax system around the globe.

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