# **Grand Canal Innovation District** Manifesto

# Context

"We operate in an extremely competitive environment. Other cities, other countries are innovating and we have to continue to do so. Now is the time to invest in this Innovation District. It will set Ireland apart".

 Martin Shanahan, CEO, the Industrial Development Authority Trinity College Dublin, the highest internationally ranked university in Ireland has spearheaded the development of the Grand Canal Innovation District concept. This document outlines our vision and serves as a call to action for industry; higher education and government to collaborate on a new and critically important engine of growth for Ireland.

This document is about beginning a conversation and is not a blueprint or set of specific actions. Its aim is to provide a starting vision to enable an ecosystem wide conversation on the challenges we face; the opportunities that are open to us and the choices that need to be made to ensure Ireland remains a globally competitive location for business, and an internationally recognised hub for research and innovation.

All stakeholders are encouraged to review, comment and provide feedback and support the development of an innovation district manifesto that is reflective of the entire ecosystem.

Please send comment, feedback or ideas to <u>GCID@tcd.ie</u>



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# **Taoiseach's Foreword**

"We aim to make Ireland the tech capital of Europe and we have many of the ingredients to succeed. The evidence is all around us as we see so many high-tech companies located here."

The Grand Canal Innovation District is an initiative whose time has come. Ireland has based its success on being open to the world. That policy has paid off as we see more people in employment than ever before in our history. International companies are attracted by our workforce and our favourable investment climate.

We aim to make Ireland the tech capital of Europe and we have many of the ingredients to succeed. The evidence is all around us as we see so many high-tech companies located here.

But we have to ask how prosperity can be sustained. As the world changes around us, so too must we adapt.

As the risks facing a small, open island economy multiply, Ireland has to seek out to future-proof our economy.

We must become more innovative as technological developments occur at an exponential pace. Big data, machine learning, the internet of things and robotics are driving change at a dizzying speed. Future economic success demands that Ireland is able to capitalise on these waves of innovation. We can't just repeat the existing formula, we need to keep adapting.

Ireland must deepen its relationship with the many innovative multinationals that have located here, and develop stronger links between them and the regions in which they reside.

We need to ensure that talent, ideas and capital flow in both directions between multinational companies and start-ups – for the benefit of both.

That is why the proposal for an innovation district centred around the Grand Canal Docks makes so much sense.

Companies today look to engage with researchers and entrepreneurs, as well as with other firms, to identify new products or services and discuss how they might be brought to market. Physical proximity is crucial in encouraging this kind of interaction. We have the individual elements: numerous high-tech companies, research-driven universities and ambitious start-up companies. But now we need to create the right environment that encourages them to work in a collaborative way to everyone's benefit.

The Grand Canal campus will be a physical space where encounters and unplanned collaborations happen daily and at the right level.

This is not just for the benefit of companies and the bottom-line. We know that young people today value working in a dynamic and welcoming environment. They want the vibrancy of a diverse city area.

This has to be a two-way process. Businesses can't shut themselves off from the public and leading companies recognise that there is a positive link between diversity and innovation.

The innovation district will open itself up to the city and its citizens by providing a public meeting space and creating a role for public performances.

I am sure the Grand Canal Innovation District will provide many chances for the local community to avail themselves of the facilities and opportunities it offers.

Establishing an innovation district is one way for Ireland to position itself globally to take advantage of the next wave of investment and innovation opportunities that arise and it is one we must nurture and develop.



**Leo Varadkar TD** Taoiseach

# **Executive Summary**

"The world economy's operating system is being rewritten. Compared to the Industrial Revolution, the current changes in the global economy are estimated to be happening ten times faster, at 300 times the scale and roughly 3,000 times the impact."

- Richard Dobbs, McKinsey

### 'Connect to Compete' Brookings Philadelphia Report, May 2017

Our world is transforming more rapidly than ever before. Innovation is changing how we live, work, learn and function as both an economy and a society. Younger people are opting to live in our cities in larger numbers, technology continues to revolutionise how we trade. travel. communicate and make decisions. In political and policy environments - talent, innovation and ecosystems are assuming increasing precedence as the future drivers of economic growth and competitiveness. Throughout the world, countries are now aligning businesses and universities in key cities and developing innovation strategies to stimulate and enhance competitiveness.

As one of the world's most open economies, Ireland is already highly attuned to the tectonic change underway. Our capital city, Dublin, is home to many of the world's most innovative multinational companies leading out on this global revolution; we have a vibrant start-up community and a progressive policy environment. These realities are converging to create a unique opportunity for Ireland, the city of Dublin, for the Grand Canal Dock area and for Trinity College Dublin.

In the last decade, there has been a growth in a new kind of urban centre known as the Innovation District – where research-oriented institutions, high growth companies and tech and creative startups are embedded in an amenity-rich residential and commercial environment.

In this manifesto, Trinity outlines its vision for how Ireland can create a globally competitive innovation district that will allow this country to leapfrog our competitors. Our vision is built around an ambitious plan to establish a new campus at Grand Canal Dock. Drawing on the support of all Dublin's universities, the campus will focus on innovation and enterprise and catalyse the development of a globally competitive innovation district for Ireland. This project will be of national significance requiring the partnership of "What's really exciting is that not only will it attract talent, it will attract companies from outside into Ireland. You will have young Irish companies growing up side by side with these companies and it will also attract venture funds from around the world."

— Julie Sinnamon, CEO, Enterprise Ireland

the government and key state agencies.

Dublin can take its lead from many examples around the world - such as Kendall Square in Cambridge Massachusetts, 22@Barcelona and MaRS in Toronto. A key element will be the engagement and active involvement of the local community and residents in the area. The aim is to create an enhanced urban environment in the Grand Canal district that will be a magnet for more talent, and other innovation companies, large, small and scaling - as well as venture funding and research activity. This globally visible innovation hub will enable exponential growth in employment and amplified economic activity. It will support direct community benefits in the area, as well as for the wider city and indeed the country.

### How do innovation districts work?

- They bring together a critical mass of talent, finance, innovation and enterprise.
- They are located in a concentrated urban environment such as Grand Canal Dock.
- Proximity, density and scale of activities are essential.
- Specific programmes and dedicated urban spaces help the whole community of the district to connect, ideate and act.
- They are integrated in the local community providing new employment and education opportunities.
- New social and retail infrastructure is an essential cohesive agent – retail outlets, restaurants, cafes, bars and accommodation.
- They are connected to local and cultural communities enabling multidisciplinary discussions and contributing to a well-connected sense of place.

All these factors then combine to symbolise the overall ambition, sophistication and energy of the host city.

### What role will Trinity play?

A key characteristic of a successful innovation district is that world-class universities are located in the heart of the district as an anchor tenant. Trinity is the highest internationally ranked university in Ireland. As well as acting as the focal point for the district, the university provides natural stability and centrality to the innovation district. It creates a connection to a talent pipeline of graduates and locates a thought-engine for innovation through faculty activity and research. It also adds immeasurably to the overall social, cultural and continuous learning fabric of the district.

### The Opportunity

An innovation district for Ireland is a truly generational opportunity.

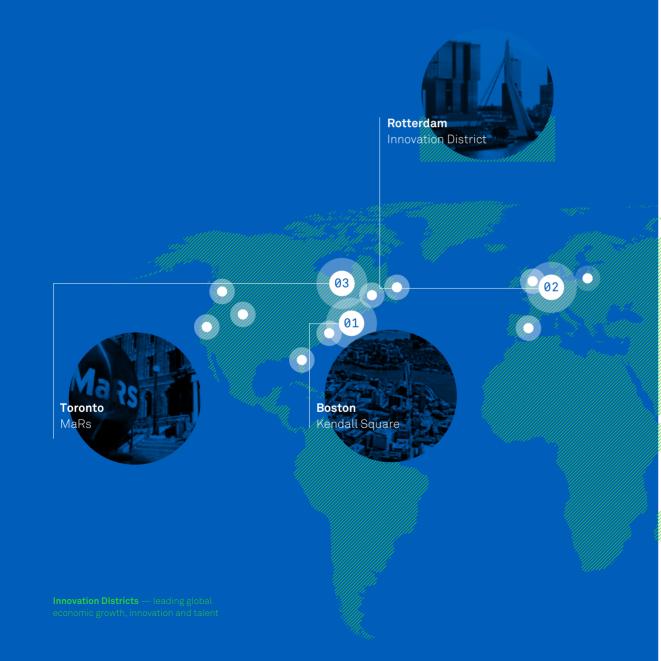
We already have all the core components in situ. We have a wide range of FDI innovation industry in very close proximity in the heart of the city. We have scale and a strong track record in university research and innovation. We have a depth of ambitious start-up companies and we have a world-standard university with land located in the area.

But the whole vision of the Grand Canal Innovation District is much, much greater than just the sum of these parts. This is a vision for how Ireland can transform its innovation offering and trigger transformational change to the benefit of our whole country.

Ireland must have the foresight to embrace this opportunity. Change is happening, we must accept, control and inform this change so that our economy and society can benefit. We have the opportunity to lead, not to follow. To act, not react.



# What is an Innovation District?



An innovation district is a predominantly urban and recent phenomenon:

"A dense, dynamic engine of economic activity where research-oriented institutions, high growth firms, and tech and creative startups are embedded within a growing, amenity rich residential and commercial environment"<sup>2</sup> Silicon Valley is in many ways the precursor to the innovation district concept, but Barcelona's @22, established in the early 2000's, is seen as the inspiration for more than 80 others around the world: from Kendall Square in Boston in the mid 2000's to more recent districts in London, New York, Singapore, Philadelphia, Pittsburgh, Rotterdam and Eindhoven.

Urban innovation districts work as they bring together a critical mass of talent, finance, innovation and enterprises; they locate these assets in a highly dense urban environment creating unprecedented proximity and scale and they activate them through programming and the development of dedicated spaces that enable the community to connect, ideate and act.

Unlike Science Parks they don't just co-locate activity but they orchestrate, elevate and enable innovation ecosystems to thrive. They introduce a crucial social element through bars, restaurants, residential units and retail; connect innovation activities to local and cultural communities enabling a new inter disciplinary conversation; and provide a well-connected "place" that symbolises the ambition and energy of leading cities.

Innovation districts have a consistently higher rate of job and economic growth than other areas of industrial activity. They also have significantly higher levels of knowledge workers and are drivers of patent activity; two areas which the OECD view as opportunities for improvement for Ireland.

The one characteristic that the most successful innovation districts share is a world class university as an anchor tenant. Universities provide stability to innovation districts; a connection to a deep talent pipeline of graduates; an innovation-thought engine through faculty and researchers and a social and cultural centre.

<sup>2</sup>'Connect to

Compete'

Brookings

Philadelphia

Report, May

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# **The Rise of Innovation Districts** A new geography of Innovation in America.

Ireland can learn from other countries, especially the US where innovation districts are having a huge transformational effect as the opening section of this essay by Bruce Katz and Julie Wagner published by the Brookings Institution shows.

> As the United States slowly emerges from the Great Recession, a remarkable shift is occurring in the spatial geography of innovation.

For the past 50 years, the landscape of innovation has been dominated by places like Silicon Valley—suburban corridors of spatially isolated corporate campuses, accessible only by car, with little emphasis on the quality of life or on integrating work, housing and recreation.

A new complementary urban model is now emerging, giving rise to what we and others are calling "innovation districts." These districts, by our definition, are geographic areas where leading-edge anchor institutions and companies cluster and connect with start-ups, business incubators and accelerators.1 They are also physically compact, transit-accessible, and technically-wired and offer mixed-use housing, office, and retail.

Innovation districts are the manifestation of mega-trends altering the location preferences of people and firms and, in the process, re-conceiving the very link between economy shaping, place making and social networking.

Our most creative institutions, firms and workers crave proximity so that ideas and knowledge can be transferred more quickly and seamlessly. Our "open innovation" economy rewards collaboration, transforming how buildings and entire districts are designed and spatially arrayed. Our diverse population demands more and better choices of where to live, work and play, fueling demand for more walkable neighborhoods where housing, jobs and amenities intermix. "The trend is to nurture living, breathing communities rather than sterile remote, compounds of research silos."

 Pete Engardio, 'Research Parks for the Knowledge Economy', Bloomberg Businessweek

> Led by an eclectic group of institutions and leaders, innovation districts are emerging in dozens of cities and metropolitan areas in the United States and abroad and already reflect distinctive typologies and levels of formal planning. Globally, Barcelona, Berlin, London, Medellin, Montreal, Seoul. Stockholm and Toronto contain examples of evolving districts. In the United States, districts are emerging near anchor institutions in the downtowns and midtowns of cities like Atlanta, Baltimore, Buffalo, Cambridge, Cleveland, Detroit, Houston, Philadelphia, Pittsburgh, St. Louis and San Diego. They are developing in Boston, Brooklyn, Chicago, Portland, Providence, San Francisco and Seattle where underutilized areas (particularly older industrial areas) are being re-imagined and remade. Still others are taking shape in the transformation of traditional exurban science parks like Research Triangle Park in Raleigh-Durham, which are scrambling to keep pace with the preference of their workers and firms for more urbanized, vibrant environments.

Innovation districts have the unique potential to spur productive, inclusive and sustainable economic development. At a time of sluggish growth, they provide a strong foundation for the creation and expansion of firms and jobs by helping companies, entrepreneurs, universities, researchers and investors-across sectors and disciplines—co-invent and co-produce new discoveries for the market. At a time of rising social inequality, they offer the prospect of expanding employment and educational opportunities for disadvantaged populations given that many districts are close to low- and moderate-income neighborhoods. And, at a time of inefficient land use, extensive sprawl and continued environmental degradation, they present the potential for denser residential and employment patterns, the leveraging of mass transit, and the repopulation of urban cores.

The full essay is available on <u>www.brook-</u> ings.edu/essay/rise-of-innovation-districts

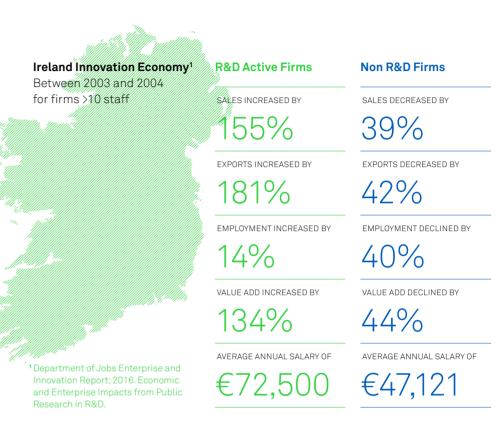
# Why Ireland needs an Innovation District

We need an internationally visible and credible innovation district in Ireland that will act as a magnet for talent, investment, innovation, industry and research.

> The world economy is changing, and as both consumers and workers we feel the effects of those changes every day. How we buy goods, communicate with each other and innovate has irreversibly transformed. The growth of cities as the primary economic engine is now evident, and amplified by the millennium generation who choose to work and live in urban environments.

> Globally the areas that have achieved the most economic success are cities that have built effective ecosystems that attract and retain talent. These dense locations of economic activity are often termed Innovation Districts and they draw in talent by housing a mix of start-up and scale up companies, large multinationals and globally competitive universities.

Ireland's global identity is not yet synonymous with innovation and that disconnect could turn out to be our biggest threat. By 2021, a short three years from now, a tsunami of new technology platforms – artificial intelligence (AI), robotics, Internet of Things (IOT), cryptocurrencies – will be driving global commerce and dictating where high value jobs are created and where new innovation capital is invested. Will Ireland be a driver of new innovation or a secondary player relegated to the side-lines?

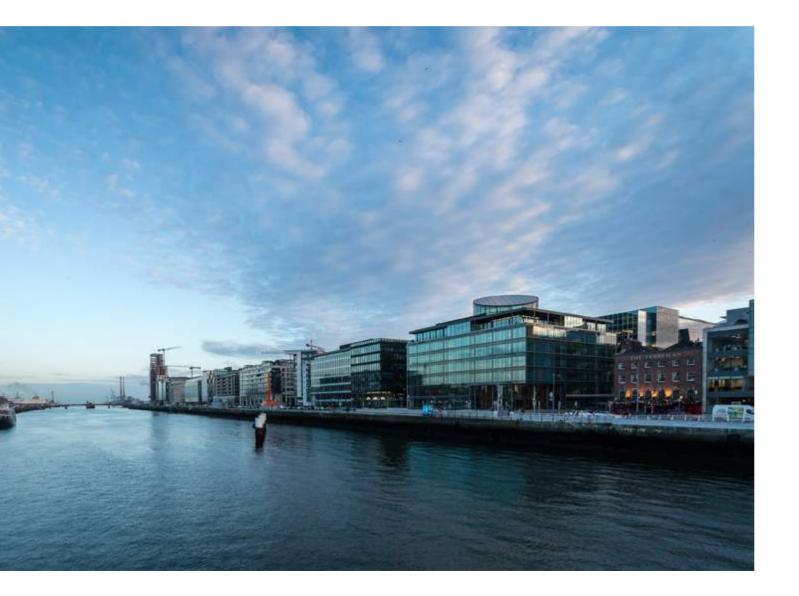


Coupled with these imminent disruptions it is important to highlight that Ireland's economy has already significant evolved in the last decade. Data from the Department of Business, Enterprise and Innovation highlight that research and innovation active firms have been the drivers of economic growth in the last decade while those firms not innovating have seen significant economic decline.

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Ireland can and must develop a world class innovation district to maintain our edge and stay ahead of rapidly changing competitor countries.

# **Why Grand Canal Dock?** It's Simple: It's Ready.



Grand Canal Dock has an international reputation, it's already the innovation heartbeat of the city, and Trinity College Dublin, a primary advocate for the innovation district, already has a fledgling presence.

In an international context, Grand Canal Dock is Ireland's best known technology focussed location, thanks to the significant and continuously expanding presence of Google, Twitter, LinkedIn, Three, HubSpot, Facebook, AirBnB and others in the area and the many global consultancy legal and accountancy firms such as Accenture, Deloitte and Matheson who have made Grand Canal Dock their home.

More than 20,000 people are currently employed in the kilometre radius of Grand Canal Dock with the Grand Canal theatre at its centre and Dublin's Convention Centre close by.

Grand Canal Dock has already become a vibrant social centre with cafes, restaurants and bars. With the right strategy it

can also become an activated innovation centre for Ireland.

The area houses a diverse and thriving residential community which will be consulted about the development of the innovation district. The residents will be asked for their views on how Grand Canal Innovation District (GCID) can further regenerate their neighbourhood and they will be kept up to date on progress.

The National Planning Framework draft (NPF) ambitiously targets the development of at least 50% of all new homes in Dublin on infill and brownfield lands, placing an emphasis on new development in Grand Canal Dock – all of which is hugely positive.

In fact, the draft report specifically highlights the Dublin Docklands area as an exemplar of urban regeneration that contributes to Dublin and Ireland as a whole:

"The Docklands Project radically changed the whole area, not only through major phases of mixed use property development but also by involving the local community and by fostering and investing in educational and other social interventions. Dublin Docklands is now a world-class city quarter and paragon of sustainable inner city regeneration that continues to make a major contribution to the social and economic prosperity of Dublin and Iteland as a whole."



Grand Canal Innovation District (GCID), with Trinity at its heart, will provide an innovation nucleus that will support and strengthen the wider Dublin city innovation proposition.

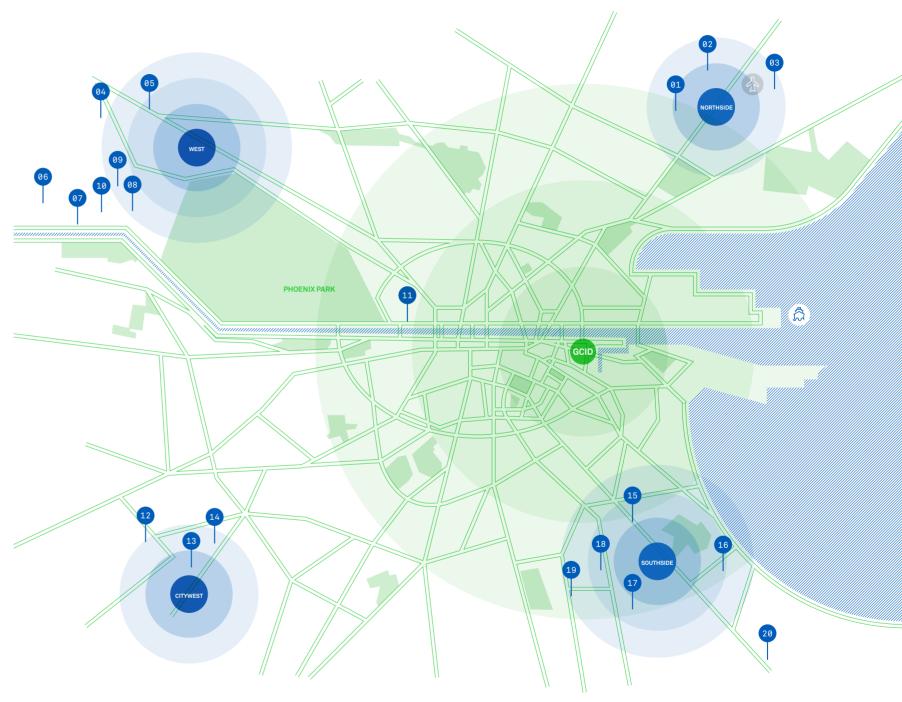
Enterprise clusters surrounding the city will remain strong but will have enhanced access to talent, start-ups and research.

Northside	Citywest	
01 Ryanair	12 Xilinx	
02 Siemens	13 Adobe	
03 Fujitsu	14 SAP	
West	Southside	
West 04 IBM	Southside 15 Microsoft	
04 IBM	15 Microsoft	

**08** Nokia Bell Labs 19 Sage 20 Dell

**09** PayPal 10 eBay

**11** Workday



# **Innovation Eco System** Density + Proximity + Critical Mass



### **Research + Expertise**

- A World Class University Researchers
- B Shared Research Infrastructure
- **C** Incubators and Accelerators
- **D** Venture Funding
- E Angel Investment
- F Entrepreneurs and Start-Ups
- G Student Entrepreneurs
- H Regional Company Spaces



- Business + Education
- S Multinational Companies
- T Government Agencies
- U Conferences, Lectures, Workshops
- V Public Lectures

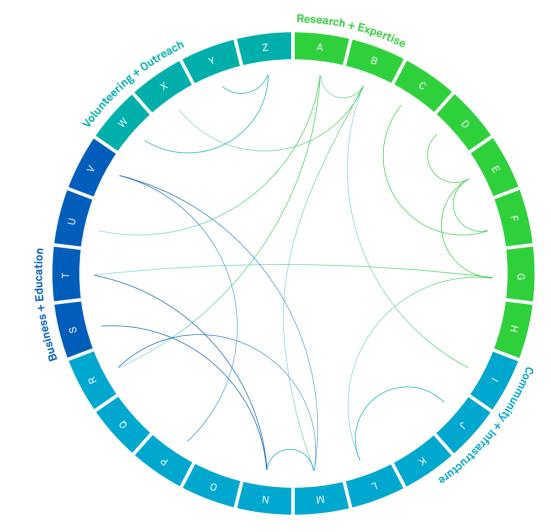


- Community + Infrastructure
- Co-Working Space
- J Venture Café
- K District Hall
- L Restaurants, Cafés and Pubs
- M Civic Space
- N Local Community
- 0 Bike Stations, Public Walk Ways
- P Public Space
- Q Accommodation
- R The Lir



- Volunteering + Outreach
- W Cultural Activity
- X Homework Club
- Y Internship Programme
- Z Coder Dojo

Successful innovation districts provide a unique set of co-located innovation, enterprise, social and cultural components. It is this overlapping of perspectives, cultures, skills and people that drives different thinking, improved collaboration and enhanced outcomes.



Key In gradient

# An Innovation Scorecard for Grand Canal Dock

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Key Ingredient	Score	Gap Summarised
World Class Companies	•	Many of the world's most innovative firms have a large footprint at GCD. In addition many of the leading service and consultancy firms are also co-located there. This provides a huge advantage for Dublin as at present there is already over 20,000 employed in this part of the city.
Entrepreneurs	•	Dublin has a thriving start-up ecosystem and 75% of Ireland's start-up companies are located in the capital. In addition existing entrepreneurship drivers such as the NDRC; enterprise hubs such as the Guinness Enterprise Centre and co-working spaces such as DogPatch Labs are soon to be complemented by large co-working spac- es such as WeWork.
Inherent Advantages	•	Dublin's location as a bridge connecting Europe and the US is one of the city's major advantages. There are almost 30 flights per day to the US and the London-Dublin air route is the second busiest in the world. Dublin is also a charming and internationally well-loved city, known for its creativity, and the friendliness of its people. According to the Dublin Chamber of Commerce's Great Dublin Sur- vey of 2017, Dubliners are open and optimistic, and over 65% of them have a positive view of the future impact of technology on their lives.

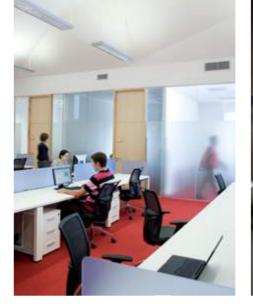
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Grand Canal Dock (GCD) is an optimal location for Ireland's first innovation district, but success involves a number of key ingredients beyond a dynamic, central and well-designed physical location. A scorecard benchmarking GCD against the characteristics required for a globally competitive innovation district is provided below:

Key Ingredient	Score	Gap Summarised
Diversity	•	According to the 2016 census, 18% of Dublin's population is foreign born, giving the city one of the highest levels of diversity in Europe.
Service Enablers	•	Critical to any globally competitive innovation ecosystem is the underpinning infrastructure – digital capability and broadband; power and water. Grand Canal Dock has the core requirements in this area; although continued invest- ment will be required to sustain future competitiveness.
Enabling Infrastructure	•	There has been a number of significant public infrastruc- ture projects in Dublin recently including the Luas Cross City Project, Dublin waste2energy plant, the Poolbeg and Docklands Strategic Development Zones. Last year almost 100,000 people commuted by bicycle every working day in Dublin and a strong public transport system is in operation. However, housing remains a key challenge and while a number of smart city projects in relation to open data, transport, utilities, energy, and waste management are underway, Dublin still lags in the execution of smart city solutions relative to other European cities like Copenha- gen, Berlin, Stockholm and Amsterdam.



Key Ingredient	Score	Gap Summarised
World Class Universities	•	Dublin's universities fare well in global rankings. In the latest QS ranking Trinity is just outside the top 100. Dub- lin's UCD and Royal College of Surgeons in Ireland make the top 250 in the Times Higher Education ranking. DCU is developing an ambitious new campus DCU Alpha while DIT is spearheading the country's first Technological University on a new campus at Grangegorman. However, the key for a world class innovation district is proximity and although Trinity is city centre based, it is not close enough to GCD to allow Dublin to properly leverage its strengths. A second campus at Grand Canal Dock would address this deficit.
Capital	•	Ireland has more investment per capita than any other European country. 70% of the €880m venture invest- ment in Ireland in 2016 was in Dublin. However, there is an over-reliance on the government for seed capital, a need for a larger and deeper pool of angel investors, and easier access to debt capital.
High Density of Business	•	Grand Canal Dock has many world leading businesses but lacks the critical mass and density of start-up and scale up companies required to enable an activated inno- vation district.





Key Ingredient	Score	Gap Summarised
Public Networking; Programming and Open Infrastructure	•	International best practice is very clear; industry co-lo- cation is not enough; the enterprise base needs to be activated through access to public space and a strong programming component that brings the community together. The emphasis has to be on the quality of life and integrating work, housing and recreation.
Shared Research Facilities	•	Shared research facilities lower the barrier for compa- nies to become innovation active by providing access to skills and infrastructure that allow a company to begin to innovate. Dublin is still in the early stages of developing its shared economy credentials. While co-working options are becoming easier to find across the city there are lim- ited shared lab, prototyping space, IOT and other shared facilities.
Incubators & Accelerators	•	At present there are no incubators or accelerators active within GCID. They are a critical part of infrastructure as they support start-up and scale-up companies; critical for a thriving entrepreneurial ecosystem. GCID can become the unifying location that connects our enterprise, cul- tural, residential and innovation communities.

# **A New Trinity Campus**

The innovation district score card highlights many compelling characteristics of Grand Canal Dock, including the critical mass of global companies, strong employment, residential units, good infrastructure and an excellent global talent base.

However significant gaps were identified. The lack of shared research facilities that are critical in lowering the barrier for activating innovation for the enterprise community; the absence of programming and public and civic space where individuals, companies and entrepreneurs can connect, ideate and act; the absence of the required density of start-up and scaling companies.

Perhaps most significant is the absence of the co-location of an internationally leading university. Proximity matters and although Trinity College Dublin is a close neighbour, successful innovation districts have a university at the physical centre of their narrative and geography.

Trinity has the vision to address these infrastructural shortcomings through the development of a second campus that would compensate for current gaps and place a thriving and vibrant new innovation campus at the centre of the innovation district.

The proposed new campus is the first strategic development of scale for Trinity outside of its historical city centre campus and represents an enhanced ambition of Trinity to play a more central and enabling role in the development of a world class innovation ecosystem for Ireland. The campus will be different than the existing Trinity campus; and indeed any other university campus in Ireland. Its location alone is unique; at the physical heart of the capital city and one of Europe's most thriving enterprise hubs. It will be surrounded by globally leading businesses and will create a new city location for research, innovation, entrepreneurship and creativity.

The campus will house many of Trinity's national research institutes and will have the highest density of world class researchers on the island of Ireland. It will also bring together researchers from the schools of engineering, computer science and the natural sciences in a new centre called E3 (Engineering, Energy and the Environment).

Importantly industry will also co-locate on the campus in a mix of shared working and own front door office spaces.

Most importantly the campus will also provide programming and public space to enable a new innovation conversation for Dublin.

# **Campus Characteristics**



### Research

Trinity will locate on the campus its existing national research centres – AMBER, CONNECT, ADAPT and Learnovate. In addition it will establish a new research institute E3 - Engineering, Energy and the Environment; bringing together its schools of computer science; engineering and natural sciences. All of these activities will ensure the new campus has the highest density of world class researchers on the island of Ireland; and a ready-made bridge to connect these innovation-thought leaders to the enterprise community.

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### Enterprise

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A key gap identified in the benchmarking of GCD is the absence of start-up and scale up companies. Trinity will partner with innovation organisations to support the establishment of a 12.000m2 shared working space on the campus. This space will house 300 - 400 companies and create a uniquely dense start-up ecosystem that will attract entrepreneurs; angel investors and venture funding. Furthermore there will also be "own front door" industry space to house scaling companies and new companies attracted to Ireland and this world class eco-system.

The campus will bring together four key ingredients that combined will facilitate the establishment of an innovation district that will be transformational for Dublin and Ireland.



### Place

Trinity will partner with innovation organisations to establish innovation connection spaces with a similar mandate to what Venture Café has been successful in activating in many cities in the US and Europe including Cambridge, Boston, St. Louis, Miami and Rotterdam. In addition Trinity will look to establish a public meeting space to support conferences, hackathons, innovation meet-ups and informal get-togethers across the innovation and entrepreneurship community. A global reference would be District Hall in Boston.



### Culture

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All great innovation districts become social hubs, particularly in the evening time enabled by environments where creative artists meet technologists, and powered by cultural events and activities. Trinity will ensure that there will be a role for the artist, creator and performer on its campus; and importantly a shared space to enable this community to connect with the city's innovation leaders. The new campus will host the Lir Academy, Ireland's national academy of drama and art which is already located in the area.

The new Trinity campus will play a unique role for Dublin by providing a neutral environment to support connections between academia and industry; programming and civic space, and by its endorsement of the space as one of Ireland's most internationally recognised brands.

# **Enhanced Connectivity and Collaboration**



From day one the Grand Canal Innovation District (GCID) will be a microcosm of what Ireland looks like when the potential of our talent and thought leadership is fully realised and on display to a local and global audience.

Through company facilities and shared public ones, the GCID residents will showcase their ongoing technological, social and educational projects and participate in broader public initiatives that inspire creativity, innovation and collaboration. Programmatically, these initiatives will include daily networking, training, thought leadership and meetup events, as well as regularly scheduled incubators, workshops, exhibitions, concerts, hackathons, product demos, career fairs, international conferences, product and pitch competitions.

The GCID will be a community leader, giving innovators what they need most access to thinkers, test beds, talent, capital and an environment in which to create and innovate.

## GCID – Enabling role models, encounters and unplanned collaborations

World class talent and companies need access to inspiring role models. The GCID will bring together multinationals, startups, investors, academia and research centres; within a physical and programme-rich infrastructure with an unprecedented level of depth and scale.

This critical mass of talent will be based in the innovation district where they can spontaneously and serendipitously engage in open innovation together.

Steve Jobs was one of the first innovators to understand the importance of proximity to spur innovation. His Pixar office, unveiled in 1991, was designed to "promote encounters and unplanned collaborations" by obliging employees to cross the central spine of the building many times every day. Teamwork, one of Ireland's leading tech companies, designed its new office in Cork with a similar objective in mind.



A physical space where encounters and unplanned collaborations happen daily and at scale, is the vision behind the Grand Canal Innovation District.

# Leadership and Partnership

To succeed the district needs to create an environment of close co-operation from the earliest stages between Government, industry and academia. In Dublin we have this co-operation in spades.

"You can either put up red tape or roll out the red carpet. If you want to be a 21st-century laboratory for technology, you put out the carpet."

— Pittsburgh Mayor Bill Peduto, December 2016

Innovation districts are founded by civic leaders who have a mission that is equal parts public and private. Discussions with leaders of other successful innovation districts in Europe and the US make clear the importance of a 'triple helix' approach to leadership in developing an innovation district in Dublin.



### Government

The Irish government's aspirations and plans are well laid out in Project Ireland 2040 and both the Innovation 2020 and Enterprise 2025 policy documents and in that context, it has a primary role to play in the planning, development and success of the GCID. Indeed, government involvement in the project will be critical, in terms of funding; to engage key decision makers, and negotiate the compromises necessary to deliver on the project successfully.

As a national entity, the government will play an important role in ensuring that the District represents innovation from across the country, and that its positive impact extends well beyond its Dublin city home.

Ireland's experience with the International Financial Services Centre (IFSC) confirms that this is a realistic aspiration. While still based in Dublin, the IFSC brand now encompasses financial services companies across the country. Of its current 38,000 employees, 10,000 are based outside Dublin. The GCID is strongly aligned with the national strategic objectives around knowledge jobs, research and investment articulated by the IDA and Enterprise Ireland. Importantly it also offers them a new and compelling story about Irish innovation, and enhances the corporate tax narrative by providing real substance around innovation and talent, collaboration and place making.

Dublin City Council will also play an expansive and crucial role in the district development. From influencing the built environment through the planning process and the design of the public space, through using the district as a lab and test-bed for smart city initiatives that position Dublin at the forefront of the global smart city movement.

This manifesto is an opportunity for government to support a project of national ambition and scale that can truly differentiate Ireland.

### Industry

The furious pace of technological adoption and innovation is shortening the lifespan of companies and forcing executives to commit longer term to locations where they believe innovation is most likely to flourish. With industry's help, instead of losing these companies to other regions, the GCID will become the location of choice in Europe for their strategic and IP intensive activities.

Furthermore, companies are more focused than ever on talent. A district that is talent-rich will remain attractive to global enterprise. With GCID, Dublin will become a city where talented individuals can not only find a job but build a career.

With GCID, Dublin which is already an attractive city for international talent will become a city where international talent can not only find a job but build a career.

### Universities

When cities and universities partner to drive innovation, great things can be achieved. Universities have a critical role to play in a successful innovation district. They provide stability to the district as they commit to a location not for years but for decades and centuries.

In addition, they provide international visibility and validation for the national strategy, through a pipeline of talent into the ecosystem supporting the co-located enterprises, research and innovation leadership through world class faculty, and the associated physical infrastructure. There are many benefits to Trinity being a lead participant in, and anchor tenant of, the new innovation district at Grand Canal Dock.

Trinity brings its reputation to bear as Ireland's leading university and its position as Europe's leading university for graduate entrepreneurship. It leverages its deep roots in the city and through the development of a new campus at Grand Canal Dock, will provide critical infrastructure to enable Dublin transition to hosting an activated and thriving innovation district.

However, while Trinity is the originator of the vision for GCID, with the willingness and confidence to see it through to fruition, the main objective of this manifesto is to raise a sense of ambition and to put forward a vision for how Ireland can create an internationally differentiated piece of innovation infrastructure. In addition, we wish to ignite a public conversation, and in the spirit of collaboration, gather key leaders and stakeholders together to develop and further the plan for the GCID.

There is plenty of space for – and an open invitation to - other higher education institutions to realise this ambition for Ireland through action and vision.





# Success...

Success is a nothing less than a redefined sense of what Ireland can achieve.

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It is Ireland, for the first time in its history, confidently defining its own innovation identity and destination. Building on the research strengths of its universities; enabling the innovation capability of its start-ups and attracting and tackling the grand innovation challenges of international industry.

It is about Ireland having an internationally recognised location for innovation excellence that resonates both nationally and internationally and is built on the talent of our people and the attractiveness of Ireland as a location for global innovators to come, work and build a career.





Additional start-up Additional FDI companies companies co-located landing in Ireland

through GCID

within GCID

Enhanced venture investment per annum Innovation focused seminars, panels, per annum

Enhanced activation of the community

Attendees per annum visits to GCID per annum

Enhanced connectivity

between FDI and startup community

International delegation

Visitors in first 10 years

# What will an Innovation District enable?

# "A brilliant idea in isolation is not enough to create a real breakthrough. Place matters."

The creation of the GCID will be transformational for Dublin and Ireland and requires support across industry, higher education and government.

GCID builds on our track record for success in foreign direct investment; in university research and innovation and our thriving start-up ecosystem. It will connect these components; create a new innovation infrastructure of international scale and attract the best mobile talent in the world.

The GCID will result in the establishment of an internationally visible and credible innovation district in Ireland.

It will act as a magnet for talent, investment, innovation industry and research. It will enable accelerated regeneration of Grand Canal Dock; the development of a second campus for Trinity College Dublin focussed on innovation and enterprise; the increased competitiveness of our higher education system and a location to attract talent and funding to support the internationalisation of our indigenous industry base.

In short GCID can personify and define a new innovation centric enterprise strategy for Ireland. It can build on the significant progress of the last decade and provide the required infrastructure, activity and vision required to position Ireland as an innovation leader in an increasingly challenging global innovation ecosystem. We need a new sense of ambition for Ireland. Twenty five years ago Ireland took the plunge to create a new financial services district in Dublin. Against the odds it was a global success.

Now we have another opportunity – to get to the forefront of innovation globally. Dublin is currently not ranked in the top 20 innovation cities in Europe. With this vision and the associated ambition we can aim to be in the top 20 cities globally by 2030. This is a realistic goal, and if achieved will bring immense opportunities, generate significant economic return and establish a thriving new social, cultural and innovation quarter in our capital.

GCID is a generational opportunity. It is a vision of its time. In 10 years, the opportunity to lead will have passed; the global innovation competition will have outstripped us.

We must act now to position Dublin and Ireland for the future.

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# **A Shared Vision**

It also explains the challenge before us in Dublin. Fulfilling Dublin's potential needs must start with a series of "big tent" discussions in which all key stakeholders across the city and country are motivated to participate.

In this context, we should reflect on our own history. GCID represents a project of scale and ambition that will connect with international business. The nearest possible equivalent is already thirty years old – the IFSC.

The IFSC came into being in 1987 under legislation that was designed to boost activity and employment in the Irish economy. It was heralded as the major economic success story of then – Taoiseach Charlie Haughey's political tenure, employing 14,000 people initially and over 35,000 today.

A 'who's who' of global financial services companies were attracted to the IFSC because of our talent, telecommunications infrastructure, pro-business regulatory environment and our, at the time, low cost base of operations relative to other jurisdictions. While the IFSC lost some of its competitive footing as a result of the 2008 financial crisis, it has regained it in more recent years. Last year the IFSC claimed half of the world's top 50 banks and top 20 insurance companies as tenants and paid over €1b in corporate taxes, and a further €1b in payroll taxes.

Today's global economy has little in common with 1987, or even 2007, but we need the same forward planning and ambition that brought the IFSC to life, to deliver on the GCID.

A plan of GCID's scale would have been too ambitious 20, maybe even 10 years ago, but in 2018 it has the potential to define Ireland's innovation identity because:

- we've developed an internationally competitive research ecosystem that is producing a stable talent pipeline of masters and PhD trained graduates.
- we have 30 years of innovation led FDI companies, that has provided experience for many middle and senior managers to scale businesses globally from Ireland.
  we have a stable and growing start-up ecosystem and now have more than 600 start-ups in Dublin. In addition we have more venture investment per capita in Ireland than in any other European country.

Trinity College Dublin is ranked first in Europe for entrepreneurship – producing graduates that raise more venture funding than any other university outside the US.

Like the IFSC where an aligned vision was created; today we need to create a shared narrative around the role that a globally leading innovation district can play for Ireland and the opportunity to transform our future competitiveness by the development of GCID.

Is there any reason why in the year 2025 the international media should not report that:



In May 2017, the Brookings Report on Philadelphia explained the city's challenge succinctly:

"Efforts have tended to occur between individual institutions and have not been synchronized around a shared vision and set of goals that could put the region at the forefront and help it capture the associated economicgains".

# **Innovation District** Advisory Group



Successful innovation districts across the world owe their success to a combination of factors. Primary among these is the early formation of long lasting partnerships between public and private stakeholders to explore and validate each component of the innovation district plan and, critically, to ensure momentum is maintained in bringing those plans to fruition.

The purpose of this manifesto is to begin a conversation about why Ireland needs an innovation district.

To move forward this conversation Trinity proposes to establish an innovation district advisory group.

This advisory group will develop a consensus vision using this manifesto as a starting point for the conversation.

The advisory group will have membership reflecting the "Triple Helix" approach to governance that will include

- National government key departments and agencies
- Local government key departments
- Dublin's higher education institutions
  Multinationals and leading Irish
- Innovative startup companies; scaleup businesses and investors

companies

- Innovation ecosystem stakeholders in Dublin and beyond
- Representatives of the local residents and community

This manifesto explains the "why" of the GCID and goes a certain distance towards conceptualising it aspirationally and operationally. The advisory group will develop these concepts into well rounded ideas and plans supported by roadmaps, timelines and performance metrics.

The advisory group will reflect on the challenges of governance, programming and funding and bring forward recommendations on how to formally establish the innovation district; the role to be played by each entity and prioritise the next steps.

In addition the group will review key policy issues that could impact the development and ultimate success of the GCID including matters such as visas, angel investment incentives, share options, R&D grant approval processes and other factors that will influence the short, medium and long term success of the GCID.

The advisory group will develop a roadmap and establishment plan for a globally competitive innovation district for Dublin. In tandem the plans for the new Trinity campus will be formalised. The advisory group will be chaired by Martin Fraser, Secretary General to the Government.



Martin Fraser Secretary General to the Government

# Glossary

GQD	Grand Canal Dock
GCID	Grand Canal Innovation District
TTEC	Trinity Technology and Enterprise Campus
E3	Engineering, Energy & Environment Institute
FDI	Foreign Direct Investment
NDRC	National Digital Research Centre
AMBER	SFI Centre for Advanced Materials and BioEngineering Research
ADAPT	SFI Centre for Digital Content
CONNECT	SFI Centre for Telecommunications and IOT
INSIGHT	SFI Centre for Big Data
CIC	Cambridge Innovation Centrer
NPF	National Planning Framework
IFSC	International Financial Services Centres
Venture Cafe	A not-for-profit organization dedicated to helping innovators make the world a better place by envisioning, implementing, and managing initiatives and programs that build, strengthen, and connect the innovation community.
District Hall	A dedicated civic gathering space for a city's innovation community. Its mission is to create impact for local innovators and entrepreneurs through its spaces and programs.

# Dublin's Global Innovation Reputation

Dublin has it all – start-ups, multinationals, leading universities and research centres – but it lacks the kind of physical home for innovation that other cities use to capture the imagination.

Place matters and as a small but global city, Dublin needs a physical home for innovation that's a microcosm for all that's world class – or has the potential to be – in Irish innovation.



# **It's Now or Never**

The GCID is a generational opportunity that will define the Ireland of our future.



The OECD's call to Ireland to "Move up" means increasing the level of investment in innovation, accelerating commercialisation from research centres, and finding new and more effective ways to connect multinationals to smaller Irish start-ups and scale-ups creating innovative solutions.

Moving up requires that we think and act differently; and it encapsulates the opportunity we have before us with the GCID. It's a now or never opportunity for Ireland.

The government's aspirations and plans are well laid out in Project Ireland 2040 and key policy documents such as Innovation 2020 and Enterprise 2025. The GCID is aligned with all these ambitions and will deliver for Ireland.

A reputation for innovation is an economic imperative for Ireland. We can and must earn it now.

GCID is a generational opportunity. It is a vision of its time and will define the Ireland of our future.



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