**IRISH COMPANIES: EXPORTING INNOVATION TO THE WORLD**

**Investment in R&D and internationalization is powering renewed economic growth**

Irish companies are proud to be home to the youngest population in the EU, with one-third of Irish people under the age of 25, and with strong support for continued membership of the single market and the Eurozone, the country is pursuing an ambitious, innovation-led vision of economic growth that is inspiring businesses of all sizes in all sectors, from local startups and SMEs to giant multinationals.

We have a strong pro-business environment, an open economy, and a stable and consistent 12.5% corporate tax rate," says Michael D'Arcy, Minister of State at the Department of Finance. "We’re having conversations with our third level (educational) institutions, and they understand that technology is going to be dominant in every sector."

Already home to over 1,200 multinationals employing some 230,000 people, Ireland has become an important English-speaking, common-law base in particular for U.S. companies looking to serve their European markets. Nine of the world’s largest pharmaceutical companies, eight of the top 10 technology businesses and more than 50% of the world’s leading financial services firms have established major operations in the country, while Internet poster-boys Google, Facebook, Twitter, and more than 50% of the world’s leading financial services firms have established major operations in the country, while Internet poster-boys Google, Facebook, Twitter, and dominant in every sector.”

**Clients of Enterprise Ireland, the state agency responsible for helping Irish companies overcome development and manufacturing challenges we had all faced, and to help make safe and more affordable medicine in a faster and smarter way.” Their education & training business developed out of a need to provide Ireland’s large pharma sector, including their own company, with people who had the right skills for the future.**

**“The government realized that our future as a country is dependent on having a highly educated workforce.”**

Dr. Flynn says. “Our particular strength is our responsiveness to the needs of the outside world and our ability to collaborate in a partnership approach.”

With more than 220,000 students enrolled in third level courses across Ireland, universities and colleges, the country’s higher education institutions are also making a major contribution to the growth of Ireland’s capacity for innovation.

In the capital, 45 technology companies, mainly in the data science segment, have already established a presence in the innovation campus of Dublin City University (DCU). At the end of last year, Talent Garden, Europe’s largest co-working network, launched a hub at the same site which provides a work space for freelancers, tech start-ups and corporate innovation labs, with capacity for 350 people. Talent Garden will work in partnership with DCU Business School to upskill entrepreneurs and assist corporates with their digital strategy.

“We are at the epicenter of the technological transformation taking place in this country and across Europe,” says Professor Brian MacCraith, President of DCU. “This partnership goes way beyond co-working and into the fields of accredited digital platforms, skills training, as well as creating international connectivity for Irish startups looking to scale up in other markets.”

In keeping with the goals of the Project Ireland 2040 plan, which emphasizes social outcomes and values ahead of economic targets, Irish universities are focused as much on personal development and soft skills as narrow disciplinary know-how.

Professor Vincent Cummiskey, President of the Limerick Institute of Technology (LIT), which has campuses in three Irish counties, says that open and accessible education holds the key to the economic and social development of Ireland. "It’s our responsibility to give opportunities to people, old and young, so that they can benefit from a high level of education and in so doing transform their lives."

“Our mission as a university is to transform lives and society through education, research, innovation and engagement,” Professor MacCraith at DCU Business School added. "We want all our students to graduate with a life purpose and to flourish in the workplace, in their private lives and in civic society.”

**What Irish people can offer companies here is extremely hard-working and creative people that can think outside of the box.”**

Fiach Mac Conghail, CEO, The Digital Hub
Can you give us an introduction to your first year in office?
We’re going to have a broadly balanced budget in 2019 and I think the challenge now is to manage expectations and be aware of opportunities to do better with our spending. We’re trying to keep everybody focused as we are putting money into the Rainy Day Fund. We know there are challenges; we are increasing our capital spending substantially in 2019.

Tell us about the recent allocation to infrastructure developments within the national plan?
Recently, we’ve launched the Project Ireland 2040 Plan in which we’re spending €116 billion investing in our society and infrastructure. The biggest area of expenditure is climate change, at €21.8 billion. We know and understand that we need to do more, we’re not yet meeting our Paris Climate targets for 2020, but we are absolutely determined that we will reach our 2030 requirements. In 2017 we had a change of Taoiseach (Prime Minister), Tánaiste (Deputy Prime Minister) and Minister for Finance so that any resistance to change has diminished. I was born in the 1970s and I’m older than all of you. I think there certainly was an obstacle changing the guard within Fine Gael. I think our new Taoiseach is probably the catalyst for that change.

Setting Brexit aside for a minute, what other important issues are you dealing with within the European Union?
There are challenges within Europe; we have seen resistance towards migration and I have to admit I find it hugely disappointing as a nation who were a nation of immigrants, that the two wealthiest regions in the world - Europe and the US - are rejecting people from other jurisdictions that are poverty stricken, corrupt and seriously compromised. I am not saying you can let everybody in, but we can be more generous than we are.

What are some of the other issues you are working to control?
It was inconceivable two years ago that the US would potentially enter a trade war with their closest partners the European Union or that we still wouldn’t know what type of Brexit would occur. The challenge for us right now to be careful, but it’s also important to ensure that we don’t just live in an economy that counts the numbers, we have to ensure that the people who need help get it. We are going to be careful with our allocation, we are going to continue down the reform pathway, we are going to spend more on infrastructure, but we are going to look after our people also.

Can you elaborate on the Enterprise Ireland Competitive Start €750 million fund and deep tech fund?
The Enterprise Ireland fund is a new funding stream, for early stage start-up funding for Fintech and DeepTech companies to enable companies to reach key technical and commercial milestones. As an EU member Ireland has guaranteed access to financial services passporting in the European Union without tariffs or restrictions. With the collaboration between government, private equity, the funds and the development banks, we would achieve much more than with each going off in their own direction. As we build infrastructure, try to get people out of cars, decarbonize properties, the merging of tech and finance is going to be the future. We have to leave something behind for the next generation as well.

What is it that continues to make Ireland an attractive place for companies?
We have a strong pro-business environment, an open economy, and a stable and consistent 12.5% corporate tax rate. We’re having conversations with our third level institutions, and they understand that technology is going to be dominant in every sector, it’s just how you apply it sector by sector.

What do you predict will be the most positive development in the short term?
I think the international community is going to know and understand and accept that climate change is happening, and the sustainability of global investment is necessary. You now have most companies analyzing their investment on the basis of the carbon footprint. Ireland is the first country in the world to commit to withdrawing public money invested in fossil fuels.

Can you explain the particularities of the relationship between the business communities of the US and Ireland?
U.S. companies don’t just have a legal license to operate in Ireland, they have a social and community license to operate because of the interwovenness of our communities. In 2016, we measured the social contribution that U.S. companies make across the island, and found that U.S. multinationals support 7,000 community projects across Ireland and their people donate annually over €600 million volunteer hours to those community projects. So the roots of U.S. multinationals in the communities across Ireland are very deep and pervasive.

Another independent research that we commissioned just this June found that 84% of Ireland’s general public see U.S. multinationals as critical to Ireland’s future economic strength and that 7 out of 10 of the leaders of U.S. multinationals believe Ireland is even more attractive today for FDI than it was in 2015. Our roots are deep, the community links are pervasive and there’s recognition of the strength and depth of the US-Ireland business community.

Also interesting is that the only country in the world that is guaranteed a bilateral meeting in the Oval Office with the President of the United States of America is Ireland.

Ireland is approaching full employment and finding and retaining talent is now a challenge. What solutions do you see?
What we constantly hear across sectors is that the talent that U.S. multinationals find in Ireland is second to none. What do you predict will be the most positive development in the short term?
What are some of the opportunities that you’re talking about when it comes to Brexit?
Ireland is about to become the only Common Law English speaking member of the European Union with an unbelievable track record of success attracting U.S. foreign direct investment. But we do need to see the bigger picture which is that if we have a hard Brexit, the impact on the competitiveness of the domestic economy is extremely concerning. 400,000 jobs either side of the Irish Sea depend on agri and food business and transport.

We are very pleased about the National Development Plan, which includes €500 million for a disruptive research and development fund (Disruptive Technologies Innovation Fund). We think that will be matched euro for euro by the private sector resulting in intense research and development in game-changing innovation. We are working very closely with Science Foundation Ireland on what we are collectively a grand challenge approach to research and development, trying to pick two or three areas for Ireland to have a global impact. We’re also very excited about the growing understanding of the Irish society so that we can realize that ambition to be an island of talent at the center of the world.
Developing the connection between Ireland & Europe

Noelle O’Connell, Executive Director, European Movement Ireland

What is the role of European Movement Ireland?

We are independent and non-partisan, and we are the oldest NGO in the country dealing with Irish and European affairs. We were founded in 1934, so we are over 86 years in operation. Our founding aim was to campaign for Ireland’s place to be at the heart of Europe, notwithstanding our geographically peripheral nation status. The leading thinkers and visionaries of the time in the 1950s were involved in trying to lessen our historical dependence on our nearest neighbor, Britain.

The European Movement Ireland is a member of European Movement International. We are supportive of the EU but see ourselves as a “constructive friend”, supportive but not blind to the challenges and flaws in areas where we think the EU can do better. What we ask of our members is that they support and promote Ireland in Europe and grow our relationship with fellow member states.

This particular year is rather fraught with all of these changes, but as an overriding umbrella in an organization that is over 60 years old, what do you see as Ireland's role?

Geographically small but nimble, we are a very global and outward looking country. Our history of colonization, famine and mass-migration makes us instinctively open to co-operating with other nations. In Ireland, every second person has family in the US or family who’ve emigrated, and most of us have worked and lived abroad. That is, I think, a big part of why we’re so innovative and adaptable. Ireland also has its own unique, special relationship with the United States, not least on the 40 million US citizens that claim Irish ancestry. I think we see ourselves as being a bridge between North America and Europe, both culturally and geographically.

Ireland has a great reputation but there is a difference between being thought of as a wonderful, beautiful, idyllic destination and being thought of as a tech powerhouse. What characteristics of the business culture would you emphasize?

Ireland is a pro-business and welcoming country. Across many sectors companies have established their European hub here. In sectors of the tech industries, we have the Silicon Docks in Dublin, where we have the headquarters of Facebook, LinkedIn, Google, PayPal and others. We’ve become far more of a multicultural society and our workforce is increasingly diverse. We also have a highly educated workforce. We are very skilled at relationship building and stakeholder engagements.

If you didn’t have to think about Brexit for a minute, what would be some of the challenges that you would be working on in terms of the European Movement and your mission?

It’s really interesting that the conversation has moved on from Brexit across the EU. It’s not the priority in any other member state but the UK and, obviously, Ireland because of the impact it will have on us as well. If you talk to any of our colleagues in Poland, the Balkans or the Baltic states, they’re talking about the influence of the larger neighbor next door, or the issue of migration. At European Movement Ireland, we are shaping Ireland’s input into the on-going future of Europe debate. We are listening to where the Irish people stand on a number of key topics like climate change, agriculture, sustainability, and security. We also try to do a lot of thought leadership, we try to bring Ireland to Europe. We are the national implementation body for a primary school program in which over 90,000 primary school kids take part from 1,000 schools. There are only 3,000 schools in the country so you can appreciate the scale of that project. Brexit has opened Pandora’s Box in some ways, but it has also forced us to look at how we manage our relationship with the UK. As our Taoiseach notes, Ireland is coming into its own and can be a leader regionally and globally.

Could you brief us on Enterprise Ireland?

Enterprise Ireland is the agency in Ireland that supports primarily indigenous industry. We support any entrepreneur or start-up company right from the start-up phase through to the building of multinational corporations. We cover all sectors and many of the core themes of direct relevance to sustainability as well as the development of our natural resources. We have about 5,000 companies on our books at any time and about 1,500 of those would be what we describe as active or very active.

We develop indigenous industry, but we are also involved with foreign direct investment (FDI) interests in the agri-food industry. IDA Ireland, our sister agency, is tasked with FDI interests.

Our primary interest is in “high potential start-ups.” These are companies that we know are able to generate employment and are aiming to export. We also support less-developed companies through a network of local Enterprise offices covering every region in Ireland.

A major question for us now is how to support the next significant multinational corporation to come out of Ireland. We have a history of supporting companies to a certain size, but now we are very interested in how to help them grow beyond that.

How can Enterprise Ireland help them?

Our agencies are all about exposing our companies and teams to the opportunities that are available internationally. Enterprise Ireland has a network of overseas offices in all markets of specific interest to Ireland to provide support to our companies.

We can support the training of management teams through our relationships with institutions such as Harvard and other business schools, for example. We support our CEOs to go through training programs that put them in a cohort of other very high-level CEOs, helping them to think big as well as develop their skills. On a research and innovation agenda specifically, we have our internal RD&D support for companies seeking to build next generation products.

More and more, we drive our people to use international funding. And that is where my Horizon 2020 team comes into play.

What exactly is Horizon 2020?

It’s one of the biggest European funding mechanisms, and nowadays one of the biggest global RD&D funding mechanisms. It provides funding for everything from academic research through to very high-end industrial research. You’ll see companies like Airbus and Intel using these mechanisms and we want our companies working in an environment in which they are exposed to companies like those.

Not only is this an internal research and innovation activity, but they are doing their business development by being part of it as well. If they are collaborating with Airbus, for example, can they win business around that? Can they become a supplier to Airbus? We can assist them here in Ireland, but by driving them out into an internationally competitive environment, we are allowing them to demonstrate that they can operate at that level, and therefore grow their business.

What role does Enterprise Ireland have in the 2040 plan?

We have announced the “Innovate Technologies Innovation Program,” which is the first step on the innovation side as part of the national development plan. This is an interesting program because it is collaborative, bringing leading large companies in the Irish context together with smaller companies operating locally. This provides a real portal to establish a center, or cluster, of excellence. These centers, in a small country like Ireland, are what we need in order to create impact.

How do you describe Irish innovation?

We see research in all of the major sectors that you would associate with modern science and technology. Some of the excitement around the uniqueness of Ireland is where you see this applied to interests here, such as smart agriculture or medical research. Here we produce a huge proportion of milk for the international market. We also have a very nice set of academic research facilities around our infant care. So, there is a cluster of interests around the agri-food industry together with the health and medical research around infant development or mortality. We have the capability, the people, the clusters of companies and academic institutions, already working in these areas.
What is the role of Sustainable Energy Authority of Ireland?

We have three main pillars of activity. The first is with consumers in their home and their day to day choices regarding cars, appliances and other choices. Over the past 10 years we have incentivised the upgrade of approximately 400,000 homes, or about a fifth of our residential building stock. We have learned that instead of a national agency saying ‘this is what you should do’, a more effective approach is one that educates, empowers and nudges consumers to make their own decisions.

The second pillar is working with public and private sector business. We run the Large Industry Energy Network, which includes the top 200 energy users in our country in innovation, knowledge brokering and grant aided activities. For many of these organisations, a move to more sustainable energy practices does not stem from altruism; instead it’s about competitiveness, growth in markets and responding to increased shareholder interest in environmental performance.

Our third pillar of activity is one where we have a significant and direct impact on long term performance. We are the statutory authority with responsibility for our energy statistics and national energy modelling requirements, and we work with the International Energy Agency, the EU and others in executing these. These exercises allow us to design, test and propose policy options to the Government of Ireland as to how best to meet our climate ambitions, and to work with peers in Europe to identify best practices.

SEAI is also the national interface with the IEA and the EU on research and development priorities. Ireland is small and agile, and I truly believe that we can innovate and lead in certain areas such as micro-grid and smart network applications.

How did Ireland fall short in its climate goals?

I believe it’s a combination of two factors. The first is that the energy targets were very ambitious. Having said that, given the strength of the economy at the time, they were perhaps achievable and it is vitally important that we must continue to stretch our ambitions, and to work with peers in Europe to identify best practices.

The second factor was the recession that quickly followed the setting of these targets. In a recession, with hard constraints on funding, the government was less able to incentivise from the exchequer, with the other option to regulate industry to make change. However, if you incentivise through regulation, it’s often a cost that is just passed down to the consumer, who in a recession may not have the capital available to pay a premium for greener products.

Notwithstanding the above, the pace of action in Ireland has been criticism from environmentalists on how we are not likely to come close to achieving our electricity and transport targets, while still falling short in heat. Heat is one of those tough problem areas that many countries find challenging. It tends to be a distributed problem where the consumer decision plays a key role, and they only make these choices at irregular and longer intervals.

It’s worth noting that despite Ireland likely falling significantly short on our overall climate emissions targets (which encompass agriculture and other sectors), we are in fact quite likely to achieve in excess of 80% against our energy targets to 2030.

What aspect of sustainable Ireland do you wish people knew more about?

We have an incredible track record here with respect to integration of renewables onto the grid and will need to push harder along that path, including the integration of distributed generation, storage and flexible demand. Ireland is small and agile, that integrating these technologies into the grid and having a market that rewards consumers for services provided, represents an enormous opportunity. There is a lot of high quality energy research underway in Ireland at the moment, and I am very positive about the future.

Supporting Ireland’s 2018 Year of Sustainable Business
Stephen Nolan, CEO, Sustainable Nation Ireland

Let’s start with the origins of Sustainable Nation Ireland. How and why did it get started?

In late 2015, seeing how well COP21 had gone in Paris, there was momentum for the creation of a new agency comprised of two sister initiatives in Ireland: the Green Financial Services Centre (Green IFSC) and The Green Way, an organization leading the cleantech cluster in Dublin. By bringing the two together—in Sustainable Nation Ireland—we had the first entity in the world that was looking at the same agenda from both sides, finance and enterprise. Sustainable Nation Ireland is the national platform for the promotion of Ireland as a world-leading hub for sustainable finance, business and innovation, accelerating Ireland’s transition to a low carbon economy.

Our mission is to bring together capital market participants, corporates, innovators and public sector organizations to stimulate increased investment in sustainable infrastructure and innovation. The transition to a low carbon economy is a huge opportunity for Ireland, catalyzing economic growth and jobs.

Are governments and corporations currently paying enough attention to sustainability?

The G20 said that 90 trillion dollars is needed in the next couple of decades to transition the global economy to a sustainable economic model. Tensions are managed globally by pension funds which are looking at everything through the environmental, social and government lens. They are thinking long term, and sustainability is just another word for long-term thinking.

Years ago, sustainability would have been lumped in with corporate social responsibility. Now we are seeing an evolution in this thinking, and the sustainability professionals are moving into the C-suite. Companies like Unilever or BT have a Chief Sustainability Officer on the board. If you don’t move up the C-suite, you become increasingly less valuable in the future. The SDGs are also becoming a core part of modern Irish corporations and we have a program aimed at encouraging Irish business to tackle climate change and other sustainability issues focusing on green finance, responsible investment, enterprise innovation and resource efficiency activities.

What is happening with regard to the climate action agenda?

I think that our Prime Minister certainly wants to be a leader in climate action issues. Today the government has the last three years of cabinet meetings where we are now likely to come close to achieving our electricity and transport targets, while still falling

And this brings us to your event in November, can you describe this effort?

The 2018 Climate Innovation Summit, Europe’s leading event on climate innovation, will be held here in Dublin, the emerging green business hub in Europe, this November with a focus on the finance needed to accelerate climate action. This is a partnership between Climate-KIC and Sustainable Nation Ireland.

The goal is to mobilize the billions that are now in low carbon investments or green finance into the trillions that are needed for a sustainable economic model and a big part of that is innovation. Across five days we will be looking at different government departments, agencies, companies, and discuss how innovation fits within them.

What we’re trying to do in November is step back and say: this is a massive challenge and an opportunity...
Breaking ground in the USA
David Maguire, Founder & Director, BNRG Renewables

What is the focus of your activities at BNRG?
We’re focused on developing, constructing and operating utility-scale solar projects. We’ve been doing this for 12 years across various jurisdictions in Europe, the UK, and most recently Northern Ireland. We just commenced construction on our first U.S. project in Oregon two weeks ago, and we continue to develop portfolio projects in the US, and around the world.

Where is this support for the shift to renewable power coming from, the private sector or government policy?
I think it’s a combination of both. First and foremost, Ireland is very reliant on foreign direct investment. A lot of that FDI comes from large U.S. corporates which are coming under increased pressure from institutional shareholders, as well as their customers, to demonstrate both sustainable investment and sustainable behavior.

Therefore, a key investment criterion when a company is setting up anywhere in Europe is to be able to source clean energy effectively. Ireland, at the moment, is the fastest growing economy in Europe. We have turned around the ship after a period of austerity and made Ireland an attractive destination for investment. However, this economy is relatively small, and we can’t afford to take a hit of 500 million on the Exchequer because we fail to meet our climate targets. So, first of all, there’s the driver from the corporate seeking renewable energy, and then there’s the driver from policy at a European level.

Tell us about your expansion into the US?
We have a unique selling proposition (USP) and that’s a high level of attention to detail and foresight to see where the market is going to be in 3 or 5 years time. We looked at where solar is going, what we know will be available by the time we go to construct. The markets opened by that future technology will be in cloudy, gray-sky countries. As a developer from Northern Europe - we’ve built out over 100 MW in the UK - we have a pretty good handle on how the world is going and what economies are going to be competitive. We are going to have a unique selling proposition when a company is setting up anywhere in the world.

Where is the company going to be in a 5 to 10-year period?
I hope that eventually we will be a green power company. I think the whole nature of the interaction between the consumer and the product, which is an electron, is going to change dramatically. We are going to have something similar to our traceability in agriculture with electricity. Among other things, I think blockchain will unlock the power of the consumer to buy the electron from a particular supplier.

I see BNRG being part of that ecosystem as the business model of the old utility dies. If we can set the price of carbon in Europe properly, I think that’s going to accelerate the change we’re already seeing because the consumer will push even if policymakers don’t. Climate Change and climate sustainable investment is becoming center and forefront and there is recognition that it is the biggest challenge we face globally. As a former EPA scientist, I see it as a real threat, but I also have great faith in the human race and ingenuity and innovation. Policy makers come and go but the people will drive change because they’re more empowered than they have ever been. I think despite the concerns and the cynicism I have about politics and the slow pace of change, common sense and humanity will win out in the long run, and that’s what we’re ultimately investing in as a business.

150 MW of projects in the USA by 2020

14 MW in County Down, Northern Ireland
300 MW pipeline in Republic of Ireland

The largest cluster for digital companies in Ireland
Flash Mac Conghail, CEO, The Digital Hub

Please introduce The Digital Hub and its role.
The Digital Hub Development Agency which operates The Digital Hub was established in 2003, with Media Lab Europe being one of the flagship tenants at the time. We are here to support digital technology enterprises to flourish in our community that is over 200 years old. The neighborhood is called the Liberties, one of the oldest parts of the city that has both an industrial and residential tradition and The Digital Hub is at its heart.

My job as the CEO is to curate the mix of enterprises so that it is diverse: med tech; education; travel tech; block chain; AI. Within five years, we will be doubling our space which will allow for more companies, such as Amazon or Stripe, which started here but had to leave us because they grew too big. The real idea of a cluster is to have some large companies that can actually feed off of what is happening, at a local level.

One of the emerging ideas coming from our board is that we need to start attracting companies within specialist industry clusters.

What is unique about The Digital Hub is its location only 500 meters from St James’ Hospital and the Children’s Hospital, which is a 15-minute walk from Trinity College. Right between us is the National College of Art and Design with its post-graduate courses in Medical Device Design. There’s an opportunity for us to establish what we may call a med-tech corridor.

To what extent can The Digital Hub form part of a community educational force and what kind of people can companies expect to find here?
The challenge facing this country at the moment is that the gap between the “haves” and the “have-nots” is greater than it has ever been before. How do innovation and technology and entrepreneurship contribute to a fairer society? The closer we can connect innovation and the citizenship, the better for all of us. Another issue for us is how to continue to create indigenous companies and keep our coders, our programmers, our software designers in those industries when they are tempted to go elsewhere.

Do we pivot our education system towards the immediate needs of the industry, as in the next five years? Or do we find a way to pivot our education to support what will happen in twenty years’ time? That’s a big challenge facing us.

The profile of the companies here in Ireland and particularly in The Digital Hub is very diverse and international. I suppose that’s the biggest shift in 20 years; if I close my eyes I can set the price of carbon in Europe properly. However, this is more than just about the consumer.

What Irish people can offer companies here is innovation and creativity and people who think outside of the box. We can offer the ability to change and adapt very quickly and our sense of ambiguity can be helpful in problem solving, not just by going from A to B, but sometimes C to D and then back to B. We’re very good at that.

What are some of your concerns right now?
Companies in The Digital Hub are competing with major international companies on two counts. First of all, attracting the talent and matching the salary. And secondly, the provision for housing or the availability of rental accommodation is the biggest issue facing enterprises in the cluster that we have here.

What is your greatest challenge and, if different, a significant goal toward which you are working?
The easiest part for us is to attract the right companies here. I suppose our biggest challenge is to find the right partners to help invest in this space so that we become more sustainable ourselves. I think we have an obligation in The Digital Hub to redevelop the property that we have into this important innovative creative and technological quarter in the city. We have the opportunity to have a major impact on the city.
Combining technology and education programs for the pharmaceutical sector

Ian Jones, CEO & Luke Kiernan, Director of EU Research Projects, Innopharma Labs

How do you describe Innopharma?

IK: We want to help make the pharma industry smarter – both through technology and through education and training. In terms of technology, we’re about developing solutions to help the pharma industry transition towards advanced manufacturing and greater automation. And with regard to Education, our aim is to address the growing skills deficit both in Ireland and beyond around smart manufacturing and business skills for pharma, med-tech and food manufacturing.

How did you decide to be an inventor and the founder of a company?

IK: I think the Irish are naturally very entrepreneurial – certainly my family are. Setting up businesses is in our culture, maybe it’s our farming heritage! Innopharma we always try to stay ahead of the industry, always keeping an eye on opportunities, and be quick to develop solutions. For example, our education business grew out of a skills shortage in Ireland’s pharma industry, during the recession it was one of the few industries hiring, so, we devised a way to retool people for those roles in pharma.

Could you elaborate a little bit on the evolution of the company?

IK: For the technology business, we evolved to meet our customers’ needs. We started out with individual sensors to bring better understanding to specific processes and control to specific parts of the drug manufacturing process, but the companies all had such different needs and were asking us to adapt our solutions for other processes and integrate our products with products from other providers. So from there we developed a more complete turnkey solution, which integrates our different sensor types, data analysis software and the hardware into one single application. We call this SmartFB – it means our customers can solve a wider range of problems within the drug development and manufacturing process. By being able to see what’s happening in real-time during the process, they can solve issues in a more efficient way. For the last 20 years pharma companies have been buying our sensors and products from other companies and putting it all together and trying to integrate it to their own solution. We’re trying to develop the seamless solution with everything integrated, taking the headache away from the pharma company.

How do you describe Innopharma?

IK: The quicker you can bring that product to market, the more money the pharma companies make. Additionally, there’s a patient benefit because they get access to a new innovative medicine faster. Our technology helps to make this happen.”

Ian Jones

2009 Innopharma Labs was founded

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2009 Innopharma Labs was founded

8 of the world’s top 10 pharma companies work with Innopharma

How are you competing?

IK: Many companies in this space have horizontal platforms, the generic version of sensors or data applications that will work separately across several industries or processes. Our niche is very much about deep industry and process-specific integration. We know pharma.

LK: The pharma industry has been generating data for the last 25 years, but in most cases we don’t know what to do with it, what it means, whether it’s good or bad. What makes Innopharma’s solution unique is that we have the real-time data from the sensors which is telling us how the process is performing, and the machine data, which tells us what’s happening with the machine, and everything feeds into central dashboard giving us useful data. As a manufacturer the business is making products, all they really want to know is, is this good or is it bad? Is it not good, how do we make it better? I think that is what we are bringing to the table.

How receptive is the market to this?

IK: It’s what the pharma industry is talking about right now. We launched our SmartFB product at Achacma in June, which is the biggest global pharma-chemical trade show held in Frankfurt every three years. The theme this year was all about the benefits of Industry 4.0 and Advanced Manufacturing, and the pharma industry is becoming aware of the need to do something about this. It’s for efficiency reasons, but it’s also regulatory driven. Being smarter means less regulatory risk, and the FDA are pushing the industry to embrace smart technologies. In February last year we attended a talk in Washington given by one of the heads of engineering at Merck who said that 40% of their capital investment over the next seven years was going to go to smart machines. Continuous manufacturing already exists in other sectors, but the pharma industry has not seemed to it yet, and that’s because of a lack of willingness to invest in new stainless-steel infrastructure when the old stuff is still working. What we’re saying to the industry is “you’re right, it’s not broken”, but just retrofit everything and make it smart. And we can provide you with that solution.

LK: I think we’re all more comfortable with technology now too. It’s not that long ago that we didn’t have smartphones, but now we’re used to them and moving on to smart homes and cars, so we’re more tuned in to connected devices and ‘smartness’. We’re not that comfortable with the unknown and the pharmaceutical industry is a particularly conservative industry because we can’t take chances with our products. But I think society in general is more comfortable with the idea of smart and they can understand how this is making things easier.

In terms of the recent funding from EU Horizon 2020, what does this set you up to do?

LK: We were delighted to get this funding. It offers us a new area to tackle within the pharma industry. So, the most important ingredient that goes into the tablets are the active substance, the API, that has the pharmacological effect. It’s not always the same people making the finished drug product that make the active substance, so this opens a new market for us. The most critical phase in substance manufacturing is the crystallization phase. What we’re doing is bringing better control to that with specific sensors that we have developed that we integrate onto a crystallization reactor. These sensors get more information, store the data, process that data and then feed that back into the equipment to control the temperatures or the pH adjustment to get a purer and more consistent active substance. From the industry perspective it basically gives them a more “right first time” approach.

IK: It’s an extension of our philosophy on smart vertical integration, and there’s probably 60,000 to 80,000 chemical reactors in the world. So, it’s a big market to make smart.

What’s your vision of what Innopharma, and Ireland, will be in 2040?

IK: Ireland will still be a hub for pharma and med-tech. We’ve been known for 50 years for our technical manufacturing expertise and that isn’t going to change as there’s a huge body of knowledge and talent built up here. Nine of the world’s top ten pharma companies are here in Ireland, that’s an incredible ecosystem to be a part of. For Innopharma, the global trend is towards hands off, data-led, smart manufacturing, and we want to be the leaders in that. And with that trend towards a more technology driven manufacturing sector, there will be a demand for skills in those areas, like advanced manufacturing and data analytics, so people and industry are going to need our education to have the right skills to continue to succeed. We want to be known for making the pharma industry smarter overall.
What is your broad assessment of the Irish workforce?

In Ireland I don’t believe that innovation is just a byproduct. We have an incredible mix of people in the workforce, with diversity of thought and background. At Accenture we have about 66 nationalities in the business in Ireland and that is deliberate because sustainable businesses are those that are more diverse and have greater breadth of thinking. There is something really special happening around the interplay between business, government policy, the academic institutions, and the mindset of people in Ireland. Most Irish people have an open mind to the outside world and are comfortable with difference and traveling. You won’t hear many people in Ireland say “well this is just the way we do things.”

What is a culture that cultivates innovation?

Innovation is a mindset. There is a discipline, and a process and then you have to have the right talent and the right environment. Ideas and innovation are now very mobile between industries. Great ideas, properly formed, that can move quickly, are the gold dust of innovation.

Can you explain Industry X.0?

I like the analogy with a car plant—50 years ago cars were assembled by hand. Then they produced assembly lines, then robots. For the mass production of cars, we have reached the point where there is really very little human intervention, at least in comparison with what it used to be. Still things go wrong because of the complexity of the elements of the car. The complexity of the products being produced makes any failure or hiccup in the process incredibly expensive and difficult to replace. The same applies to medical devices, and medicines themselves. Each step of the process needs to be communicating with the next stage of the process to ensure that the quality is checked at every point.

What would you like the global audience to know about Irish-led innovation?

Here you have some of the most innovative and remarkable industries in the world in a country where everyone is in close proximity. Irish people have an inclination to innovate because we are very comfortable collaborating with each other. So you put the proximity and that inclination together and we have some of the most amazing, adaptable, keen graduates and citizens that enables innovation. Then when you add the government’s focus on innovation this helps us to make change happen quickly. All of this is only going to get better because we have such a young workforce.
Customers should always come first

Mike Stenson, Head of Innovation, Kingspan

What is Kingspan’s essential character with regard to sustainability and community involvement?

I would first of all point to our emphasis on putting the customer first. What our customers want is at the center of what we do, and we pride ourselves on being able to respond to those needs. Since our inception in the 60s, I think that we have managed to stay agile and close to the customer, introducing the innovative and sustainable products and services they need and backing that up with how we operate as a business. For example, in 2011 we made a public commitment to be a Net-Zero Energy company by 2020 and this has helped us to demonstrate how our products and services can contribute towards a world where energy conservation and carbon reduction in buildings is the norm. Community has always been fundamental to our growth and understanding as a business – we respect and learn from the communities where we live and work by engaging in a number of community, education and sport initiatives across the globe.

Does Kingspan really lead customers on this journey, or is it just responding to their needs?

I think that we do a bit of both. Our industry, by definition, is extremely conservative and very focused on what the customers want today but we also want to push them a bit toward what’s possible. We launched our Quadrant product a couple of years ago and that is a world-leading building envelope product offering impressive levels of thermal and fire performance. Now, if we were to ask customers if they wanted this, their first reaction may be that they don’t need it because what they have is actually ok. However, we have been able to make a case for this as an unrivalled next-generation high-performance fire and insulation product. Furthermore, we see the need to continue on our sustainability journey and move towards a totally circular product set. We are also looking beyond product to support our customers with exceptional levels of service using digital technologies – it’s a very exciting time for the business.

Can you articulate Kingspan’s commitment to Ireland for us?

As a company founded here, by definition, the operations fabric and the ethos of the company – our manufacturing facilities, our workforce, the culture – are all here. We are a prominent business in Ireland and we consider Ireland an important part of our history and future. We are actually building a new Innovation Center in County Carlow that will focus on cutting-edge research for the next generation of Kingspan products.

What are some of the challenges that you face?

Because the industry is quite traditional and building projects are often fragmented - I think the big challenges relate to how we can use digital technologies to better serve our customer along the complete project cycle. One of the key technologies we are exploring at the moment is Building Information Modelling (BIM) which is a software that allows everyone from designers to contractors to design, manage and control the project in 3D form. We are developing our digitalization offering to allow us to bring this and other technologies to the table with our expertise and customers.

Where do you expect future growth to happen for Kingspan?

We indicate several pillars for our growth. First would be geographical into both markets where we are established and new markets. Second, is a strong focus on providing more traditional building envelope solutions and the growth of our newest division, Light + Air, is key to that. Third, is our continued focus on product and solution innovations with a particular emphasis on researching new building materials, what we call material science. Fourth, is ensuring we deliver the best possible customer experiences through our teams and digital technologies.

Do you have any concerns about this growth?

Well of course we have to manage growth and ensure we have the right talent in the right places and that is something I am working on within the Innovation function at the moment as we grow. We know that we need to carefully manage the growth of our people to match the growth of the company and ensure that we are offering the right opportunities for individual growth too. Like everyone else we are looking to the next generation of the workforce while taking our culture, values and DNA and spreading it across the world.

Maximizing the positive impact of business

Tomás Sercovich, CEO, Business in the Community Ireland (BITC Ireland)

Can you give us an introduction to Business in the Community Ireland?

Business in the Community was set up in the year 2000 when the European Commission started to articulate sustainability. This is not a new concept in Ireland though; as far back as 1756, when Arthur Guinness set up the brewery in Dublin, he instituted the values of caring for employees by providing housing and health facilities. We do two things: one is advising, supporting, guiding, and inspiring companies to implement sustainability in their management principles, systems and operations. Secondly, we function as a think tank and an advocate for these issues.

How do you convince companies to engage more deeply in sustainability?

The best managed companies – those that are really successful today and will be in the future - are the ones that have fully integrated these considerations, whether they label them sustainability, environmental considerations or CSR. A key challenge is attraction and retention of talent. Companies realize that if they can’t make their region or city a great place to live, they won’t be able to attract talent. Those that engage intelligently and practically with the local community also earn license to operate and that license to operate is what allows a company to grow, even if it’s not growth that is comfortable for the community. If you go back to the theory, it’s all about the good corporate citizen. Finally, businesses cannot prosper in societies that fail, and that is me the cornerstone. If you are based in a community where there are significant societal challenges - poverty, lack of educational attainment, crime - then that is detrimental for your business.

So where is Irish business in the quest for sustainability?

I would say Ireland scores very highly on the community engagement piece. Compared to Scandinavia, Eastern Europe, Southern Europe, the level of dialogue and connection and the acceptance of business by local communities is outstanding. Ireland has a great record on solidarity and care for the neighbor.

In which of the pillars do you think that they need the most work?

First and foremost, climate action. We’re not going to meet our 2020 targets and there are reports we may not meet our 2030 targets. Several years ago, all the conversation was about the huge potential that Ireland had to be the number one in renewables, yet it still isn’t mainstream.

Tell us about the activities and the strategy around your Leaders’ Group.

Ten years ago we created an ISO-type standard on sustainability, which is called Business Working Responsibility. It mirrors the global standard on sustainability, ISO 26000, but because ISO 26000 is not certifiable and subject to third party audits and verification, we created one that is. There are 30 companies in Ireland that have it. We sat down with those companies and asked if they would be interested in looking beyond the frontiers of their company to how to affect change in Ireland on key sustainability issues. They agreed to be part of this is CEO-led platform and chose three themes: transition to a low-carbon economy, where we have launched a low carbon pledge; the worker of the future - best practices around volunteering hours; and a low-cost pledge; the worker of the future - best practices around volunteering hours.

What are your long-term goals at BITC?

In the short-term, I would like for Business in the Community to have a very compelling message and a coherent narrative because we do many things in this organization. I want to make sure that our businesses see that the only acceptable way of running a profitable, successful business is by being sustainable, and that we see us a partner on that journey. Secondly, we want to be more effective in broader conversations. I would like to take the Leaders’ Group outcomes to government, other industry bodies and around Europe. I would like to be able to look at Ireland and say we’re one of the most inspirational countries when it comes to sustainable business. I felt really proud of the fact that we are generating change and if I can be part of that process with this great organization, my job is done.
Irish companies sustainably feeding the world
Tara McCarthy, CEO, Bord Bia (Irish Food Board)

Can you explain the role of Bord Bia between producers and customers?

Bord Bia’s mission is to drive, in partnership with industry, the commercial success of the Irish food and drink industry. Agri-food is the largest indigenous industry in Ireland. We have exports of €12.6 billion euro, which is an increase of 13% on the year before, thus showing fast growth as well. Ireland’s food industry is quite unique because, as an industry, we have a ten-year plan. In that plan we look at our ambition, our enablers and our blockers. Every five years we revisit to see what our ambitions should be. These ambitions are articulated through the talents, skills, innovation agenda, and sustainability of our industry. Most recently, with contributions from all stakeholders, we agreed that by 2025 our industry could grow to €19 billion euro in exports.

Bord Bia’s job within this context is around five key pillars. First, our role is to be the custodians of the insight gained from extensive, shared, research. Instead of being a production-led industry, we look to be an insight-led industry and we establish that ethos from here.

The second area that we invest in is talent, because we believe that the next challenge will be the war on talent. If we want entrepreneurs to come into this industry, we need to make sure that the infrastructure is there to help them succeed. There are certain skills that our food industry needs, so we look at those spaces and then partner with educational institutions to make sure that we provide a way for people to acquire those skills. We work with Smurfit Business School, which partners with lecturers from around the world, such that anyone who works on a Bord Bia program knows that they’re being exposed to the best in the world.

We want to position the food industry not only as an exciting place to work but also as a place with a mission: you’re helping to feed the world, and you’re doing it sustainably. We know that this is important to the millennials who are looking not just for a job, but a job with a purpose.

What about the issue of sustainability?

Our third pillar is around sustainability, and particularly food sustainability, meaning naturally produced food with provenance. Origin Green is our absolute commitment to the sustainability agenda. We understand that this is a huge topic and we do not believe that we have everything right, but we do believe we are in a very strong position. Years ago, we asked UK-based Carbon Trust to design a program to measure the carbon footprint of each farmer from information volunteered by the farmers themselves. As a result, we can give the farmer a report indicating how much money he can save if he changes his behavior. Everyone wants to do the right thing, but it is also helpful if the right thing saves you money. Sustainable farming is actually economical farming.

Our fourth, related pillar is route to market, where we need to gain an understanding of how we get our product to our customer. We want to better understand the roadmap of food to market and we are looking seriously at how to choose where to play and how to win. We have been working on market prioritization exercises, by food sectors, with a disciplined approach to how to measure resources.

And the fifth pillar related to?

The final pillar is around brand communication in the digital age – how do we tell our story? That is evolving constantly and so much of how we tell our story is around Origin Green. We have built an amazing, unique, architecture for our commitment to sustainability, but we need to be able to better articulate the impact that it is having.

Part B is about the processors and 90% of the exporters in Ireland are now verified members of Origin Green. That means that they have sent us a plan with their strategies and their stretch targets. We also invited our retailers and foodservice operators into the program. We are the only ones in the world that have a national program like this.

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Ireland’s dairy industry. Your sustainable source.

Origin Green, Ireland’s national food and drink sustainability program is our commitment to a safe, secure food supply far into the future. Central to Origin Green, is the Sustainable Dairy Assurance Scheme (SDAS), the first national dairy sustainability scheme of its kind, an independently audited and internationally accredited program.

Ireland’s temperate climate, abundant rainfall and tradition of family farming have resulted in a grass-fed system with cows grazing outdoors for the majority of the year. Ireland’s dairy farmers participate in the SDAS program, where consistent audits and continuous improvement ensure a sustainable supply of quality milk.

So make sustainability key to a reliable dairy supply for your business. Visit OriginGreen.com/Dairy to learn more.

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Business should be aided by technology
Rory Finegan, CEO & Founder, Beyond Accounting

How and why did you set up Beyond Accounting?
I grew up with this American dream that setting up your own business and making a fortune was what success looked like, whether it was true or not. What actually happened was quite different because I went to college, which was all about saving and earning. I was a Chartered Accountant and got a job. I was doing well for myself, learning loads and earning good money, until the recession hit. Then I was basically given a cheque and sent on my way, so it was a challenging time. But it was also the perfect time to revisit my dream of having my own business because I was now free from the golden handcuffs! That’s where it all started.

How is technology changing your sector?
I recognised early on that technology would be a gamechanger for traditional accounting. New solutions were coming into the sector—the gamification of accounting systems and cloud platforms—and it just made sense to me. Many Irish accounting firms continue to look and act as they have done for decades. When I set up Beyond, I wanted to diversify significantly from the way accounting had been done up to then. A major shift was happening internationally, and I decided to seize the moment. Modern accounting for modern business was our goal, and today we’re leading the Irish market and three or four years ahead of our competitors.

What are the main challenges you see for companies in Ireland in 2019?
We had GDPR in 2018, followed by the payroll modernisation that Revenue brought onstream in January, meaning it now has much more access to real-time figures in your accounts, books and banking. This is great for transparency, but if you’re a small business trying to survive in the grey areas, it’s going to be more difficult in the future. Overall, I think one of the big challenges for businesses will be to keep their costs down. There are quite a few inflationary pressures at the moment. Property prices, for example. SMEs need to be smart about their expenditures while making sure not to impede growth. It’s a constant balancing act.

How will Brexit affect companies and the overall economy in Ireland?
I’ve been baffled about this since the Referendum happened, and I still believe that a hard Brexit is unlikely as it will economically hurt both the UK and Europe; usually money talks in these situations! There’s no money in it for the UK to leave Europe. It would be a very bad move. What’s interesting is that there is money now being earmarked by the EU to help countries and sectors that are going to suffer from Brexit. As for Ireland, Brexit would leave us the only English-speaking nation in the EU. I think long-term that’s a massive benefit to Ireland.

Can Ireland still offer a competitive business climate to those interested in investing here?
We do some issues, such as property prices forcing wages up. But overall, Ireland is still a positive place for FDI. Ireland benefits from having a UK-originated legal system that international companies take reassurance from. Government agencies like the IDA and Enterprise Ireland provide amazing support for businesses. But the bottom line is that foreign corporations here pay very low corporate taxes, which has made FDI extraordinarily successful for Ireland. One in four employed people work for a foreign-owned company; we have a very international outlook and we’ll continue to attract good businesses.

Sustainable growth powered by community
Catherine Moroney, Head of Business Banking, AIB Bank

What measures or milestones are you using to determine your progress on sustainability?
AIB has aligned our sustainability journey to our core purpose which is to back our customers to achieve their dreams and ambitions, underpinned by four strategic pillars of: customer first, simple and effective, risk and capital, and talent and culture. We are early in our journey on sustainability and measures however we already know sustainability has to be embedded in how we do business everywhere and not a ‘Programme’. It also has to be effective for our five stakeholder groups. The first group is our customers. Customers want transparency and value, fast delivery and to trust their bank. I think that the battle of the future is to earn customer trust; customers need to know who to trust with their money and with their data. They will also need to know that there are people behind the digital systems so when all fails they can speak with a person.

We already have multiple customer satisfaction measures in place. The second stakeholder group is our employees and we currently measure our staff engagement scores confidentially through Gallup. We are working hard at recognising our employees, giving them the ability to feel involved in why we are here and our purpose. That is important to all, but especially to millennials. We have 95% of women in management and that’s rising, and we are broadening our cultural and skill set mix. We have a backstop then of our ‘Speak up’ policy which is a process through which staff can communicate any concerns they have confidentially. I sit on AIB’s diversity and inclusion board, which has given proactive inclusion volunteer groups for gender, race, family and sexual orientation. These groups are proactively helping us to understand and see difference as a strength. We know that if you have employees that are proud to wear the jersey, they will create happier customers.

The third stakeholder is our regulator, whose primary focus is also fair customer outcomes and a stable and sustainable banking industry. The regulator has driven significant change in banking over the last decade and has ensured greater transparency, accountability and stability in financial service provision.

The fourth stakeholder is the investor, who will look first at financial performance and are now increasingly looking beyond financials to non-financial measures of sustainability. I expect investors welcome AIB’s two sustainability reports published to date.

Finally, we have our fifth stakeholder group of community engagement and society. Sustainability demands that your organisation adds societal value, not just financial value. AIB are embedded in our communities that we serve and our business, and our consumer focus goes back to our customers. AIB’s Corporate Social Responsibility programme is designed to support this at a local level, for example our staff our encouraged to take two days a year of paid service to volunteer with chosen charities and volunteer groups. Sustainability in business is very much akin to connecting the head and the heart processes in a human and in society—head being the hard metrics, heart being the values—they have to be fully aligned to be sustainable. Sustainability is about operationalising this in a consistent, focussed manner.

What can you tell us about the Global Reporting Initiative (GRI) standard?
It is a recognised international reporting standard on sustainability progress. AIB has published two sustainability reports to date to this standard which have been independently assured. We intend to fully embed sustainability into our business, it cannot be ‘separate’, that is our ambition and that journey is underway.

According to AIB, why choose Ireland?
Ireland is a natural gateway to Europe with a highly educated workforce and accessible decision-makers. We are also an open, pro-business, pluralist society that understands interdependence and thrives on international trade. Ireland is known for its quality of community life and values, its talented workforce and its ability to attract and retain international investment across leading industries.

What do people want to participate with Ireland in 2040?
Ireland would be a model for having implemented our Project Ireland 2040 programme providing all of the future proofed infrastructural capacity necessary that is pro-business while maintaining our societal bonds that make Ireland a great place to live, work and raise a family, whatever you consider ‘family’ to be used to have a clean, green, sustainable economy powered by renewable energy and our sense of community.

Modern accounting for modern business was our goal, and today we’re leading the Irish market.”

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“Sustainable growth powered by community”

“Business should be aided by technology”

“Modern accounting for modern business was our goal, and today we’re leading the Irish market.”
An internationally competitive, research-led university
Dr. Anita Maguire, Vice President for Research & Innovation, University College Cork (UCC)

Can you describe the research landscape in Ireland?
A serious national ambition in research commenced in earnest around the turn of the century, so the development of our research landscape has occurred over only two decades. The national government realized that our future as a country is dependent on having a highly educated workforce to underpin the development of the knowledge economy. That drove a genuine commitment to produce people with research experience who were operating at the highest levels so that Ireland is not just a place where multinational companies came to manufacture products while doing all of the knowledge part overseas. One of the strategies for doing that was to bring the researchers together into interdisciplinary clusters particularly those involved in areas having to do with industry, in order to ensure that they are working on top-quality research.

Will you elaborate on how the collaborative atmosphere between UCC and industry facilitates innovation?
Many of the funding programs encourage us to work together across institutions and also encourage us to work with the enterprise sector.

In my own area this is very exciting because here in Cork we are sitting at the heart of pharmaceutical companies in the world. Within twenty minutes of this university you have Pfizer, Lilly, GSK; all the major players are here with very large activity around pharmaceutical manufacturing. In 1991 all of the research decisions were taken in the US or Switzerland and they just came here with the established process. Now they use R&D activities to anchor their manufacturing here, so they need highly qualified research teams. They also interact with us to ensure they upskill to make those changes.

Because of the cluster of companies here, people realize that there are tremendous job opportunities and we are therefore able to attract a very excited and motivated group of people. What we are really doing is producing highly trained researchers fit not just for enterprise tomorrow but to underpin the advancement of enterprise in the world.

The story of this university and research is very interesting because when research investment commenced in the early 2000s we moved very quickly to put together multidisciplinary research centers for research. Having these research centers working with other institutions both nationally and internationally has been an extremely successful journey for University College Cork.

What about the role of the government?
Most of us would say that our government has been tremendously forward-thinking that was easier to do from 2000-2008 when we were the Celtic Tiger economy but the fact that they have maintained the research investment from 2010 on is a real credit to our government. There is recognition that unless a country like Ireland can actually be a leader in its high-end people, there is no place for us. The results are important, and the research is important, but the real difference is in the people that we put out. The PhD students who come out of here have been trained in the top-end science, they’ve been trained to believe in what they can do, but they’ve also been exposed to broader areas so when they go out they are more valuable scientists. The ultimate goal is about the economic wellbeing of our society, therefore the programs incentivize that type of behavior.

Two decades ago we would never have believed we would have the resources and the opportunities that we have now. Excellence does require focus, but it also requires that people know where they fit into the broader context. This doesn’t happen spontaneously, you need to provide incentives and reasons to do it. The programs at the national level, which are about incentivizing research excellence, have led to some extraordinarily exciting science.

What goals are you concentrating on today?
We have a very good platform to build on and I am focused on making sure that we are attractive to people who are at the very top of their game. We need to be attracting serious thought leaders in their own disciplines, aligned with the areas in which we are strong. At the same time, we want to make sure that we are giving opportunities, all in a balanced ecosystem with young people and established professionals working together.

What is the scope of SFI?
SFI is the major competitive funder of scientific research in Ireland. We fund both basic and applied research across multiple sectors: physical, biological, IT, energy, software, pharmaceutical. It helps to think of it as if the U.S. National Science Foundation (NSF) and National Institutes of Health (NIH) were combined. We do not fund arts and humanities. We will fund social sciences if the research relates to industry or the economy of the hand sciences SFI is relatively new, founded in the year 2000 and modeled on the American NSF. There has indeed always been an NSF ex-director on the board of SFI. I would call it NFS+. There are three pillars that are important for SFI: excellence, impact and talent.

What does the future hold for SFI?
Engagement is about listening to people and seeing what their priorities are and I feel like SFI must listen to the people of Ireland and think about how to respond to them in the research community. The view is simple, globally we want to be at the front of innovation leadership.
A university innovating with talent
Professor Brian MacCraith, President, Dublin City University (DCU)

Please comment on DCU’s mission statement: “To unlock the talent of students and to be Ireland’s university of enterprise”. Our mission is to transform lives and society through education, research, innovation and engagement. The two main areas of engagement for us would be first with civic society, the communities around us and further afield, and then with enterprises. We were established 38 years ago to be a business-friendly university. I spend a huge amount of time speaking to the leaders of industry in Ireland, within 30 minutes’ drive from here. I can be at the European headquarters of Google, LinkedIn, HP, IBM, etc. With this sort of interface I can get different perspectives on changes in their needs as employers. Innovation happens with interfaces.

How important is innovation for DCU?
We have established an innovation campus where we have 45 tech companies, mainly in data science, creating a really robust internet cluster. In September we will open a node of the largest co-working digital space in Europe, Talent Garden, headquartered in Milan. Why have these companies come here? Because of the proximity to an innovative university where dialogue happens all the time. They also get access to talent and research facilities; people want to talk to them and come up with solutions. Setting up an innovation campus at the time of austerity shows how important it was for us.

How would you describe the learning experience of your students?
DCU wants the students to flourish in their private lives, in civic society and very significantly in the workplace. We want our students to graduate with a life purpose and to be employable. It’s very important that they can expect industry placements when they graduate. Whether that be in the social or political sciences, international relations, journalism and digital journalism - one of our key strengths, or in the tech areas such as bio-tech or ICT.

Major employment agencies are looking for something way beyond disciplinary knowledge. They want candidates to have the ability to lead, communicate, work in groups, be creative, have critical thinking and the capacity to solve problems. Students should learn to be adaptable and to use creativity. Another issue that is relevant is technology and how artificial intelligence is replacing many routine jobs, so the uniquely human skills become commensurately more important. Therefore, we also emphasize the development of these soft skills. Finally, for us “your talent matters.”

Can you mention one of the DCU’s recent accomplishments?
In 450 years of university, Ireland never had a Faculty of Education. Can you imagine? So creating one was one of our objectives. We integrated three separate colleges of education into the university and combined them with our school of educational studies and now we have a really exciting entity where we educate all of those teachers on one campus and develop the talent of each of them individually.

Also, we want to be known for who we include and not for what or who we exclude. Few young people with autism go to university because they encounter many barriers so we co-funded a two-year project and now DCU is recognized as the first autism-friendly university. Many of our initiatives led to changes to make the university more inclusive.

Your priorities going forward?
Development of talent, knowledge and innovation. But I think fundamental to all is talent. What we should be doing is taking the natural gifts of individuals and enabling those to develop and defining talent development as “the systematic development of aptitudes and gifts into skills and real competencies.”
Can you present CIT to us in a historical context?

OF: Cork Institute of Technology was born from the Crawford Municipal Technical Institute, established in 1912. The model of education from Crawford is what was used when setting up the Regional Technical Colleges in the 1970s. There was a close relationship with industry, so very often there were employed people coming back for night classes to up-skill and you also had people working in industry who came back to contribute through teaching, insuring that industry knowledge was transferred to the students. The emphasis was on producing graduates who would be immediately employable.

For example, in the 1980s we had a course in Chemical Technology and the people graduating with that diploma really fuelled the early days of what is now the very strong pharmaceutical sector in this part of the country.

Now, we continue to develop courses in partnership with industry. Our MSc in Cloud Computing was the first of its kind in the world, and developed in conjunction with Dell EMC and VMware, producing graduates with the skills needed for today’s fast-growing ICT industry. We also have three cutting edge Masters programs that are very attractive to companies looking to set up in Ireland: MSc in Artificial Intelligence, MSc in Information Security and the MSc in Data Science and Analytics. We would focus on what the national priorities are as well. We have the Hincks Centre for Entrepreneurial Excellence, and we also have two Technology Gateways that are funded by Enterprise Ireland. These Gateways have an explicit remit to stimulate innovation in the small-to-medium enterprises (SME) sector. Between the two Gateways they work with over 100 companies per year on different sized projects, contributing enormously to the innovation capacity across the region.

One very special activity underway in CIT is the delivery of Ireland’s longest-running student accelerator – Student Inc. All students regardless of academic discipline or year have the opportunity to start a business while in college. Support is provided from the Rubicon, from Hincks and from the Innovation and Enterprise Office, as well as externally from various state and industry partners.

OF: Of all the institutes of technology, CIT has more involvement with Science Foundation Ireland (SFI) centres than anyone else. We have a partnership with Tyndall through our CAPPA research centre, it was also announced this year that Nimbus has been designated as a “spoke” or connector, working in an interdisciplinary manner between several established SFI Research Centres.

What research centers would you highlight?

If you look at Horizon 2020, CIT is leading in the Institute of Technology sector. We have the highest drawdown of funding from Horizon 2020 and one of the reasons for this is our historical tight strategic focus in three niche areas: cyber physical systems (Nimbus Centre), photonics (CAPPA), and BioExplore (bio-analysis and bio-control). What sets us apart, and is a strength of research across the region, is how engaged and connected we are with industry. Our particular strength would be our responsiveness to the needs of the outside world, and our ability to collaborate in a partnership approach.

COL: We would focus on what the national priorities are as well. We have the Hincks Centre for Entrepreneurial Excellence, and we also have several established SFI Research Centres.

Which research centers would you highlight?

What sets us apart is how engaged and connected we are with industry.”

Dr. Orla Flynn

Innovation and Enterprise Manager, CIT

Rubicon - Ireland’s premier campus incubator with over 400 alumni companies

Nimbus - Leading research centre in IoT

Hincks - Ireland’s first Centre for Entrepreneurship Excellence

Award-winning Library, IT and Architecture facilities

Ireland’s largest provider of accredited engineering graduates

What do you envision as the Ireland of 2040?

OF: Our thinking is around the idea of being exposed to the outside world throughout your journey in higher education. It’s not about coming in, being stuffed with knowledge and sent back out. Our students all spend time involved in the real world, exposed to industry through placement and other opportunities, and we prepare them for the changing nature of the workplace.

COL: I think that we are currently very dependent on outside factors such as foreign direct investment, and the future will see us more independent, with more world class indigenous companies.

OF: The action-plan for jobs brought a lot of stakeholders together in a positive way. I think that if the Ireland to 2040 plan can deliver on the infrastructure it promises it will have a transformative effect on Ireland, particularly outside of Dublin. I would like to see a rural Ireland that is thriving and ever greater participation by women in the workforce.
CIT enables students to progress through the different levels of qualifications

CORK INSTITUTE OF TECHNOLOGY

CIT is one of the most highly-rated higher education colleges in Ireland and is both student- and industry-friendly. There are many opportunities for students to pursue a diverse and successful career or to start their own business while pursuing their degrees, and there are many opportunities for industry to interact with CIT regardless of size: start-up, small-to-medium sized enterprise or a multinational.

Courses in CIT cover Business, Engineering, Science, Computing, Humanities, Media, Art, and Music. CIT has an enviable record of providing students with excellent employment opportunities and a firm basis for future career development. CIT offers the full range of higher education qualifications, including Bachelor degrees, Honours Bachelor degrees, and post-graduate Masters and PhD degrees. CIT has a very well developed 'ladder' structure to enable students to progress through the different levels of qualifications.

The Rubicon Centre, CIT's on-campus incubator, recently celebrated ten successful years of powering start-ups in the region. Rubicon alumni have created 856 jobs in the Cork region with innovative business solutions and opportunities for the domestic and international markets. Many of the Rubicon alumni companies have now established operations in other countries, including the US, Australia and Britain. They have raised more than €66 million in public and private finance and secured €12 million in Horizon 2020 funding. In addition to the funds raised by Rubicon companies under Horizon 2020, the European Union’s programme for research and innovation, CIT is the second best performer of all third-level institutes in terms of its 14.9 per cent success rate in securing Horizon 2020 funding. CIT is the leading institute of technology in terms of the number of projects that were approved, as well as the level of funding received. The Rubicon Alumni of the past decade have included 34 High Potential Start-Ups (HPSUs), all of which are now trading internationally. More than €1 million has been secured by 20 companies through Enterprise Ireland's Competitive Start Fund since its launch, which allowed them to leverage further investment. Of the successful businesses formed through supports from the Rubicon Centre, 73 per cent are still in operation today, a number that is well above the EU average for start-up success rates. These figures have firmly placed the Rubicon Centre at the forefront of the region's start-up community over the past decade.

The Rubicon Centre operates a number of support programmes across the southern region, which support entrepreneurs at different stages of development. Collectively these programmes, including New Frontiers, which is run across the country, is the only accelerator that doesn't take equity in the companies it supports and is co-funded by Enterprise Ireland. The Rubicon and CIT were among the first to offer programmes for both female entrepreneurs and student entrepreneurs. Some 16 per cent of the Rubicon's current start-up cohort is female-led. In 2011, the PINC programme was created to address the low number of female-led companies in the Rubicon. PINC has since been replaced by EXXcel, which is aimed at female entrepreneurs in the STEM sectors.

CIT was the first college in Ireland to set up a student accelerator, Student Inc., to support the student community interested in entrepreneurship while studying in college. Now in its eighth year, Student Inc. allows students to examine the feasibility of their business ideas during the summer months. For the last 3 years, Student Inc. has had an international element with students from Vietnam working on their business ideas alongside CIT students. Student Inc. is co-funded by the four Local Enterprise Offices in Cork City and County alongside CIT and Cork County Council. The programme has proved that exposing students to an entrepreneurial environment has very positive outcomes in terms of young people looking beyond working as an employee and actively pursuing self-employment as a goal on the completion of their third and fourth-level education. A number of the participating students that went on to successfully start and grow a business have attributed their time on Student Inc. as the turning point of taking the self-employment route as opposed to the employee option. The programme provides a proven set of mechanisms for commercialising undergraduate students' enterprise projects. About 25 per cent of Student Inc. participants started their business ideas as student projects and, without the programme, these projects would not have progressed any further.

Forty-eight per cent of the companies based in the Rubicon have CIT links, either for student projects or placements, joint course development or research. CIT has a number of areas of expertise that are directly relevant to industries in the region. These national resource centres, including CAPPA and TEC Technology Gateways and MEDIC, provide independent expertise, advice and assistance to different sectors of industry and to local and national agencies. Each one offers training, consultancy and contract research and development services to industry. CAPPA is an industry-led applied research group working in the fields of optics and photonics. TEC specialises in wireless systems, wireless sensor networks, miniaturised hardware systems and software development. MEDIC is an industry-led applied research centre that specialises in medical technologies and draws expertise from a number of areas within CIT. These include the Departments of Mechanical, Biomedical, Manufacturing and Electronics Engineering, as well as Applied Physics and Instrumentation. The centre has access to CIT's state-of-the-art gait analysis system and a fully-equipped biomaterials laboratory, and also works with many of Cork's top biomedical engineering companies.
Aiming to make Cork the best place to do business
Conor Healy, CEO, Cork Chamber

You have said, “2018 is indeed a time of opportunity and excitement for Cork.” Why?
Ireland has done a major review of where it’s going economically and positioning out to 2040. We were focused on ensuring that for the next 20 plus years, Cork was properly positioned in the national plan and that has been accomplished. For the first time we see appropriate recognition of Cork as a really strong second city region, which has a major opportunity to complement our capital city. In countries all around the world, strong second city regions are a key element of the economic make-up of that country. The Cork region is going to grow from about 500,000 people at the moment, to over 800,000 people over that relevant short period of time.

In the city center in Cork, there is incredible opportunity for growth and development. There are over 200 acres of brownfield land, which is probably the largest brownfield developable area in any European city. There are new office developments, there are a million or so square feet of office development in the pipeline coming through here over the next 18 to 24 months, as well as apartment developments. There’s a new sense of excitement and activity in the city Cork had nice, steady growth through the Celtic Tiger period, but never had that massive boom. So, what we’re seeing, post-recession, is development taking place that is backed by government commitments in the national plan. We just launched a new strategic plan a couple of months ago and our vision is for Cork to be the best place for business. We have all of the stakeholders, local government, the universities, and the national government working together so that’s why I said it’s a very confident time in Cork.

What is that is driving this development?
All of the key stakeholders in Cork came together over a year and a half ago during the early phases of the consultation period around the national plan to have a coordinated response. Collectively there was a plan developed, Cork 2050, which marries our strong indigenous sectors, such as agribusiness and tourism, with the start-up environment, particularly in the technology area. As companies work to attract people and families, quality of life is also very important. One of the things we’re focused on capitalising on is that work-life balance environment that we have here that - just by virtue of scale - a capital city struggles to have. What has changed as well over 10 to 15 years is that we have multiple career opportunities in multiple sectors. If you had tech skills, skills related to the life science sector, skills in the tourism and hospital industry, skills in any sector that you want to mention, you have lots of opportunity to build a really strong second city region which complements the success of the capital city and I think we’re going in the right direction with that.

Connecting Cork which promotes Cork as a

A safe and efficient airport facility
Niall MacCarthy, CEO, Cork Airport

After some years of decline the airport is once again on a strong upwards curve. Can you brief us on how this situation has changed?
Ireland had a tough recession. One of the first things people cut back on is holidays and the airport felt the recession. We had seven years of decline. When I came in the middle of that decline, the brief was to turn it around and back into growth. The first thing we did was to have a multi-faceted strategy after studying every aspect of the business. This strategy covered the period up to 2017; it started in 2013 and in 2015 we started growing again with a strong growth in 2017.

We put traffic growth at the center of our strategy: with no traffic we would die! Our strategic plan also included sections on financials (about profits and commercial revenue), stakeholders (users, local authorities and politicians who had a very negative impression of the airport at that time) and customers.

Some of our actions then included getting new routes, grow our car parking business, diversify our retail bringing in an Irish whiskey section for example, downsize our number of staff, bring in new technology, make our processes more passenger friendly, etc. We also re-branded ourselves as a Cork Airport. It took about two years to see the benefits and in 2017 we won “Airport of the Year in Europe”.

We have a new strategy now, from 2018 to 2022, which despite Brexit and various other challenges shows very strong growth. This year we should grow 4%.

What is helping this growth?
The new year-round Air France services, Aer Lingus flying to Lisbon, seasonal extension on some Ryanair flight and talks to airlines about introducing new routes next summer.

In the turnaround of Cork airport, what was the single most decisive factor?
Having a business strategy as opposed to just running it on a year-to-year basis. You need to plan an airport in a longer horizon because it’s a long horizon business.

Project Ireland 2040 supports the development of Cork and the area. How do you assess this project?
Ireland 2040 is about spatial planning. The project looks at where people live and want to live. Then they will put in the infrastructure in and around where people want to live. Also, we need centers of growth beyond Dublin not to end up with a country focused on only one area. Cork has a deep infrastructure, it has hospitals, theatres, a pretty coastline, a nice quality standard of living, etc. The government seedled an economic counterbalance to Dublin and is going to encourage increasing the population in Cork.

What makes Cork the airport of choice for those coming to Ireland?
Really short walking distance from your car park to the terminal. No queues at security. A really short walking distance from the terminal to your gate. A really clean and nice passenger experience. Good food. Very friendly staff. You put all that together and it takes the stress away from the traveler.

We measure passenger satisfaction. We interview passengers to describe their experience at the airport. The final question in the survey is “Overall, how happy were you with your experience today on a scale of 1 to 5?”. 91% of the people gave us a high score which is why we were awarded the “Best Airport in Europe” in 2017.

What are your mid-term goals? What would you like to accomplish next?
I want to really turbo the passenger growth of Cork Airport for both tourism and business over the next few years. We have a terminal here that can handle 4 million passengers. We are at 2.4 million this year, so we have excess capacity and we can deliver services with really high standards. We’ll keep our standards very tight. Also, we’ve been audited by the EU and the IAA for security and we’ve passed both.

How do you envision Cork in the future?
I think it’s going to be a diverse population center with a high quality of life due to its proximity to the sea, a high net disposable income and an area approaching full employment.
Educating good global citizens  
Professor John O’Halloran, Deputy President and Registrar, University College Cork (UCC)

Can you introduce us to the importance of sustainability at UCC? Our University strategy sets out a series of values: global citizenship; research-based curriculum; creative knowledge and social responsibility, or what we call graduate attributes. We want our graduates to be distinctive, so we need to emphasize what makes us unique.

The first point on which we are unique is our sustainability agenda. The measures that we use are the 17 sustainability goals set out by the United Nations. We were the first university in the world to be awarded the Green Flag from the Foundation for Environmental Education in Copenhagen. The importance of this lies in transforming the institution. We were the first higher education institution in the world to achieve the ISO 50001 standard. Harvard called asking how we did it!

Another unique strength that we have is the capacity to work with others, combined with the capacity to work across disciplines. For me one of the most seminal moments in a recent interdisciplinary meeting was when our professor of creative practice in our College of Arts expressed sustainability through a dance performance. I am a scientist, but I think that science has failed, and the connections we can make and the creative practitioners can contribute by speaking to people’s hearts, to the things that really matter to them – their deep values. It’s not that the science doesn’t matter but its about telling the story.

What are some of the strengths of the Irish context when it comes to those sustainability efforts? First, I think that our small size helps. I also think that Irish people are good communicators, we really do like to talk, and to listen and most important, connect. As Irish, we gather and converse naturally, with a sense of informality, which allows for real conversations to happen and an authentic exchange of ideas. Education itself is important. Imagine, this university was built during the famine, there was a recognition from the beginning that it was through education that we would change people’s lives, and the world. We have the highest participation rate of third level education in the OECD because it is so valued by the society. That also stimulates us to innovate.

What will education look like in the future, from your perspective? First, I believe that education should be lifelong. Second, I think that it should be learning by doing; meaning that we should be teaching people not only in skills, but in how to be good communicators, good leaders. These are the graduate attributes that we are trying to inculcate in our students. With talent comes responsibility – so people must be able to change and create a different world.

The metaphor I like to use is of orchestras and buskers. We need the orchestras, those who do organized work in groups. But we need the buskers, since they are the next generation of experimenters. Sixty percent of the jobs that our young people will have don’t even exist yet, according to the World Economic Forum, so our graduates need to be flexible as well as hard-working and skilled.

What can we give our students the capacity for independent thinking. We have to teach them to differentiate between fact and fiction. As a research-intensive university, we have what we call our connected curriculum, with business, society, research and values to make sure that the connections happen for people to make a difference. We must create minds that know no bounds and are exploratory —the most important thing they need to do is to ask questions.

My plan is that each student will conduct a self-assessment on their knowledge of our graduate attributes when they start. The idea is that through their lifelong and life-wide learning process here, their assessment would improve. Individuals will then be able to see where they are growing, or where they have stagnated. That would also create a situation with a lot of data to contribute to a lens on what education will be in the future. I hope that we will have the data to prove that a University College Cork student is educated in the disciplines, but also educated to have a series of values that make them good citizens.

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An access university working with industry and community  
Prof. Vincent Cunnane, President, Limerick Institute of Technology (LIT)

What is LIT’s role in the development of the region? LIT is a regionally focused third level institute of technology with a national and international outlook. One of our chief USPs is that we are very engaged with the communities we serve and our stakeholders. We are not a traditional university; we are very much a technological school but we are also involved in art and design and have one of the top 50 fashion schools in the world. We do a lot more applied research than basic research, meaning that we are taking problems from the outside and working to solve them here. At the heart of all of that is innovation. We are distributed around Ireland with campuses spanning three counties. We have two sites each in Tipperary and Limerick and a smaller site in Clare. We work very closely with the county councils in each of these areas, and have five enterprise sites that we run ourselves. In our enterprise centres we have post graduates, PhDs, and others doing research on industry-related programs. The Irish government helps fund some of this activity, for example through the New Frontiers program, which we run on behalf of Enterprise Ireland. These activities with business are not an add-on to our organization – they are core to LIT as an institution.

You recently announced a partnership with Cook Medical and VistaMed. We are working toward Industry 4.0 assembly processes based on our history as a region with a lot of manufacturing industries. That program, the INCASE project, brings together a large U.S multinational, Cook Medical, a small Irish company, VistaMed, and an educational institution, LIT. This is a safe place for the companies because the IP issues are all worked out in advance as national protocols exist in these kinds of relationships.

Limerick suffered particularly during the downturn. Now the city is coming back. What does the future hold? My own background as the head of a regional development agency has also led me to look for ways of building partnerships. When Dell left in 2009, which was devastating, I was asked to be the chief executive of a task force to determine how to turn Limerick around. We brought Limerick City and County Councils together to provide more streamlining and better decision-making, and we have had visionary leadership from the City Chief Executive. As a result, we have announced around 20 FDI projects just in the past 2 years.

With regard to growth sectors, one of the most promising is the biomedical sector, which is huge, as are IT services, and increasingly we are also seeing financial services (Northern Trust) grow as well. Additionally, we are seeing a lot of growth, in particular, for example we have Regeneron here now, and interestingly, they are in the old Dell factory.

Why this region? One of the things that we do particularly well is to bring different technologies together. In the past successes were around a single technology changing things. The future is more about working together and bringing technologies together. Small is an advantage when it allows you to bring distinct aspects of sectors together in a better way than you would in a more geographically dispersed area. We are both close and open to each other’s ideas, and welcome collaboration.

How do you anticipate LIT evolving to serve people throughout their lives? Here at LIT we are an access institution. We give opportunities to people, old and young, to benefit from that level of education and in so doing transform their lives. The future of education is about being open and accessible to all. Elitist education leads to inequitable society. We are into active learning, preparing work-ready graduates. While they are here we cannot prepare them for the future that we do not know, but we can give them the soft skills that they will definitely need in order to deal with the new landscape and new opportunities. We see ourselves in the near-market scenario both in the graduates we produce and the applied research that we do. The problem-solving side. Engagement is key to the future of the organization. We need to go deeper into communities that were underrepresented here to open up opportunities to all who can benefit.
With regard to FDI, what sectors would you think fit the best in Limerick?

Traditionally we were very manufacturing focused. That has faded a bit, but the ethos is still there, in IT, software solutions, medical devices, and the creative sector. We benefit a lot from Limerick Institute of Technology (LIT) on one side and University of Limerick (UL) on the other because they draw students from around the country, in particular the west.

We find that there is a different mindset between people from the east and west coasts of Ireland. In the west there is a greater sense of self-sufficiency, probably because we’ve had to work a lot harder to get things that in the east are taken for granted. That has instilled an attitude toward work that industry finds very beneficial.

We have found with the most recent crop of FDI that the companies are growing much faster than they had perhaps even anticipated. As an example, WP Engine came in here with a support service catering to their European business. They quickly found that they were attracting people who were overqualified, so they decided to set up a software development team as well. Trusource Labs are doing somewhat the same.

We are also seeing very strong evidence from AI, particularly in the auto sector. GM and Jaguar’s key people are working in the autonomous car space and are making the west of Ireland a test-bed for these technologies.

We are near an airport, with an attractive city, 35% cheaper than the city to make it more walkable and pleasant. Uber has its European headquarters here and they went WP Engine to make it more walkable and pleasant. We are very happy to see our FDI.

What do you envision the balance of FDI looking like in Limerick in 2040?

We only consider FDI to be FDI when they arrive, because very soon they become indigenous, part of the fabric of society. We have companies that have been here for 30 or 40 years. After five you become more Irish than the Irish themselves. There will always be an effort to attract new companies here, but one interesting thing is that in the various announcements this year for about 1,800 new jobs, 80% are now coming from companies that arrived from somewhere else but have been here for the last 10 years or so. We are very happy to see our companies growing, and we like the idea of branding ourselves as the ‘scaling capital’ of Ireland. We are looking now at smaller levels of FDI, but the importance will be in the experience they have here and their ability to grow.

What are some examples of collaboration between international companies and local entities?

Another aspect of this character is that Limerick is a comeback kid. We were hit very hard by the recession, but we have come back from strong and are adapting and innovating to move forward. Most companies that set up here have been able to find the right people, get moving, and start making money faster here than in any of their other corporate locations.

One of the first tasks is delivering on strategic sites, what does that mean?

We needed the planning to create more innovation space, and that is what those sites are about. We set up a company called Limerick 2030, which was created to guarantee the public infrastructure. That will spiral out to funding the plan actually signed a charter to deliver the plan. This is a living, breathing plan that will change and pivot, but we are delivering on it.

How is Limerick selling itself to millennials?

Our cost of living is significantly less than in Dublin. We are also still small geographically. What we are seeing is companies want city center locations because the people they are employing want to be able to go to work without having a car, so we are developing our city center and river front areas. We are embarking on a renovation of part of the city to make it more walkable and pleasant. Uber has its European headquarters here and they went WP Engine to make it more walkable and pleasant. We are near an airport, with an attractive city, 35% cheaper than the city to make it more walkable and pleasant. Uber has its European headquarters here and they went WP Engine to make it more walkable and pleasant. We are very happy to see our FDI.

What drove the organizational restructuring of the council?

We decided to restructure to better react and future-proof. When we launched our 2030 economic and spatial strategy, it was key for two reasons: one, it was the first time that job creation and city planning were brought together. Second, this was the first time that the stakeholders in the plan actually signed a charter to deliver the plan. This is a living, breathing plan that will change and pivot, but we are delivering on it.

How do you see Limerick evolving?

We needed the planning to create more innovation space, and that is what those sites are about. We set up a company called Limerick 2030, which was created to guarantee the public infrastructure. That will spiral out to further investment. We also set up an innovation company called Innovate Limerick that brings all of the partners together to help generate innovation at the indigenous level, using research and development to make jobs happen. Our economic development division is the biggest regional economic development entity in the country because of our commitment to delivering jobs on the ground. Our goal is not to be the primary investors, but to set the tone for the business community to drive investment and overtake our role. That was the emphasis of 2030 from the beginning of that reason, we bought one of the sites that Dell left, and turned it into a film studio that now houses NBC universal making a new sit-fi production called Nightflyers by George RR Martin. This is a story that is transformational for us. We have also co-located several international companies in our buildings. GM, for example, shares space with us. So we have begun to make a name for ourselves as disruptors – doing things differently, and quickly.

In terms of Horizon 2020 and the Smart City funding, what are the most compelling stories at the heart of it?

Limerick is a Georgian city. What we are doing with the Horizon 2020 fund, for example, is to take those inefficient buildings, at the core of our housing offering, and turn them, through innovation, into better housing stock. We asked ourselves how to get people back into living and working in these spaces while also making them energy efficient. We plan to answer that through this mechanism. The idea behind all of these grants is that they are replicable within Ireland, and then even internationally.

How do you see Limerick evolving?

I think Limerick will be double or triple the size it is now, but in a very managed way. The Limerick story is told multiple times in the Project 2040 plan because of the results we have achieved here. Stand-out stories will be film production, sports technologies, financial and medical services. We will have blended sectors, which will be very strong for us into the future. Limerick will be an Austin in Ireland, including the cultural element and the creative work too.
Leading manufacturer & innovator in its sector worldwide
Martin McVicar, Managing Director & Co-founder, Combilift

You have said that the driving force of Combilift is to "deliver innovation". Can you elaborate on that?

The unique value that we bring is to handle more products in a safer way and in a smaller space to make our clients’ businesses more efficient. When we founded our business we decided to focus on exporting to clients handling long goods. From one Combilift the company has therefore invested very heavily in research and development. In the early years we were investing more than 10% in R&D, and at the moment we are at about 7%. We focus on a company’s unique handling needs and provide them with a way to improve their efficiencies. Our people don’t sit at their desks sending images, we send our engineers out to clients to see what they actually need, and I like that because it keeps them in contact with the unique needs of the marketplace.

What is your approach toward sustainability?

Of course as a business we want to lower our carbon footprint as much as possible and make our business as sustainable as possible into the future. We also have an advantage, which is that we were designing our new greenfield facility with all of this in mind and, as it only opened in April, very recently. Our building has been nominated for a logistics award in the UK as one of the green manufacturing plants built this year. We are ISO9000 quality approved, ISO14001 for health and safety and ISO 14001 for environmental management.

What is it that sets you apart from your competitors?
The larger competitors that we have focus mainly on conventional forklift trucks. Our niche is with customized products that save space and handle product more safely. The European market really bought into saving space because land is so expensive. In the US what really appeals to our clients is the safety that our product brings to their employees. When we are developing a product, we are developing it for function and design. For the North American market we design our product with a lot of North American and safety and ISO 14001 for environmental management.

Are there any challenges to being here in County Monaghan?

On the contrary. First, we are an engineering business in a rural area and many of our employees are part-time farmers. The great thing about them is that they are mechanically minded and used to fixing things themselves and that mentality plays into our business here. We have no FDI in this local area, so all companies in this area are indigenous. There is a real entrepreneurial culture in this part of the country.

What kind of advice would you give to a new entrepreneur?

They shouldn’t spend too long on the minuses of doing it; you will always find reasons not to start, but you need to just get moving. For any entrepreneur, please don’t wait. We don’t encourage you to think bigger than you normally would. That goal was probably planted during that program. This facility has 11 acres under road and we can still double our output here, and we have 100 acres more on our site.

What is the origin of RelateCare?

RelateCare was a joint venture formed in 2009 between RigneyDolphin and the Cleveland Clinic, though it is now wholly privately owned. RigneyDolphin is an indigenous Irish-based contact center company founded by two very successful entrepreneurs, husband and wife Frank and Adrienne Dolphin, in 1990.

Can you describe what you deliver?

RelateCare is helping organizations to bridge the communications gap before the patient enters the hospital, and after they leave, allowing healthcare organizations to focus on what they do best which is bedside care. Running a world class or best practice call center or contact center is not in the DNA of providing patient care as such. We’re working with several leading U.S. organizations including the Cleveland Clinic, Stanford Children’s Health, Texas Children’s Hospital, VNA and others.

And or each of your clients you are providing a consultancy or a service?

It’s actually a blend of both. We’re a team of advisors and consultants who can go on site and work with organizations as they streamline patient access and often that results in an organization looking at how they can centralize patient access to drive a more uniform patient experience. So we’re helping organizations to create efficiencies, and if they want an elite solution RelateCare is able to provide that as well. The U.S. healthcare system is largely privatized so these organizations are competing with each other for patients. A lot of what we do revolves around efficiency and therefore revenue. We also partner with them to improve the patient experience. A lot of funding for hospitals is determined in part by patient reviews.

What element does it play in your success to be an Irish company?

I think Irish companies are well-received internationally and there are many examples of successful Irish companies working overseas. Being an Irish operation also gives us an advantage because of time zone differences. We are able to support and process work during the day here in Ireland before the day starts on the West Coast of the United States.

Do companies come to you for help in order to solve a problem?

A lot of the organizations are working in the dark and we go in and carry out a detailed discovery, what we tell these organizations is “We’re going to come in here and help turn on the lights.” Help organizations extract the data from their operations and make informed and strong decisions.

Communicating better health
Conor O’Byrne, CEO, RelateCare

What is your approach to solving problems that are unique to the U.S. healthcare system?

A lot of what we do is enabled by the digital infrastructure that is available in the United States. We do some work with private hospitals here. We have quite a heavy focus at the moment in terms of the UK private sector. Again, the healthcare sector is very similar to the model of healthcare in the US and there is a concentration of organizations that have American interests. So there are opportunities to bring that model that we have solutionized in the US back into the UK. We’re also looking at some opportunities in Canada as well.

How much do you think your business is going to change in a relatively short period because of innovations such as blockchain?

We have seen over the last couple of years a heightened sense of fear around security. Indeed, we addressed that by becoming ISO20011 certified. The mantra in RelateCare is to make the process better for the patient or the patient who has a lot of concerns about anxiety about what the future holds. Of course, we also like being presented with business challenges and over the last two years we’ve become quite data rich in terms of being able to prove our impacts and we were even featured recently with Skincare in the New England Journal of Medicine.

Is RelateCare then primarily solving problems that are unique to the U.S. healthcare system?

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