GOING FROM STRENGTH TO STRENGTH

Ireland’s thriving Technology, Media & Telecoms (TMT) sector plays a hugely important role in the wider social and economic fabric of the country.

From the creation of well-paid jobs and delivering substantial year-on-year export growth, right through to the nurturing of an innovation and knowledge-led entrepreneurial culture, the sector should continue to play a key role within the economy for the foreseeable future.

With over 210,000 people working in both multinational and indigenous firms, exports by the TMT sector account for 26% of Ireland’s total exports while it contributes around 13% towards Ireland’s GDP.

The buoyant TMT sector has also been enabled by a favourable business environment in which the State, through various agencies like Enterprise Ireland and the Local Enterprise Offices, have helped create a strong investment and funding ecosystem that embraces the banks, venture capital and private equity companies as well as a network of business angels, incubators and accelerator programmes.

A key component of this important ecosystem is the Irish venture capital industry which, alongside Enterprise Ireland, has become a vital source of medium-to-long-term capital for Irish SMEs operating across a wide range of sectors, including TMT.

Since 2008, in excess of 1,550 Irish SMEs have raised a total of €5.5bn, almost all of which was raised exclusively from Irish venture capital fund managers.

“A thriving Venture Capital industry is a prerequisite for exploiting Ireland’s rich potential for innovation and entrepreneurship,” says Sarah-Jane Larkin, Director General of the Irish Venture Capital Association (IVCA). “Venture Capital increases the quality of innovation and has a far-reaching impact on competitiveness and the spin-off effects on job creation, patent applications and economic growth have been well documented both internationally and locally in IVCA Impact Studies,” she adds.

Despite strong growth in the levels of venture capital funding flowing into the Irish market in recent years, 2018 saw a 25% decline on the €994m that was reported in 2017, ending the year on €740m, according to the IVCA.

“The one thing about the venture capital market is that it’s cyclical and we have been in the current cycle more or less since 2011 and funding levels have been on the increase every year. While we didn’t break the €1bn mark in 2017, it was still very significant,” says Sarah-Jane.

“In 2017, a couple of deals were driving that growth, particularly in the €100m plus range which...”

---

EQUITY FUNDS RAISED IN IRELAND BY SMEs

<table>
<thead>
<tr>
<th>Year</th>
<th>Funds Raised (€m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>€401m</td>
</tr>
<tr>
<td>2015</td>
<td>€522m</td>
</tr>
<tr>
<td>2016</td>
<td>€888m</td>
</tr>
<tr>
<td>2017</td>
<td>€994m</td>
</tr>
<tr>
<td>2018</td>
<td>€740m</td>
</tr>
</tbody>
</table>

Source: IVCA
CASE STUDY:

GAVAN WALSH, iCABBI

With a staff of 96, the Dublin-based iCabbi has rapidly established itself as a global player in the provision of cloud-based dispatch platforms in relatively short period of time. With customers in the UK, Ireland, Finland, the USA and Canada all using its platform, around 15.6m bookings a month go through its system. In addition, over 400m journeys have been fulfilled by its proprietary platform which has been developed in its Sutton-based head office since the company was founded in 2010.

“We currently have around 25% of the UK market and 10% of the US market, so there is plenty of scope for us to grow the business, particularly in Europe where there is a huge opportunity to expand,” says Gavan Walsh, the company’s co-founder and Chief Executive.

Having initially dipped its toe in the Irish taxi market when it set up in 2010 – a move which had mixed success – the company decided to change its business model from one which was too heavily dependent on the business-to-consumer (B2C) market to pivoting towards a business-to-business (B2B) model by focusing on providing taxi companies and fleet managers with access to its cloud-based platform.

“We made a decision in 2012 to pivot towards making dispatch systems that we could sell on and, with the benefit of hindsight, it was the correct decision. To help fund this, we raised €650,000 from a number of investors including AIB Seed Capital Fund, Bloom Equity and Enterprise Ireland. Thankfully, the strategy worked and since then we have enjoyed a steady growth-curve,” he adds.

“While there are cloud-based systems out there and there is competition, the options for taxi companies are quite limited. Our job is to give them the tools they need to compete with the newer players like Uber by keeping them relevant in a changing marketplace,” adds Gavan.

In June 2018, RCI Bank and Services, a subsidiary of French car maker Renault, acquired a 75% stake in iCabbi for an undisclosed sum. The investment provided an exit for investors like Bloom Equity, NDRC, AIB Seed Capital Fund and Enterprise Ireland all of which were prominent investors in the company.

“The investment by Renault has been a game-changer for the company and has led to the creation of over 60 new jobs. It has also allowed us to fast-track the development of our strategy. With the new investment, it will allow us to be a lot more strategy-focused which will, over time, allow us to grow considerably,” says Gavan.

Apart from raising seed capital in the early stages of its development, the company also raised funding under the Government-backed Employment Incentive & Investment Scheme (EIIS) which, he says, helped the company in its early stages.

“It’s a great scheme for companies and indeed investors, and it certainly was a help although it has been tightened up since we raised our funds. But we also used venture debt which can be another good source of funds when other sources might not be forthcoming. While it does carry a higher interest rate, it can be worth taking on that risk,” he adds.

While acknowledging the important role that the different investors played in providing much-needed funding in recent years, he points out more businesses should also look at appointing a mentor who can help them navigate unchartered waters.

“If you can get a good mentor on board from the early stages, it’s a big help as they can steer you in the right direction. The reality is that some businesses keep on going when, perhaps, they shouldn’t. An experienced mentor can usually spot all the signs and help companies make the right decision before it’s too late,” he adds.

“We currently have around 25% of the UK market and 10% of the US market, so there is plenty of scope for us to grow the business, particularly in Europe where there is a huge opportunity to expand.”

seed funds closing out on new applications and the cycle they are at combined with the time it has taken for new seed funds to replenish supply within the market,” he says.

“We can see some new seed funds coming into the market, but the gap in active seed funds is a real problem because it impacts other sources of funding in the market, like business angels, who typically like to piggyback on a deal that involves seed funding. So, in the absence of seed funds, angel investors have expressed their concern as, overall, it’s not having a positive impact on the market. Also, the VC industry depends on a pipeline of seed capital-backed companies for investment and if there is a fall-off in these, for whatever reasons, it has a knock-on effect. So, we need to get our act together on this in 2019,” he says.

While the decline in seed funding in 2018 is an immediate concern for the IVCA and its members, it has also called on the Government to recalibrate its current economic policies with a view to accelerating indigenous economic growth.

“We see dark clouds threatening our economic growth and these range from international trade volatility, changes in US tax laws and Brexit. As a small open economy that is impacted by decisions made in other countries, Ireland can be impacted disproportionately,” says Alex.

“We can do this by increasing the future flow of capital to innovative domestic companies and significantly expand their numbers and growth into international markets. One of the ways we can achieve this is the creation of a ‘Fund of Funds.’ Most governments, the EU as well as the European Investment Fund (EIF) recommend such an approach by the State as a way of encouraging greater private sector investment in Venture
Capital funds. We’ve explored this concept and we are confident that, with Government backing, a fund of funds can be developed successfully in the Irish market,” he says. He points to policy initiatives that have been undertaken in Denmark and the UK, where measures have been introduced to unlock to £20bn in private sector investment to finance the growth of innovative firms over the next 10 years.

“Whatever about its preparation for Brexit, the UK government has been quick to replace European Investment Fund money — knowing that the money is not going to come in post-Brexit — with a range of incentives to encourage the flow of private sector funding.”

leadership skills and have been exposed to a wide range of different business strategies, but I don’t think the supports or incentives are attractive enough for them to strike out on their own,” she adds. “In terms of what VCs are looking for from Irish companies, Alex Hobbs says there are several key trends.

“First of all, VCs are looking for timely and high-value exits. And while technology never stands still, right now the core foundation technologies that underly the next generation of TMT applications are becoming standardised and modularised within the cloud and are accessible to a wider population of app-developers globally. This means that the TMT sector offers increasingly greater potential to get a new idea tested and launched quickly and, from a VC perspective, greater potential for faster investee growth and to deliver timely exits.”

“If one looks at the VenturePulse figures, the vast bulk of companies are in TMT and Life-Sciences. There’s also a few AgTech companies coming up too,” he says.

“Obviously we are seeing trends around Big Data. We are starting to see artificial intelligence (AI) and machine learning becoming more integrated into products that are in development. Of course, AI is big, particularly when it comes to making sense of the massive volumes of data. Most hardware companies now will have a data element and are generating data insights for a product, so there are very few product-only plays that are getting funding. Other enabling technologies like blockchain, IoT enablers, digital engagement tools and mobile connectedness are all big at the moment,” he adds.

**CASE STUDY:**

**Davra**

**PAUL GLYNN, DAVRA.**

Harnessing and connecting new technologies that enable businesses collect data, understand it and make informed decisions based upon it, sits at the core of what the Irish networking company Davra offers its customers. While this whole process is a key attribute of the so-called Internet of Things (IoT), for Davra Networks and its Chief Executive, Paul Glynn it’s a process that the company has been involved with long before the term IoT was coined.

“IoT is really just a term, it’s not a market. It’s a little like mobile was 15 years ago and e-commerce was 10 years ago. It’s just about companies and organisations across all industries using new technologies in different ways,” says Paul.

“Increasingly more and more organisations are looking to connect the different technologies they use so that they can collect data and turn it into some form of usable business intelligence,” he adds.

With a staff of 24, 20 of whom are based in the company’s head office in Dublin’s IFSC, the company has built up a considerable reputation in a wide range of global industries including transportation, healthcare, mining, manufacturing, agriculture as well as in the provision of technology for Smart Cities.

“We are agnostic when it comes to sectors but 75% of our business is in the transportation sector and this could be anything from police cars in Dubai, ambulances in Nashville, light-rail in San Diego or freight in Connecticut,” says Paul. Approximately 80% of the company’s revenues are derived from the UK and the USA, less than 5% from Ireland with the remaining 15% coming from the rest of the world, including the Middle East and Latin America.

“Our route to market is with the big systems integrators and vendors like Cisco, Dell and Intel. With Cisco, for example, we worked with the city of San Diego which had a number of applications running across its transportation system. They had 15 different applications for their trains for things like ETA (estimated time of arrival), passenger announcements, digital signage, security and telemetry. We brought together all of those applications using a single platform so that data could be shared across all of them. They have taken the initial project and grown it by adding in more and more functions and locations, so they are an ideal customer for us,” he says.

Apart from the management team, the company’s shareholders include AIB Seed Capital Fund, Delta Partners, Enterprise Ireland and Investec Ventures Ireland all of which invested in a €1.7m Series A round of funding in 2013. More recently they were joined by Connecticut’s state-funded VC Connecticut Innovations which invested €400,000 in early 2018 as a prelude to a much bigger fund-raising exercise which will take place in 2019.

**Increasingly more and more organisations are looking to connect the different technologies they use so that they can collect data and turn it into some form of usable business intelligence.**

“Obviously, investors look for an exit and the valuations and exits that are being put on IoT companies, at the moment, are very high. So, we are in a very interesting space. There’s lots of companies that say they are IoT companies but if you look at the recent Gartner Magic Quadrant report that was published in 2018, there’s really only 18 players around the world and we are one of them. We are also one of just three private companies operating in the space. So, there’s no shortage of people willing to engage with us,” says Paul.

With consolidation in the IoT space a feature of the market, Davra is not in any hurry to cash in its chips just yet. “There’s a lot of consolidation in the industry and a lot of acquisitions are being made but we would like to think that we could be the guys making the acquisitions rather than being snapped up by one of the bigger companies,” he concludes.
FUNDING FOR GROWTH

AIB has played a critical role in funding the Irish TMT sector. The bank provides a full life-cycle support to its TMT customers, from start-ups to SME and to corporates, which is supported by a specialist sector team.

With booming employment and double-digit growth for each of the past five years, Ireland’s thriving Technology, Media and Telecoms (TMT) sector is having a major impact across the economy. “TMT covers a broad and diverse range of businesses, with the factors driving growth varied in nature. We have seen strong growth in the number of technology customers in recent years, driven primarily by software companies and IT services businesses,” says Mark Harris, Head of Technology, Media & Telecoms, at AIB.

“We have seen demand for bank finance for areas like new product and service offerings, strategic acquisitions in Ireland and the UK, management buy-outs as well as to companies looking to mitigate some of the impact Brexit may have on their business,” he adds. “Our Media customer base has also increased by 25% over the past four years, with the Irish film industry, in particular, driving this growth. Elsewhere, the growth of digital platforms and a desire for ‘own-content’ is creating opportunities for Ireland’s many successful studios, fueling opportunities for AIB and its customers in the process,” says Mark.

“We have also seen consolidation across the telecoms sector during 2018 with larger indigenous companies increasing their footprint through the acquisition of smaller players while we have also witnessed some consolidation across the broadcast media sector too.”

He points out that a recent review of AIB data shows that 35% of AIB’s customers operating in the TMT sector have opened their accounts in last five years. “This demonstrates that growth in the sector is not restricted to the increasing footprint made by tech giants such as Facebook and Google but has also been driven by a vibrant indigenous start-up ecosystem,” says Mark.

A key feature of the TMT sector is the availability of support for start-ups, says Mark. “Strong start-up support is key. The range of services provided by Enterprise Ireland are hugely important when it comes to stimulating entrepreneurial activity as are the supports provided by Local Enterprise Offices and the availability of funding from the Irish venture capital industry,” he says.

“There are also a significant number of accelerators and incubators around the country, with organisations such as Dublin BIC and NDRC in Dublin, Portershed in Galway and Ludgate in Cork providing environments in which entrepreneurs are put through their paces and provide an invaluable testing ground for new ideas and business models. AIB recognises the importance of these services and is a proud sponsor of both the Portershed and Ludgate,” he adds.

“The Portershed project has led to the creation of over 660 jobs and delivered over €7.2bn of economic value to the Galway community. AIB’s partnership has been critical to that success, and their foresight as the first sponsor of a co-working space in Ireland demonstrates their commitment to the ecosystem,” says Mary Rodgers, Innovation Commercial Manager of Portershed, Galway.

Mark points to some recent Irish successes on the global stage. “The acquisitions of Altocloud by Genesys and that of iCabbi by the Renault subsidiary, RCI, are examples of strategic acquisitions...
CASE STUDY:

**GERRY SHIRREN, CARTOON SALOON.**

Worth an estimated €100m a year to the economy and employing in the region of 1,600 staff, according to Animation Ireland, the Irish animation sector is thriving at the moment.

One of several animation companies that are flying the Irish flag on the international stage is the Kilkenny-based studio Cartoon Saloon which was set up in 1999 by Nora Twomey, Tomm Moore and Paul Young and since it was formed it has picked up numerous Academy Award nominations as well as a string of international awards along the way. “The Secret of Kells was the big international breakthrough for the company and came 10 years after it was set up,” says Gerry Shirren, Managing Director of Cartoon Saloon. “That really brought us on to a new international stage and started a whole new era for the company,” he adds. Since then the company has gone on to produce a number of well-known animated films including The Sound of the Sea and more recently The Breadwinner, both of which received Academy Award Nominations for Best Animated Feature, with the latter also receiving a first time Golden Globe nomination. With 150 full-time and contracted staff working on various productions that are in the pipeline, the company is currently benefitting from the growth in the number of OTT platforms like Netflix and Amazon, says Gerry. “The landscape for animation studios like ours has changed for the better in recent years, both for TV series and films. The rise of companies like Netflix, Amazon, Tencent in China and now Apple, which is launching service in 2019, has been great for the industry. Because we are a niche producer with a very scattered audience, the delivery systems used by these companies finds our audience both on a local and a worldwide level and that’s good for them because it gives them content that people want and it’s good for us as it gives us access to our audience,” he says. Currently the company has three major productions in the pipeline – Wolfwalkers which will be streamed on Apple’s new OTT platform, My Father’s Dragon, which has been bought by Netflix and a TV series called Pete the Cat, a commissioned production for Amazon Studios. According to Gerry, the growth in the Irish animation industry in recent years has been helped along, in part, by Section 481 Film Relief, various EU funds as well as the Sound & Vision schemes which are administered by the Broadcasting Authority of Ireland (BAI) while strategic skills, marketing and financial support comes from Screen Ireland. “Section 481 has worked well for the Irish film industry in general, not just the animation sector and without it, a lot of productions simply wouldn’t be made in Ireland. Section 481 are critical to the whole ecosystem of the industry as we are competing with big animation markets like France, the UK, Canada and Australia, each of which have their own version of Section 481. But EU funding has also been helpful while it also encourages co-productions with other EU countries which is a good thing. In fact, it’s hard to see how the studio would have survived without EU funding,” he adds. Given the time it takes to complete a production- with some productions taking anything up to 30 months from start to finish – film finance has always been a complex ground to navigate, he says. “Film finance banking is quite complex and almost boutique-like. You are essentially funding a project that is a long-term one and could take anything up to two years- sometimes longer- in production and it requires a jigsaw of finance coming from in several sources. To turn those funding mechanisms into cash requires a lot of work and its very specialised. In the past, Irish production companies would have gone to banks in the UK, France or Canada. However, we just completed project finance with AIB for Wolfwalkers and it put in a huge effort getting to know us and understanding the business model. It was a pretty big step for the bank,” he says.

**AIB’S INVESTMENT IN THE VC ECOSYSTEM**

€185m+ committed equity

into 15 funds with €1bn+ to invest

Supporting investment in over 200 companies

Source: AIB Analysis

**BANK FINANCE VS VC FUNDING FOR SMEs IN 2017**

by global players of Irish SMEs that were supported by AIB backed funds. In addition, the recent successes of our indigenous animation sector, and companies like Cartoon Saloon, show the global reach of the businesses being developed here in Ireland.” He points to the important role that venture capital has played in the success of the TMT sector. “Venture capital raised by Irish SMEs reached nearly €1bn in 2017 and accounted for 16% of all SME funding during 2017,” he says. “AIB has been a strong supporter of the Irish venture capital industry, committing over €1.85bn to 15 venture funds, which alongside other investors have committed a total of over €1bn to Irish based venture capital funds,” according to Ray Fitzpatrick, who heads up the AIB Equity Capital Fund team, part of AIB’s Investment Banking arm. “These funds cover a range of sectors including TMT, Life Sciences, SME growth and more recently renewable energy, across seed, venture and development capital stage,” he says.

“Supporting Irish economic growth and high potential SMEs is part of AIB’s ‘Backing Brave’ strategy and the bank recognises the importance of venture capital in the market place and the role it plays in backing entrepreneurial and innovative companies” he adds. “Areas like artificial intelligence (AI), machine learning, blockchain, IoT and cyber-security attracted significant investment in 2018 and will be key areas of opportunity as technology evolves. A number of other areas are also attracting investment including AgTech, EdTech and EnviroTech which demonstrate that technology is penetrating a wide range of industries,” says Mark.

The ensuing disruption triggered by emerging technologies will have an impact on many sectors, he says. “Some examples of this can be found in a recent study by The Economist Intelligence Unit which identified a number of industries that could be significantly
CASE STUDY:

**LoyLap**

**PATRICK GARRY, LOYLAP.**

Operating in the growing cashless payments and loyalty space, the Dublin-based company LoyLap has successfully carved out a considerable reputation in the provision of customisable payments for physical and omnichannel businesses. Set up in 2012 by Patrick Garry and Conor O’Toole and headquartered in the Guinness Enterprise Centre in Dublin, LoyLap now employs 14 staff.

By using the company’s cashless payment and rewards software - which is integrated with a merchant’s point-of-sale (POS) system - businesses can offer their customers seamless payments with a built-in loyalty scheme to incentivise positive purchasing behaviour and inform businesses decision-making with a range of rich data from the transactions.

“When we started, the main driver was how we could create technology that helps businesses with a physical presence like retailers, cafes or bars. We recognised that there will always be a need for physical presence businesses like these, so we wanted to build software that would help them compete with their online counterparts,” says Patrick Garry, CEO of LoyLap.

“One of the primary challenges facing businesses that don’t have an online presence is that they have no idea who their customers are, how much they spend and what they spend their money on. Online retailers, on the other hand, have become very sophisticated in terms of what they know about their customers,” he adds. Although the company initially started out by offering customers stand-alone tablets which they would use side-by-side with their existing point-of-sale (POS) technology, a number of more recent developments within the POS industry has allowed third party companies like LoyLap access to a much wider customer base, according to Patrick.

“By the end of 2014 the POS landscape was beginning to change and AIB Merchant Services had introduced the Clover cloud POS system to the Irish market. This gave us a new route to customers as Clover welcomes third-party developers to its platform if they can enhance its offering. So, immediately we launched our loyalty app on it and it was soon followed up by a gift-card application which was then followed by pre-ordering software and the latest is our self-checkout software. Every piece of software that LoyLap builds on the Clover system pertains to the merchant-customer relationship whether they are paying with a smartphone app or pre-ordering a drink to their table. And as a result of these smarter transactions, businesses can now see who their customers are and what they spend on while having the ability to take positive actions based on the data, in the exact same manner as an online business can,” he says.

With the Clover station now available in the USA, Canada, the UK, Germany, Austria and more recently Argentina, this gives LoyLap a significant potential market. The company currently has over 1,000 businesses using the LoyLap platform and while the vast majority of them are small cafes, restaurants and other retailers that use its loyalty and gift card solutions, it has also been targeting bigger corporates with its cashless payment platform.

“In 2016 we won a tender, together with AIB Merchant Services and Clover, to provide the Central Bank of Ireland with an internal cashless system for its employees. Essentially, every employee in the Central Bank has the LoyLap application to which their staff cards are linked and they can then use these to make contactless purchases in the restaurant or vending machines in the building,” he adds.

Winning the Central Bank tender opened up the door to other large customers like Regeneron in Limerick which employs 1,500 staff as well as AIB which has 8,000 staff working across different sites, he says.

“Many companies are looking at taking their buildings and businesses cashless, it’s just a question of illustrating to them why they should choose LoyLap, AIB Merchant Services and the Clover system,” Patrick says. Like many companies in the start-up phase, LoyLap’s initial funding came from the founders themselves.

“We boot-strapped it in the early days and we put in our own money. We did get a feasibility study grant from the Dublin Local Enterprise office which was useful and, in general, if you have a good idea, the Local Enterprise Offices are helpful as they will give you anything up to 50% back on a €30,000 expenditure to test a concept,” he says.

“From our experience, however, you tend to be popular when you are initially starting out or when you move to a position where you have 50 or more staff and your business is growing. The biggest challenge for businesses like ours is weathering the storm when you have between five and 45 people working for you which places a you little too large for the start-up supports, and a bit too low for what government supports might be available. In addition, we have found the venture funding ecosystem a lot more risk-averse than other countries and you can end up getting distracted from your primary mission which is to serve your clients. However, we have found that our bank, AIB, was the best option when it came to financing as it understood our product and growth trajectory and thus it has given us plenty of support over the past few years in a very positive and seamless manner,” concludes Patrick.