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INTERNATIONAL TECH HUBS

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INTRODUCTION

Welcome to the International Tech Hubs eBook second edition brought to you by BDO's plugd:in platform.

Building on the success of the international tech insights from the first edition, this work represents BDO's latest insights into future global tech hubs. Leveraging the collective expertise of BDO's partners around the globe, we review each location's benefits and advantages for start-ups, scale-ups, established businesses and investors looking to expand internationally.

From untapped talent pools and expansive available capital to strong governmental support, we believe these tech hubs represent the most exciting global locations for tech business. Drawing on extensive experience advising businesses of all sizes and investors of all interests, we believe the following locations represent the most interesting opportunities for technology ventures:

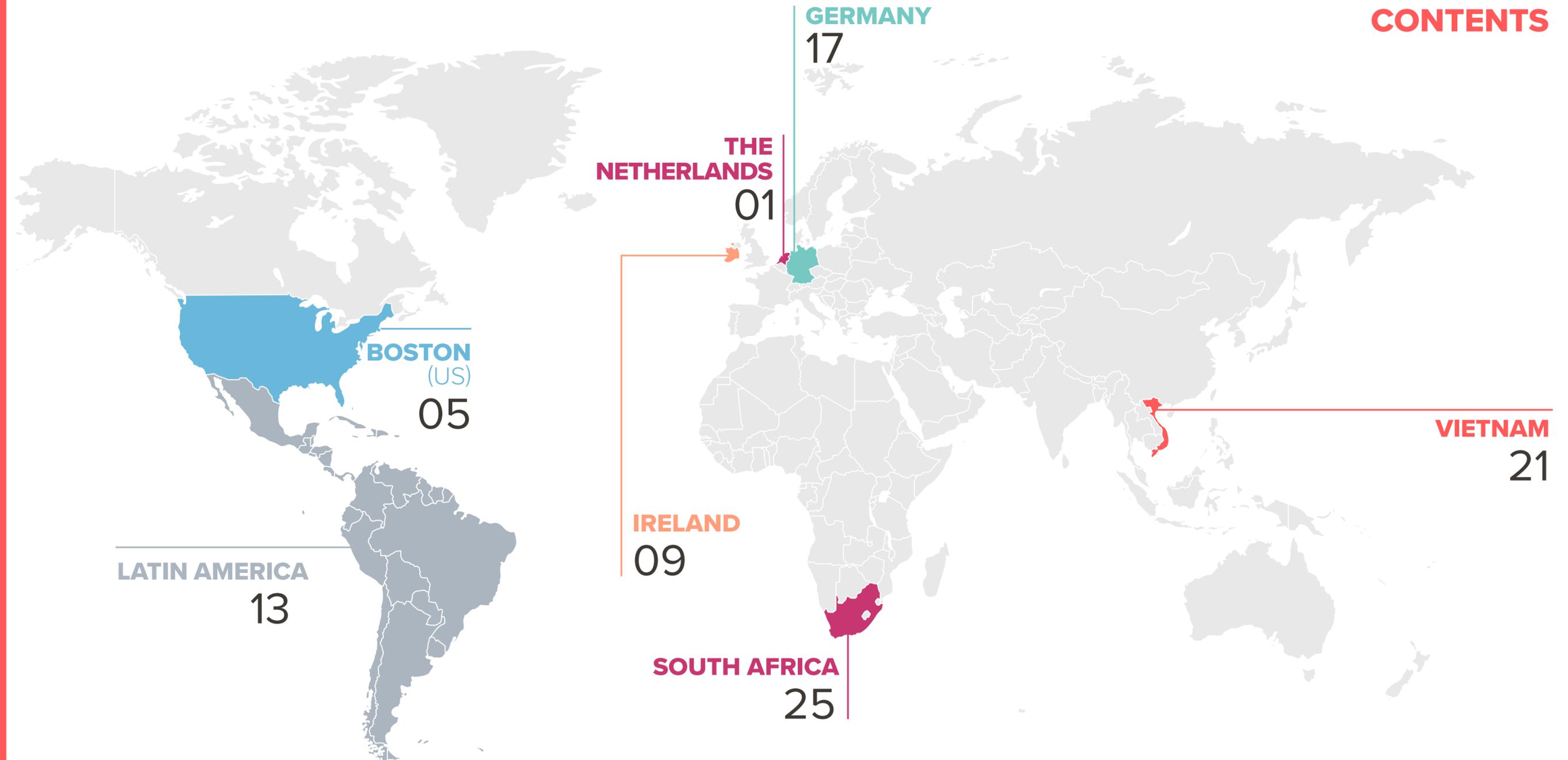
- **The Netherlands:** a successful market with a strong system of support
- **Boston:** a well-established hub for tech companies of all sizes
- **Ireland:** a tech powerhouse with geographical advantage
- **Latin America:** a fertile region with high potential
- **Germany:** a robust and attractive region with VC appeal
- **Vietnam:** an emerging market with untapped potential
- **South Africa:** impressive infrastructure with international appeal.

As the world becomes increasingly digital, technological solutions and innovations are more key than ever. Governmental and financial support is vital for supporting creative thinking and new intellectual properties. Despite the upheaval caused by the COVID-19 pandemic, these global tech hubs have proven to be supportive epicentres ripe for business growth and investor interest.

We hope this ebook provides you with useful and unique insight into the future of the world's technological developments. Thank you for reading.

TONY SPILLETT

Partner & National Head of Technology & Media
Editor in Chief



CONTENTS

THE NETHERLANDS

With expert input from Bart Paalman, Corporate Finance partner at BDO Amsterdam and co-Lead BDO Global TMT M&A. Bart has over 20 years of experience in the international corporate finance arena with a focus on the private equity and TMT sectors.



OVERVIEW: A SUCCESSFUL MARKET WITH A STRONG SYSTEM OF SUPPORT

The Netherlands' position at the doors of Europe - combined with its supportive government and plentiful capital - offers start-ups and scale ups the opportunity to take advantage of a well-established network. In spite of its small size, this robust market provides ample opportunities for investors and founders alike.

THE TECH LANDSCAPE

The Netherlands' strategic location at the gateway of Europe offers a unique access point to Europe's consumer markets. Ranked third in Europe for its global start-up ecosystem by Startup Gnome, this thriving tech hub has attracted many businesses with its healthy business climate, well-established financial industry and renowned top-200 academic institutions.

Listed as Forbes' fourth best country for business, the Netherlands' connected economy and ease of doing digital business have cemented its position as a start-up hub for European companies in general, and unicorns in particular. Another point of appeal is the Netherlands' logistic and technological infrastructure, with high quality cable connections, the largest internet exchange (AMS-IX) and one third of Europe's data centres based in the area.



“IN SPITE OF ITS RELATIVELY SMALL LANDMASS, THE NETHERLANDS OFFERS TECH BUSINESSES ACCESS TO THE 17TH LARGEST ECONOMY IN THE WORLD”



In spite of its relatively small landmass, the Netherlands offers tech businesses access to the 17th largest economy in the world and the sixth largest economy in the European union. For innovation and high tech, it takes first place for developer capital in Europe, and is the fourth most innovative economy in the world. With tax efficiency and a large English-speaking population, there is a real ease of entry for businesses.



“WITH A TECH COMPANY ECOSYSTEM WORTH \$22 BILLION IN TOTAL - FAR GREATER THAN THE GLOBAL AVERAGE OF \$10.5 BILLION – THE STRENGTH OF THE SECTOR IS CLEAR”

THE TECH BUSINESS ECOSYSTEM

Amsterdam is the heart of the Netherlands' tech and start-up scene. Renowned for creative tech, advertising, fintech, software, multimedia and gaming, tech giants already established in the city include Cisco, Tesla, Panasonic, Netflix, Uber and more.

An impressive 60% of all Forbes 2000 companies dealing in information technology have already established operations here. Recent businesses that have achieved unicorn status in the Netherlands include Just Eat Takeaway, Gitlab, Elastic, Bitfury, Flow Traders and Adyen. With a tech company ecosystem worth \$22 billion in total – far greater than the global average of \$10.5 billion – the strength of the sector is clear.

Though Amsterdam leads the tech sector, there are other significant hubs in the Netherlands that attract around two-thirds of all the country's start-up recruitment opportunities. Eindhoven is currently home to two global semiconductor giants, ASML and NXP, and the positive effect of these businesses have inspired the

formation of deep-tech companies such as ProDrive Technologies. Rotterdam focuses on life sciences, cyber security and telecoms, while Wageningen has become a global centre of excellence for innovation in food and agrotechnology (agritech).

THE TALENT POOL

The Netherlands' university offering provides an excellent starting point for a well-educated talent pool. All thirteen of the country's research universities are ranked in the top 200 universities worldwide. With an affordable cost of living and a desirable quality of life, the Dutch homeland offers an attractive work-life balance for talent. At present, the Netherlands' tech ecosystem employs 69,000 people in over 1,600 companies, ranging from start-ups to scale ups and established companies.

To help attract foreign talent, the Dutch government has provided temporary residence permits for non-EU entrepreneurs to create opportunities for them to innovate. There is also an inviting expat tax program, which offers a 30% personal tax income advantage.



“THE NFIA ASSISTS BUSINESSES AT EVERY STAGE OF ESTABLISHING OR EXPANDING OPERATIONS IN THE NETHERLANDS”

GOVERNMENT SUPPORT

Over the last 40 years, the Dutch government has provided instrumental support to foreign companies establishing or expanding their business through the Netherland Foreign Investment Agency (NFIA). At no cost, the NFIA assists businesses at every stage of establishing or expanding operations in the Netherlands, offering site visits, introductory partner meetings and quality-of-life familiarisation . It also facilitates communication

with commercial service providers; tax, customs and immigration authorities; regional investment agencies; and more. With personalised guidance and advice on tax, government, labour and permit procedures, location options and business solutions, tech companies are able to install themselves and innovate with ease.

The Netherlands also has many regional innovation funds that encourage start-ups and scale ups to grow with the aim of attracting foreign investment. For example, the Brabantse Ontwikkelings Maatschappij (BOM) is a regional fund that focuses on the deep-tech region of Noord-Brabant, supporting start-ups

 **THERE ARE SPECIFIC R&D TAX INCENTIVES THAT ENGENDER INNOVATION THROUGHOUT THE ENTIRE BUSINESS LIFECYCLE**

and scale ups through knowledge sharing and venture capital.

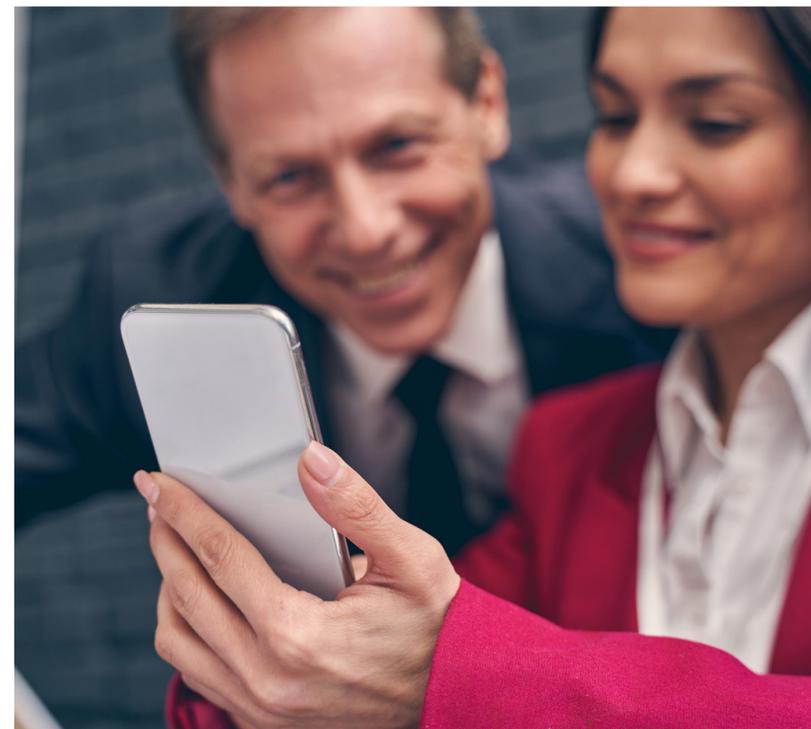
The Netherlands' accessible and cooperative tax administration minimises impediments for business development, and encourages cooperation and transparency between companies and tax authorities. The investment-friendly tax system already has almost 100 bilateral tax treaties to avoid double taxation and to provide limited or no withholding tax on dividends, interest and royalties. For European headquarters, there is 100% participation exemption, and the efficient fiscal unity regime offers tax consolidation for Dutch activities within a corporate group.

In terms of research and development, there are specific R&D tax incentives that engender innovation throughout the entire business lifecycle. For example, the WBSO tax credit offers established

companies a 32% reduction on the first €350k in wage costs, expenses and other investments, with a 14% reduction for costs over the €350k threshold. Start-ups are offered a 40% initial reduction.

The Netherlands' accounting standards are favourable to businesses from abroad. Accounting records can be made in any country, though the original filing may be required sometimes in the Netherlands. Records can be in the business' own currency, while annual financial statements can be made in English, German, French or Dutch.

In light of COVID-19, the Dutch government has joined forces with a number of development agencies to create a policy for start-ups, scale ups and innovative SMEs to offer bridge loans of up to €2 million.



THE INVESTOR ANGLE

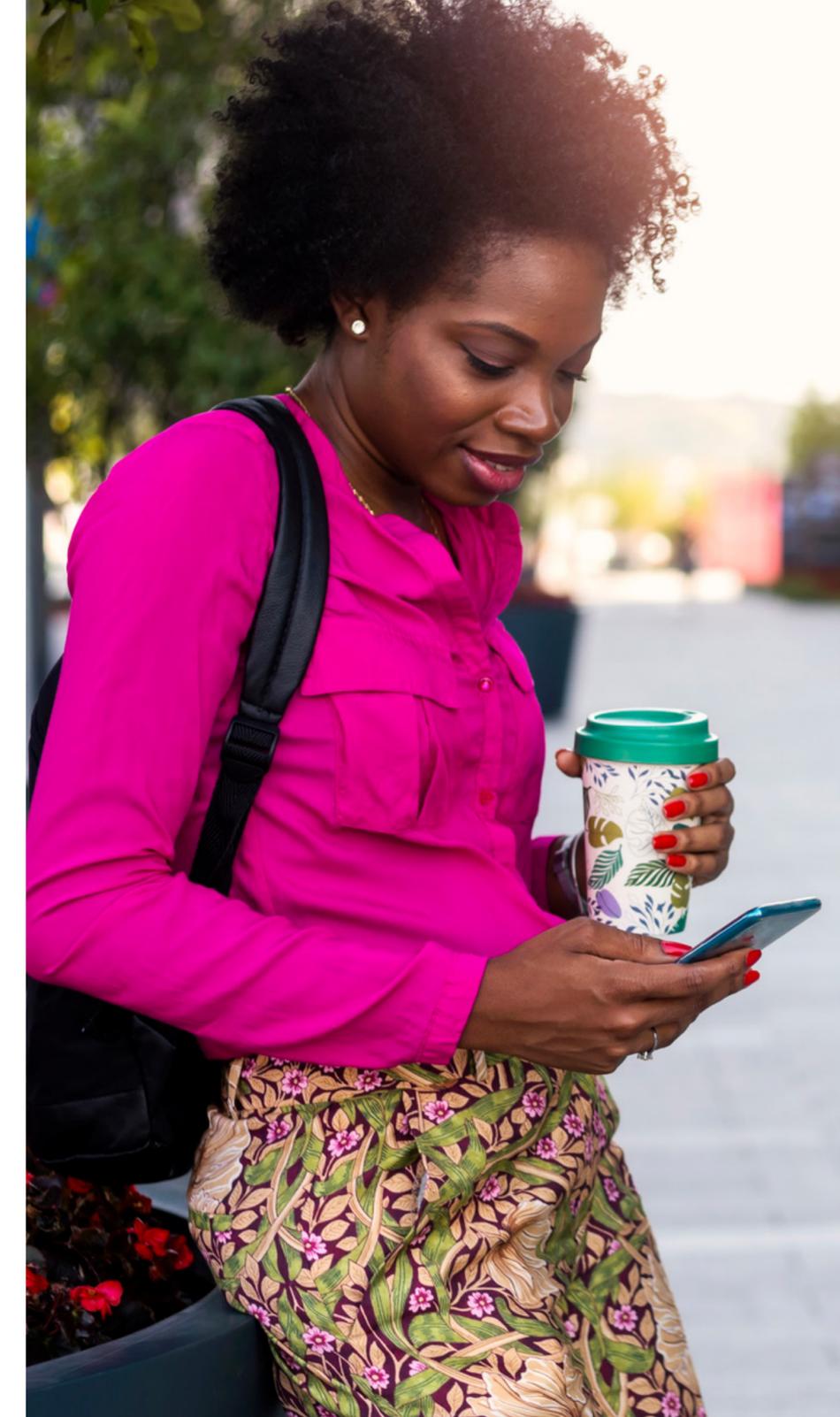
The success of the Netherlands' tech ecosystem and its relative ease of entry has sparked much foreign investment interest. The Netherlands is currently the recipient of 8% of all FDI into the European Union, attracting a high level of interest from the United States.

The country sees over 400 active venture capital and private equity funds; this type of capital is the largest catalyst for business growth, with over €1 billion raised by Dutch start-ups from national and international parties in 2019. Recent interest of VC is predominantly in the software, technology, healthcare & life sciences fintech, food & agritech, travel and logistics sectors.

Support from the Dutch government has led to private-public collaboration, such as the Dutch Growth Co-Investment Program, which invests equity alongside private investors into businesses moving past the start-up stage.

Pension funds and insurance companies also form a large part of the fabric of the Dutch investment ecosystem. The Netherlands is currently the second in the European Union in terms of the size of its pension fund market, with around €1,360 billion reported in late 2017. Dutch insurance companies place approximately 40% of their available capacity back into the Netherlands.

With all of these investment facets combined, the Netherlands provides a fruitful backdrop of capital for companies in all stages of their lifecycle to gain support and develop further.



BOSTON (US)

With expert input from Todd Berry, Assurance Partner and Life Sciences National Co-Leader, CPA, BDO Boston. Todd has over 35 years of experience auditing and advising middle-market, privately held, venture-backed and multinational public life sciences and technology companies.



OVERVIEW: A WELL-ESTABLISHED HUB FOR TECH COMPANIES OF ALL SIZES

Boston's unrivalled technological education and thriving ecosystem provides start-ups and scale ups with the talent and support they need to get off the ground. Second only in reputation to Silicon Valley, Boston's robotics and CleanTech successes have helped maintain high levels of investor engagement.



BOSTON'S WELL-ESTABLISHED, VIBRANT TECH ECOSYSTEM HAS IT ALL: BIOTECH, MEDICAL DEVICE, ROBOTICS, CLEANTECH, SOFTWARE/SAAS BUSINESSES, MEDIA, SECURITY FIRMS...

THE TECH LANDSCAPE

Once nicknamed 'The Hub of the Solar System' by Oliver Wendell Holmes, famed Supreme Court Justice, Boston has evolved from its roots as one of the oldest municipalities in the United States into a thriving tech hub. This proud multicultural city enjoys unrivalled tech and science-focused education from

renowned colleges and universities, as well as offering a solid infrastructure that makes it a suitable location for tech businesses looking to establish themselves in the US.

THE TECH BUSINESS ECOSYSTEM

Boston's well-established, vibrant tech ecosystem has it all: BioTech, medical device, robotics, CleanTech, software/SaaS businesses, media, security firms, hardware companies, digital health start-ups and more. Though it is a good location for larger, more established businesses, subsidiaries and those companies in the early stages of their development can find success in the area. With the well-established venture capital opportunities available in Boston – most notably beginning with the first successful VC, American Research and Development, established in 1946 in nearby Maynard - earlier-stage businesses have ample opportunity to thrive.

The support for local, earlier-stage companies, combined with fresh talent from local educational institutions, has led robotics to new heights. Boston's robotics-based start-ups and scale-ups employ over 4,700 people, and the ripple effect of this type of tech can be seen in the introduction of newer technologies in classrooms.

There are 1,100 life science-focused companies, bolstered by the MLSC Life Sciences Initiative, which offers \$1 billion in research grants, acceleration loads and tax incentives. This has led powerhouses such as Moderna Therapeutics to be valued in the billions, helped launch BioTech IPOs, and of course encouraged more specialist companies to move to the area.

THE TALENT POOL

The world-recognised colleges and universities in Boston and the surrounding area offer homegrown talent for the tech scene. Of these institutions, the most famous are likely the Massachusetts Institute of Technology (MIT) and Harvard, but



there are plenty of others that offer the opportunity for talent: Boston University, the Boston College, Northeastern, Worcester Polytech, the University of Massachusetts, College of the Holy Cross, Babson College, Bentley University and Tufts Medical, to name a few. There is a strong focus on science, technology and engineering in Boston's education system, helping create a fertile ground for innovation to thrive .

However, as the renown of the educational institutions close to Boston continues to grow, there is always threat of a 'brain drain', as competition from other cities and countries that can offer tech talent different lifestyles and opportunities. However, Boston's continually-evolving start-up scene and high quality of life continues to draw educated talent into the tech sector.



THERE IS A STRONG FOCUS ON SCIENCE, TECHNOLOGY AND ENGINEERING IN BOSTON'S EDUCATION SYSTEM, HELPING CREATE A FERTILE GROUND FOR INNOVATION TO THRIVE

THE GOVERNMENT SUPPORT

There is some complexity in the taxation laws for digital businesses entering the US, but this is the price of entry into a thriving market. Local government has tried in recent years to create a start-up-friendly environment to encourage tech innovation, launching grants and tax rebates for early-stage companies, particularly in the life sciences and CleanTech sectors. By offering additional tax reductions for larger tech businesses, Boston leaders hope to boost employment for tech talent home-grown in its local universities.



“**BOSTON’S VENTURE CAPITAL INTEREST IS STRONG, WITH THE CITY COMING SECOND ONLY TO CALIFORNIA AND ITS SILICON VALLEY IN TERMS OF INVESTMENT INTEREST FROM VCS**”

THE INVESTOR ANGLE

Boston’s venture capital interest is strong, with the city coming second only to California and its Silicon Valley in terms of investment interest from VCs . The investment community network - formed of investors, accounting firms, law firms and other related service providers - has always been strong, with a track record of attracting strong investment from UK, Ireland, the rest of Europe, and the Asia Pacific region.

The area’s focus on BioTech and HealthTech, as well as its diverse start-up ecosystem, have encouraged venture capital funds to invest extensively in the area. In Q2 of 2020 alone, Boston-area companies raised \$3.7 billion in 126 deals – an impressive rate considering the current climate .

In terms of other support, there are around 50 accelerators, investment groups and programmes that support the incubation of great ideas in the Boston area. MassChallenge, for example – created with backing from the City of Boston and Massachusetts state government representatives – is an accelerator that offers grants, mentorship, networking and more to businesses. There are plenty of incubators aimed at specific tech to help maximise success too; Bolt, for example, offers prototyping shops and full-time engineering staff for hardware start-ups.



IRELAND



With expert input from Kevin Doyle, Tax Partner for BDO Ireland, and Teresa Morahan, Partner and Head of Audit for BDO Ireland.



With over 38 years' combined experience in audit and tax advice services, both have a unique insight into the tech sector.

OVERVIEW: A TECH POWERHOUSE WITH GEOGRAPHICAL ADVANTAGE

Bridging the gap between Europe and the United States, Ireland's unique position has built its reputation as a tech hub to be reckoned with. Enjoying access to both sides of the Atlantic, Ireland takes advantage of an expansive talent pool and approachable tax regimes to foster a supportive local and foreign direct investment scene for tech businesses.



“GEOGRAPHICALLY, WE ARE CLOSER TO BERLIN THAN BOSTON. SPIRITUALLY, WE ARE PROBABLY A LOT CLOSER TO BOSTON THAN BERLIN.”

THE TECH LANDSCAPE

In 2000, Tánaiste Mary Harney, Minister for Enterprise and Employment, said 'Geographically, we are closer to Berlin than Boston. Spiritually, we are probably a lot closer to Boston than Berlin.' This dual market exposure has driven Ireland's FDI policy for some time and has led to Ireland now being highly considered as a solid location for international businesses to establish themselves, bolstered by global familiarity with and affection for Irish culture, the country's English-speaking Eurozone position, and its common law jurisdiction.

With Irish and European universities providing talent, the relative ease of doing business in locations known as strong tech hubs attracts plenty of foreign direct investment. The well-established precedents of major tech businesses in this market and the success of other start-up and scale up companies in the sector have led to a pool of expertise and knowledge sharing that draws in investors and new business founders alike.

THE TECH BUSINESS ECOSYSTEM

Over the last 20 years, the Irish tech industry has seen an explosion of companies being established here and scaling up. Almost all of the world's largest tech companies - Google, Apple, Facebook, Twitter, Amazon and more – have chosen Ireland as a base for their European and American connections.

Though the capital city of Dublin attracts the bulk of tech activity, various tech clusters have formed across Ireland as a whole, offering businesses cost savings on rent, salaries and creating a more attractive work/life balance for employees.

Cork's tech businesses tend to focus on cybersecurity, with McAfee, VMWare and eSentire based in the area. In Galway, medtech reigns, with Boston Scientific, Medtronic and Creganna having offices in that location. There is also a growing cluster of e-payment and fintech companies in Dundalk and Drogheda, which have now attracted the likes of PayPal and State Street.





“**IRELAND'S DISTINCTIVE POSITION AT THE DOORSTEP OF THE CONTINENT OFFERS TECH BUSINESSES ACCESS TO 250 MILLION PEOPLE ACROSS EUROPE.**”

THE TALENT POOL

Ireland's distinctive position at the doorstep of the continent offers tech businesses access to 250 million people across Europe. Despite its relatively smaller population, Ireland's connections have led to an influx of tech talent availability, even though there is significant competition for skilled employees. The Irish government offers investment and support for STEM-related college courses, and has put in place measures to reduce income tax rates for key staff who relocate to Ireland to join tech businesses.

THE GOVERNMENT SUPPORT

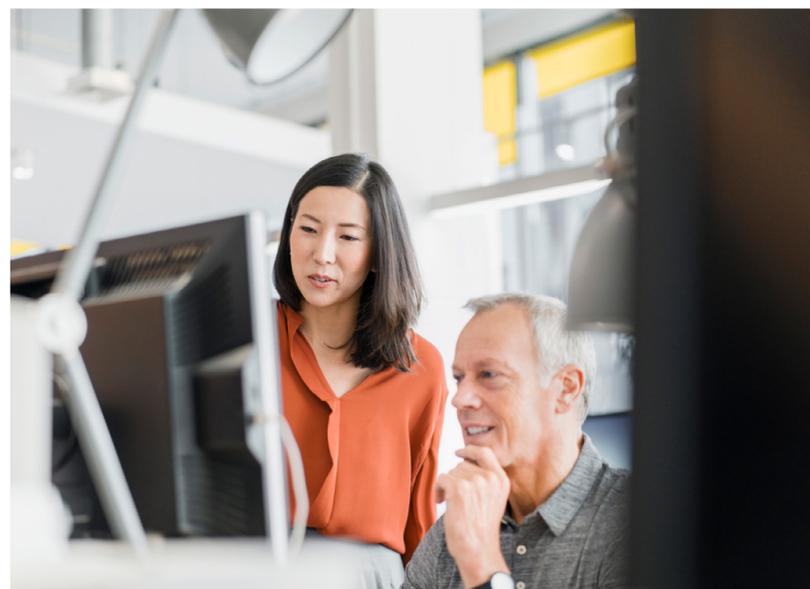
Ireland's vibrant tech ecosystem is backed by several government bodies including, the IDA, Enterprise Ireland and the sovereign wealth fund ISIF. These organisations have seeded the majority of the venture capital and growth capital funds in Ireland over the last 25 years, providing fertile ground for tech innovation. Their interest has led to further investment from global funds, who in tandem with local investors are supporting the growing tech scene and widening the international institutional investor base.

Businesses are likewise attracted by Ireland's 12.5% corporate tax rate and a very solid R&D regime that allows for a refundable tax credit. The government has put in place tax depreciation for the acquisition of IP, and is also encouraging the use of the Knowledge Development Box, which can reduce the tax rate

to 6.25% on certain IP exploitation if developed within Ireland. The domestic tax legislation allows for generous exemptions on outbound withholding tax in relation to dividends, interest and royalties; Ireland also has an expanding network of over 70 double tax agreements, with several more under negotiation.

Additionally, IDA Ireland— the nation's FDI government support arm that provides R&D grant funding and employment grants — targets non-Irish businesses to encourage them to use Ireland as a springboard for international expansion. This resolves the problem of Ireland's relatively small market, and establishes a supportive route for emerging technological companies to flourish.

Businesses coming into the market - particularly American private corporations — should be aware that there is a requirement for audited accounts in Ireland and the filing of these at the Irish Companies Registrations Office makes this information publicly available for third parties.



“**DESPITE ITS RELATIVELY DIMINUTIVE SIZE, IRELAND COMMANDS AN IMPRESSIVE LEVEL OF INTEREST FROM INTERNATIONAL CAPITAL.**”

THE INVESTOR ANGLE

Despite its relatively diminutive size, Ireland commands an impressive level of interest from international capital. It is the first choice for foreign direct investment from US tech companies, leading to its reputation as a formidable European tech hub. With incubators, start-up funds, R&D support and more, angel investor groups are able to find well-supported tech innovators with ease.

Aside from the US, the UK is also another source of funding; European investors primarily come from France, Germany, the Netherlands and Scandinavia. Whilst there is little doubt that Ireland's attractive corporate tax rate brings in significant interest, the connections within the foreign direct investment scene are uniquely collaborative, and foster a strong sense of community within the space.



LATIN AMERICA

With expert input from Luis Vila Rojas, Audit Partner, BDO Santiago de Chile, Luz Vasquez, Liaison for the Americas Region, BDO Global; Luis Romero, Partner, BDO Brazil; Dario Vieira de Lima, Audit Partner, BDO Colombia; Rodrigo Cifuentes, Partner, BDO Colombia; and Bernardo Soto Peñafiel, CPA Assurance Partner, BDO Mexico.



OVERVIEW: A FERTILE REGION WITH HIGH POTENTIAL

Latin America's expansive opportunities offer entrepreneurs the ability to tap into a technological revolution. With tenacity and an awareness of each individual nation's idiosyncrasies, bold investors and founders can take advantage of this developing market.

THE TECH LANDSCAPE

The sheer breadth and scope of Latin America's potential continues to attract businesses to the area, especially those looking to establish themselves or expand into new markets. With strong trade links, an enviable geographical position and an ever-increasing middle-class market, this region offers significant potential to businesses with the right value proposition.

The enormous region, often perceived incorrectly as a monolith, offers varying levels of ease of entry. According to the World Bank Ease of Doing Business Report 2019, Mexico, Puerto Rico, Costa Rica, and Peru are seen to be well positioned for continued growth. In terms of doing business, Colombia, Puerto Rico, Mexico, Honduras and Costa Rica have developed comprehensive credit reporting systems that add to their appeal.

The main drive for companies – and investors – looking to establish a foothold in Latin America is the potential for services and products to reach an extensive population. Which areas will be the first to be broached depends largely on the perceived stability of the economy. Chile, for example, has a smaller footprint, but a better perception of safety for investments.

With a huge variety of cultures, business practices, histories and economies, Latin America's apparent complexity can be intimidating for tech companies unfamiliar with the area. However, with its proximity to other large markets, a huge potential customer base and the relatively inexpensive cost of labour, almost the whole region would make an excellent base for businesses looking to make their mark.

“THE MAIN DRIVE FOR COMPANIES – AND INVESTORS – LOOKING TO ESTABLISH A FOOHOLD IN LATIN AMERICA IS THE POTENTIAL FOR SERVICES AND PRODUCTS TO REACH AN EXTENSIVE POPULATION”

THE TECH BUSINESS ECOSYSTEM

Each individual country within Latin America has its own particular strengths in terms of tech, though some specific areas stand out. The multi-national entities tend to focus on Mexico, given its proximity to the US: HP, IBM, Google and Microsoft are all based in this area. Homegrown talent includes Telcel, a leading player in mobile and internet services.

As for locally-developed businesses, Argentina boasts tech firms Globant, MercadoLibre, Despegar, OLX and Auth0, as well as the Chamber of Computer Software and Services Companies (CESSI), a non-profit organisation that brings together regional



companies and entities to enable the development, production, commercialisation and implementation of software and other tangential services.

Payment processing and fintech is a successful industry in Brazil, catalysed by the need for increasingly up-to-date payment options to meet the aging financial systems across Latin America.

Finally, Colombia – in particular, Medellín – is a hub for the “fourth industrial revolution”, being notable for its innovation and entrepreneurship. It has attracted Apple, IBM and HP to its market as a result.

THE TALENT POOL

Attracting talent from abroad can be one of the most challenging issues that Latin American countries face, especially given the wide cultural variety across its component countries and the perceived linguistic and political barriers.

This being said, companies in Latin America mainly rely on homegrown talent, with many of the best-educated personnel coming out of institutions such as those in Brazil.

An impressive 61 universities from Brazil made it into the 2020 Times Higher Education Latin America University Rankings, which comprised 166 establishments. Chile, Mexico and Colombia also offer good higher education opportunities, helping to establish younger talent for tech companies in their home nations.



“FOREIGN INVESTORS WILL FIND THAT THERE ARE NOVEL TAX REGIMES THAT ARE PREFERENTIAL, WITH INCENTIVES THAT MAKE SPECIFIC MARKETS IN LATIN AMERICA MORE TAX-EFFECTIVE AND APPEALING.”

THE GOVERNMENT SUPPORT

At present, tax regimes in Latin America are undergoing a period of upheaval. Foreign-owned companies's tax teams are having to adapt to new domestic tax rules currently being implemented across the region. However, as a result, foreign investors will find that there are novel tax regimes that are preferential, with incentives that make specific markets in Latin America more tax-effective and appealing.

Businesses looking to establish themselves in this region will need to familiarise themselves with the particular tax and accounting standards required by each nation. Broadly speaking, most countries follow the Organisation for Economic Co-operation and Development (OECD) standards and International Financial Reporting Standards (IFRS), though there are still many variances. For example, Colombia and Chile follows International Financial Reporting Standards (IFRS), but Brazil is still in the process of implementing it. Argentina, meanwhile, uses a parallel system.

THE INVESTOR ANGLE

According to the Economic Commission for Latin America and the Caribbean (ECLAC) in their study 'Foreign Direct Investment in Latin America and the Caribbean 2019', in Latin America and the Caribbean, foreign direct investment inflows were up by 13.2% year-on-year for the first time in five years last year. This saw

 **IN LATIN AMERICA AND THE CARIBBEAN, FOREIGN DIRECT INVESTMENT INFLOWS WERE UP BY 13.2% YEAR-ON-YEAR FOR THE FIRST TIME IN FIVE YEARS LAST YEAR**

\$184,287 billion invested into the area, with hotspots being Brazil and Mexico. Manufacturing and services were the sectors receiving the most equity, with the sources of capital coming mostly from Europe and the United States.

The facts show how Latin America maintains strong levels of interest from investors, but there could be greater support for businesses and investors alike. One of the biggest challenges for entrepreneurs and foreign investors is the varying levels of ease of doing business across Latin America. Some locations have engineered policies, incentives and visa options to help enable businesses to attract foreign direct investment, and some are still working on improving the process.

An example of a growing capital market implementing improvements would be Brazil. Here, tech is classed as a growing segment, meaning that interest rates are favourable. The Brazilian Central Bank has lowered the Selic interest rate from 7.5% (late 2017) to 2.25% (June 2020) to help spur progress.

Colombia also has a strong financial market, with plenty of capital available to finance tech companies. The drawback of the Colombian financial market is its high cost of doing business; when compared with the US, for example, the cost of a loan in Colombia is 5%–10% higher. That being said, the government has established resources to finance companies, especially in the technology sector, and there are alternative sources such as PE funds.

Latin America has incredible potential for investors, and offers a verdant market for entrepreneurs to explore.



GERMANY

With expert input from Jane Evans, Senior Manager of Advisory Services, BDO Germany. Jane has more than 20 years' experience working in financial services. She has worked extensively with companies in the technology, media and telecommunications industries with a focus on mergers and acquisitions and financial advisory (debt and equity). Jane is currently joint Head of Sector Centre for Technology, Media and Telecommunications at BDO Germany.



OVERVIEW: A ROBUST, DYNAMIC AND ATTRACTIVE REGION WITH VC APPEAL

Germany's strong economy and diverse range of multiple technological clusters offers fertile ground for international businesses looking to back innovative ideas. With significant national and regional support for tech focussed start and scale ups, founders can take advantage of a unique network of support including academic and corporate collaboration.

THE TECH LANDSCAPE

As the fourth largest economy in the world, Germany offers an attractive large pool of 80 million consumers with a peak disposable income. With a well-developed economy and a significant export market – the third largest in the world - this European nation has a lot to offer tech companies looking to either start up or expand.

The additional bonus of a highly developed manufacturing sector (its 23.4% gross value added is more than twice that of UK or France) is a testament to the country's leading economic



“**FOR BUSINESSES LOOKING TO EXPAND OR SET UP, THE COUNTRY'S SECURE LEGAL FRAMEWORK, COMPETITIVE CONDITIONS, AND FIRST-CLASS INFRASTRUCTURE ADD TO THE APPEAL.**”

status. With over EUR 100bn invested annually into research and development, Germany sits proudly in fourth place behind the US, China and Japan, cementing its reputation as a haven for innovation.

For businesses looking to expand or set up, the country's secure legal framework, competitive conditions, and first-class infrastructure add to the appeal. With six cities in the top 25 on the Global Mercer Quality of Living Survey, tech talent can enjoy a great lifestyle beyond work too. Perhaps the only challenge is the need for German language skills to access this innovative and impressive market, though English is prevalent.

THE TECH BUSINESS ECOSYSTEM

Germany is home to leading businesses in many sectors, providing fertile ground for tech innovation. Not just SAP (fourth largest software company in the world) but also companies like BMW, Siemens, Allianz, Bayer and BASF.

The German government has created a network of twelve digital hubs to foster innovation in multiple sectors: Harbour City Hamburg is a digital hub for logistics, with Dortmund also focused on this sector. Berlin is centred around IoT & FinTech; Cologne is the hub for InsureTech; Dresden and Leipzig are largely focused on smart systems and smart infrastructure. Frankfurt and Darmstadt mainly attract FinTech and



“**THE GERMAN GOVERNMENT HAS CREATED A NETWORK OF TWELVE DIGITAL HUBS TO FOSTER INNOVATION IN MULTIPLE SECTORS**”

cybersecurity firms; Nuremberg and Erlangen attract healthtech companies; and Stuttgart is the base for future industries. Munich concentrates on mobility and InsureTech as well as Deep-Tech; Karlsruhe is the home of artificial intelligence; and Mannheim and Ludwigshafen centre on digital chemistry and HealthTech.

There are over 90 more clusters around the country, supported by states or cities, creating a strong network of collaborative tech hubs across the nation, many of them now well-recognised globally: Germany's start-up and tech ecosystem is on the rise. Berlin is now the second largest start-up hub in Europe, followed by Munich.

Despite the impact of COVID-19, there is plenty of opportunity in Germany. German companies are competitive in the global tech scene, with the area providing an excellent backdrop for corporate growth.

THE TALENT POOL

Germany's population has seen a downward trend in its youthful demographic since the 1980s. Over 60s are due to increase by almost 40% by 2060, with an overall population decline of 10%.

This makes the competition for German talent very fierce. But the high quality of life, the excellent economy, and the prevalence of English all combine to encourage significant inflows of talent into the area. Already 34% of employees are International in larger German start-ups.

THE GOVERNMENT SUPPORT

German national and state authorities have been working hard over the last 15 years to promote tech innovation and in particular to support the development of ideas generated in universities into marketable products. The idea clusters created through the joint efforts of several specialist university faculties attracts extensive investment, particularly from abroad.

There's a national level of support for these clusters (for example €360 million since 2008; EXIST Business Start-up Grants, and KfW, a national public sector bank has a dedicated fund 'High-Tech Gründerfonds' for early stage tech companies), as well as federal initiatives. For example, in North Rhine-Westphalia, a state bank has an investment fund to support MedTech companies working in life sciences and other leading technologies. To offset the COVID-19 impact, the German government introduced a €2bn state aid package to keep struggling start-ups afloat.

One aspect that might come as a surprise for international businesses looking to establish themselves in Germany is that there is a higher mix of state funds available in earlier rather than later funding stages, which is less common in other countries.



“GERMAN NATIONAL AND STATE AUTHORITIES HAVE BEEN WORKING HARD OVER THE LAST 15 YEARS TO PROMOTE TECH INNOVATION AND IN PARTICULAR TO SUPPORT THE DEVELOPMENT OF IDEAS GENERATED IN UNIVERSITIES INTO MARKETABLE PRODUCTS.”

THE INVESTOR ANGLE

From an investment perspective – specifically a venture capital perspective – at first sight the ecosystem may look complex given the size of the country, the geographic spread of networks and both multiple agencies and hubs.

Ecommerce was the early beneficiary of VC funding. Historically known as being home to traditional manufacturing, Germany is now seen as a growing force in 4.0 manufacturing (digital manufacturing), whilst it has emerged as the next European Fintech powerhouse.

VC investments in Germany are flourishing and the market is highly dynamic. In 2019, the VC market saw €6.7 billion of funds invested up 45% y-on-y. This was an all-time high and the second highest volume in Europe: circa 570 start-ups and young companies were financed. Similar to the UK, domestic capital has diminished as a percentage of overall investment. This is because domestic VCs tend to lead on earlier rounds. International venture capital firms tend to hold out for businesses with a significant potential and invest later. It is larger rounds, which are more likely to be led by international investors (US in particular). These rounds have been a key factor in the recent growth in the overall amount of VC funding in Germany.



VIETNAM

With expert input from Hari Iyer, Executive Director for Advisory at BDO Malaysia. Hari has over 30 years of auditing experience, working across high-end technology solutions.



OVERVIEW: AN EMERGING MARKET WITH UNTAPPED POTENTIAL

Vietnam's fast-growing economy, young and STEM-educated workforce and diverse areas for modernisation have led to a bustling start-up scene. With a low cost of labour and international interest, there is high potential for bold ideas to thrive.

THE TECH LANDSCAPE

Vietnam - or the new Southeast Asian "tiger" economy, as it has become known – has been one of the fastest-growing economies in Asia over the last ten years. With a young, dynamic population of 96 million inhabitants, this nation's economy has expanded from its traditional agricultural roots to embrace new technologies, foreign investments and expatriate workers. Vietnam's political stability, particularly when compared to other emerging nations, has attracted technology companies looking to service the wider region. The country's lower costs of labour and supportive government policies have attracted both multinationals and start-ups to its shores. Its proximity to Hong Kong, Korea and China, and its competitively low cost base are appealing to many businesses, both in Asia and further afield.



“**WITH A YOUNG, DYNAMIC POPULATION OF 96 MILLION INHABITANTS, THIS NATION'S ECONOMY HAS EXPANDED FROM ITS TRADITIONAL AGRICULTURAL ROOTS TO EMBRACE NEW TECHNOLOGIES**”

THE TECH BUSINESS ECOSYSTEM

Vietnam's government, keen to expand and develop new industries, has made the country one of the most active in the region for digital progress. The developing start-up landscape - which is currently a hotbed for fintech start-ups – has emerged from a changed Vietnam, which has developed into a global exporter of electronics and textiles.

The country's capital city, Ho Chi Minh, is home to many developing technologies and established multinationals. Leading sectors include business process outsourcing (BPO), and its sub-sector, Information and Communications technology (ICT); retail banking and fintech; and e-commerce. The latter is one of the most promising tech-related sectors for investors; the e-Economy SEA 2019 report by Google and Temasek found that the value of Vietnam's e-commerce market reached \$5 billion in 2019, rising 81% when compared to 2015, and predicted to reach \$23 billion in 2025. The Vietnam E-commerce Association (VECOM) also revealed that the e-commerce growth rate of Vietnam is 30% year-on-year, making it a particularly attractive area for technology start-ups.



Though Ho Chi Minh City is likely the largest hub in Vietnam – attracting established tech firms such as Microsoft - there are other areas of interest too. Areas such as Hanoi, Da Nang and more offer an excellent work-life balance and specific opportunities for tech start-ups focusing on energy, finance and more.

The key draw for start-ups looking to establish themselves in Vietnam is the sheer untapped potential of the broad customer base, and the low rates of modernisation in significant industries. For example, there is currently a high percentage of unbanked population in Vietnam, with the banking and financial services sectors in need of development. The lack of retail banking with payment cards and absence of wealth management services means that fintech entrepreneurs can do well in the area, given Vietnam's surprisingly high mobile penetration. Similarly, the agribusiness sector represents 20% of the country's total export, but with little modernisation and issues with boosting productivity, start-ups or scale ups looking to revolutionise this area could make themselves a solid foothold.

The geological diversity of Vietnam is also of significant interest. At present, Vietnam is powered by coal, gas turbines and hydropower, but the government is encouraging more renewable energy usage and plans to triple the use of solar and wind energy for electricity production by 2030. With a southern area very prone to sun, and plenty of mountainous terrain and coastal access with wind energy potential, start-ups focusing on solar and wind energy could do very well.



“**THE KEY DRAW FOR START-UPS LOOKING TO ESTABLISH THEMSELVES IN VIETNAM IS THE SHEER UNTAPPED POTENTIAL OF THE BROAD CUSTOMER BASE**”



THE TALENT POOL

The main appeal of Vietnam's talent is its low salary costs and availability of talent. Vietnam's large population of 96 million is relatively young; more than 50% are under the age of 35, and many are highly connected with mobile and internet technology. The younger generation, often very educated in STEM areas, are keen to work in the technology sector, and IT work is highly paid in comparison to other work opportunities.

“**NON-RESIDENTS PAY TAX ON THEIR VIETNAM-SOURCED INCOME ONLY AT A FLAT RATE OF 20%, THE LOWEST IN THE WIDER REGION**”

THE GOVERNMENT SUPPORT

The Vietnamese government is keen to encourage foreign nationals and entrepreneurs to establish their businesses. Non-residents pay tax on their Vietnam-sourced income only at a flat rate of 20%, the lowest in the wider region. Those entering the market should be aware that Vietnam has its own accounting standards (Vietnamese Accounting Standards, or VAS), rather than International Financial Reporting Standards.

THE INVESTOR ANGLE

The Vietnamese equity market has seen robust growth, given the country's unique position as an emerging market with a high rate of STEM talent, and its 6.1% GDP growth per annum for the last decade.

Vietnam benefits greatly from the ongoing negotiations between the US and China over trade; the “war” that has boosted the Vietnamese economy by nearly 8% year-on-year as of Q1 2019, as companies turn to hardworking Vietnamese labour and free trade agreements instead.

Interested investors have followed as a result, tending to come from the wider area. South Korea invested \$7.9 billion into Vietnam last year, followed by Hong Kong, which invested \$7.8 billion.



SOUTH AFRICA



With expert input from Carl Bosma, Director, Risk Advisory Services at BDO Cape Town and Bernard van der Walt, leader of the TMT sector for BDO South Africa.



Carl has a wide range of experience with a particular focus on technology, media and telecoms. Bernard also has extensive experience in the media and technology sector, from start-ups to listed entities.

OVERVIEW: IMPRESSIVE INFRASTRUCTURE WITH INTERNATIONAL APPEAL

South Africa's technological capabilities, high levels of education and excellent quality of life are appealing to international tech companies looking for access to Sub-Saharan Africa. Though the market is still nascent, multinational tech giants and international investors have already seen the attraction.

RENOWNED TECH FIRMS HAVE ALL INVESTED IN SOUTH AFRICA, SEEING ITS APPEAL FROM AN INTERNATIONAL PERSPECTIVE.



THE TECH LANDSCAPE

South Africa's European-friendly time zone and English-speaking populace make it an appealing area for technology business and investors alike. Based on Forbes' assessment, South Africa places midway in the Best Countries for Business list, with its excellent rates of education, high quality of life and accessibility appealing to international parties. With a large but under-serviced population close by in the neighbouring Sub-Saharan and other African areas, international tech businesses are moving in to provide much-needed services and solutions. A low cost of doing business adds to the appeal.



THE TECH BUSINESS ECOSYSTEM

Though South Africa is a large nation, tech is concentrated on two main hubs: Johannesburg and Cape Town. The latter has more of an international reputation for tourism, but in recent years, business is also moving towards this coastal area. Cape Town has been ranked as the best city in the world to live by The Telegraph newspaper for seven years running now, making its quality of life desirable for tech employees. The city has also dedicated significant effort into developing a tech hub, which is referred to as "Silicon Cape". This area is focused on generating a network of small tech start-ups, rivalling the larger start-ups and scale ups seen in Johannesburg which dominates in the financial services sector.

Renowned tech firms have all invested in South Africa, seeing its appeal from an international perspective. For example, Microsoft has launched two enterprise-grade data centres to service Microsoft Azure Office 365 in Johannesburg and Cape Town, while Amazon is currently expanding its workforce by another 3,000 employees Google, Facebook, and Huawei – some of the largest tech firms in the world – have established either a base or subsidiaries in South Africa. Just over 30% of Tencent, the world's largest video game company, one of the world's most financially valuable companies, and one of the world's largest social media companies is owned by South African tech giant, Naspers. Insurance company Discovery has recently moved into the fintech space, syndicating their own bank and competing with the likes of TymeBank, also a new entrant to the market.

A more recent exploration is into the gaming and eSports side of tech. Though new in South Africa, international gaming companies are taking an interest in South African markets, particularly as the number of internet users continues to swell rapidly.



“THE MOBILE PAYMENTS SERVICES INDUSTRY IS ALSO THRIVING IN SOUTH AFRICA, DUE TO THE LARGE UNBANKED POPULATION BOTH LOCALLY AND MORE WIDELY IN SUB-SAHARAN AFRICA.”

The mobile payments services industry is also thriving in South Africa, due to the large unbanked population both locally and more widely in Sub-Saharan Africa. As fund transfers need to occur without bank accounts, payment apps have become a successful solution, due to the high penetration of mobile phones in the area.

The appeal is augmented by the internet infrastructure in South Africa, which includes 130 node locations and 70,000 miles of fibre optic cable, including undersea cables, which are incredibly useful for tech businesses. Microsoft, for example, is leveraging this infrastructure to access the rest of Sub-Saharan Africa and other more northern nations.

THE TALENT POOL

South Africa's education system is strong, with well-known and reputable institutions such as the University of Cape Town, Stellenbosch University, Wits University and Rhodes University. These produce good quality students with a very high level of education, ripe for the tech market.

There is significant competition for South African talent; some of the greatest exports from the country include Tesla's Elon Musk and Canonical's Mark Shuttleworth, both tech giants. Highly qualified staff are available at lower rates than other global locations, which makes them appealing for international businesses. Many graduates move overseas, meaning companies in the area need to be extra competitive in order to retain talent.



“GENEROUS R&D ALLOWANCES FROM THE GOVERNMENT, WHICH HELP TO INCENTIVISE COMPANIES LOOKING TO INNOVATE.”



THE GOVERNMENT SUPPORT

From an ease of doing business perspective, South Africa is very welcoming. Buying and gaining access to corporate structures is very simple, making it appealing to those looking to start up or scale up.

However, South Africa does have stringent exchange control regulations. Though it is easy to get money into the country, it is harder to get it back out. This means investors and entrepreneurs need to consider their corporate structures and transactions carefully in order to ensure their investments are cost-effective and sensible for their needs.

Corporate tax rates are also relatively high at 28%, but the international profile of South Africa and access to other markets means that this price of entry is bearable. This is also mitigated by generous R&D allowances from the government, which help to incentivise companies looking to innovate.

THE INVESTOR ANGLE

South Africa's own venture capital market has yet to develop fully when compared to others on an international scale, but the high level of appeal from international investors mitigates this for companies in the region. The US and China have high levels of interest in investing money into the South African market, with Huawei and Microsoft seeing the appeal of a country with solid infrastructure and the ideal location to launch into the wider continent. The smaller stature of the local market also offers opportunities for businesses looking to raise their profile. The Johannesburg Stock Exchange, for example, has only 25 businesses listed in the tech sector.



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