

INVEST GLASGOW


Code Clan

DIGITAL TECHNOLOGY

KEY REASONS TO INVEST IN GLASGOW'S THRIVING DIGITAL TECHNOLOGY SECTOR


 **Glasgow is the city of choice for digital tech industry giants** and a new wave of disruptive start-ups with successful sector specialisms in fintech, data science, e-commerce and marketplace, social networking, software engineering, cloud computing, the 'internet of things', space technology and engineering.


 **Ranked 2nd UK Tech City and 1st in Scotland** (CBRE Tech Cities Report 2019).

 Technology is transforming Glasgow's traditional industries such as finance, engineering, gas and oil. **The city's digital tech economy is now the largest in Scotland and one of the fastest growing in the UK.** A leader in digital tech and innovation coupled with lower saturation and cost of living have placed Glasgow firmly at the forefront of digital tech in the UK.


 Glasgow has **33,653 digital tech jobs and a digital tech business turnover exceeding £1 billion.**


 **A growing digital start-up community with 184 digital tech business startups in 2016.**


 **Glasgow City Region is home to 575 innovative technology firms,** which is almost as many as in Lille, Turin and Bilbao, or Dusseldorf and Dortmund, combined.


 Tontine accelerator is home to many digital tech start-ups with a **successful track-record in helping them attract large investments** and spinning out many of Glasgow's growth companies of the future.


 Digital tech is forecast to be **the fastest growing sector in Scotland to 2024 in terms of GVA** (38%), growing more than twice as fast as the economy overall (17.5%).


 Access to a **world-class talent pool – Glasgow is ranked no. 1 of the UK's 10 core cities** for both the highest number of digital tech students and graduates.

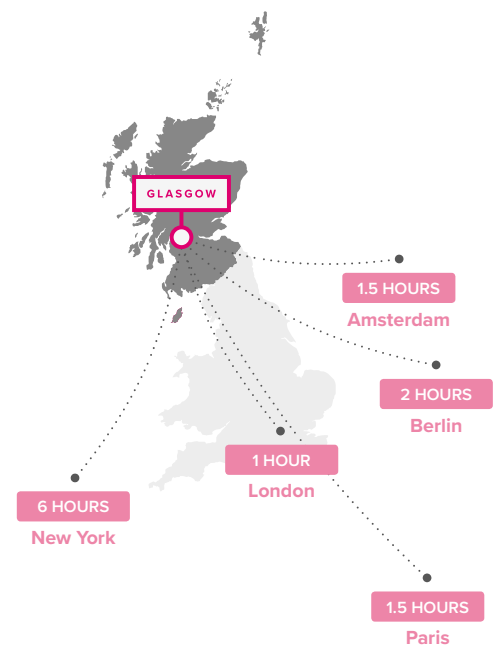
 Glasgow has leading universities with **cutting edge digital tech expertise** and strong connections to the digital tech industry.

 An outstanding digital tech environment with **numerous centres of excellence** underpinned by a robust and successful 'triple helix' collaboration of industry, academia and the public sector.

 **Glasgow is a top ten UK meetup hub** with over 12,000 tech members in meet-ups such as Scotland Data Science and Technology, The Digital Media Meetup Glasgow, Glasgow Internet of Things and Lean Agile Glasgow.

 Over the past 5 years **Glasgow has consistently ranked in the top 20% most innovative cities in the world (top 100 cities) and places 4th in the UK.**

 **Glasgow is rising in the ranks as a UK digital leader as it undergoes a digital transformation,** with full fibre digital infrastructure being rolled out across the city.



An International Strategic Location

Most European destinations are within two hours of Glasgow, offering short journey times and low cost travel.

AN EVER-INCREASING DYNAMIC MIX OF WORLD RENOWNED AND NEW DIGITAL COMPANIES

AcuSoft	CGI	Genpact	Pursuit Marketing
AgileCase	Cloudwick	GSA Digital Design Studio	SAS
Alba Orbital	Clyde Space	GSS	Skyscanner
Aridhia	Code Clan	Hewlett Packard	Softcat
Atos	Coherent Scotland	Incremental Group	Solius Group
Axis Animations	Dell	JP Morgan	Spire
BioFilm	ECS	Lockheed Martin	Swipii
Bird.i	Encompass Corporation	Technologies	Systal
Blazing Griffin	Equator	MBN Solutions	Transiris
Brightree	Exova	Morgan Stanley	
Caseblocks	Farmflo	M Squared Lasers	
Castlight Financial	FDM Group	Previsio	

SPECIALIST SECTORS IN GLASGOW

- FinTech
- Software Engineering
- Internet of Things
- Data Science
- e-commerce and Marketplace
- Social Networking
- Cloud Computing
- Space and Satellite Technology
- Engineering

LARGE DIGITAL CLUSTER

- A corporate digital tech giant – **Glasgow has an impressive 'who's who' of blue chip companies, major global organisations and international SMEs**, with a range of these locating significant technology functions in the city including JP Morgan, Morgan Stanley, Barclays Wealth, Arnold Clark, Scottish Power and Lockheed Martin. The Barclays Wealth Glasgow office houses the global IT and development resource which services the needs of the entire Barclays organisation worldwide.

- Digital tech turnover in Glasgow increased by 32% between 2011 and 2017 to over **£1 billion** and generating almost **34,000 digital tech jobs**.

IN 2016 GLASGOW PRODUCED OVER 60 SATELLITES

– more than any other city outside of Silicon Valley



CENTRES OF EXCELLENCE

- A strong and extensive digitaltech ecosystem including key players such as **The Data Lab**, which helps new data science solutions through collaboration. Also, the **Urban Big Data Centre** is a UK-wide data service and resource for researchers who want to use data science to address a range of urban challenges, both local and global. Also, **CENSIS**, the centre of excellence for sensing and imaging systems (SIS) and Internet of Things (IoT) technologies is the industry-led innovation centre that assists businesses and organisations to innovate and overcome technology barriers. Its IoT Centre provides advice, technical support and resources to create a successful business solution.
- **JP Morgan's European Technology Centre** employs more than 1,500 highly skilled technologists, developing complex software and technology services for use by JP Morgan across the globe.
- **A Centre for Space Technology** – due to a strong company presence, Glasgow has built more satellites than any other city in Europe in the past two years. Alba Orbital, Spire Global and Clyde Space are the city's experts in this pioneering field and the design and development of small satellite systems (smallsats) and collecting accessible data. More than 250 of these smallsats were launched into space in 2017 – four times the number of all other satellites combined.
- Glasgow is a **centre of excellence for optical imaging and lasers** with fast growing photonics technology company M Squared who designs precision lasers for scientific and commercial applications at its Glasgow HQ.
- **European HQ for Encompass Corporation**, the Australian fintech developer, has located its fast-growing European HQ in Glasgow. Encompass develops automated solutions for Anti-Money Laundering and Counter Terrorism Finance compliance.
- **European HQ for AcuSoft**, in 2018 the US software company opened their first European office in Glasgow. AcuSoft, who provide custom software solutions for large US companies and public sector clients, plan to expand their operations in the city to provide development services for energy industry clients in the US.
- **Centre for Excellence for Data Science.** Glasgow is home to a range of data science specialists. The global firm SAS employs over 200 data analysts at its research and development centre to create business applications to help develop solutions to tackle fraud and financial crimes. Cloudbased data analysis platform Aridhia works with universities to apply data from records that are held by the National Health Service (NHS). This data provides insight into the causes of some chronic conditions.

“We're always looking for the best people anywhere in the world – that's how the workforce generally develops these days. Scottish universities include some of the best in the world, and there's a strong culture of innovation and entrepreneurship. We found a very good business infrastructure here, and a culture that's viable for a growing company. The support in the business environment is comparable to Silicon Valley, which is a place we thought was unparalleled in that aspect.”

Silvian Centiu, CEO, Transiris (US)

Source: FDI Markets

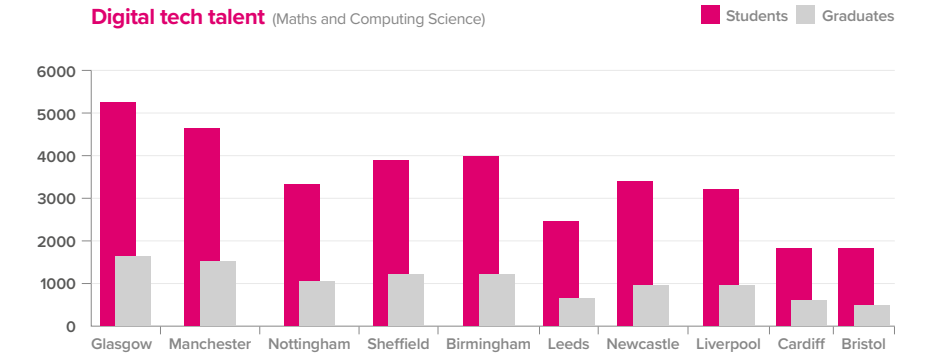
WORLD-CLASS TALENT POOL

- An ideal location for fintech developers seeking to grow their business. Glasgow has a strong cluster in dedicated technology operations for the financial sector with companies benefiting from a pool of **high quality computing science and software engineering graduates** produced by city universities.

- Glasgow attracts major international companies because they are able to recruit and retain key staff from the **highly-skilled workforce**.

- **Graduate retention in Glasgow is the highest in Scotland** and 3rd highest amongst the UK core cities, which makes it easier to recruit and retain home-grown talent.

Digital tech talent (Maths and Computing Science)



- Over 46% of the working age population are educated to **degree level or above**.

- Of the UK's 10 core cities, Glasgow attracts and produces the **most digital tech students and graduates annually** (HESA).

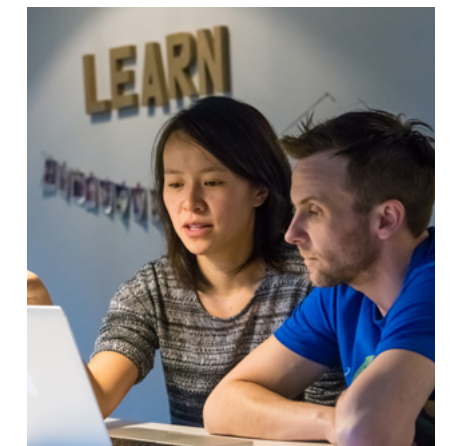
WORLD-CLASS EDUCATIONAL INSTITUTIONS

- Glasgow's universities have long been a hub for driving innovation in this sector. The University of Glasgow is home to the **oldest School of Engineering in the UK**, delivering world-class engineering education for more than 150 years. The University of Strathclyde is recognised as one of the UK's leading technological universities with seven of its eight engineering departments ranked in the top 10 in the UK on research power.
- The University of Strathclyde particularly excels in tech incubators and supporting home-grown start-ups, ranking **7th in the UK for company spin-outs**.

- The University of Glasgow's Smart Campus programme is **pioneering 5G technology**.

- The **UK's first MSc in Financial Technology** was launched by the University of Strathclyde.

- Glasgow's impressive talent pipeline is further supported by a range of digital skills academies including CodeClan, FDM Group and MBN Solutions to **skill trainees for bespoke IT requirements**.



STATE-OF-THE-ART FACILITIES AND INFRASTRUCTURE

- Glasgow's transformation from industrial powerhouse to leading digital tech cluster is highlighted by the reinvention of traditional locations now providing a home to a **new breed of digital start-ups**. These incubator and co-working spaces include Tontine, Rookie Oven, The Whisky Bond, Clockwise and The Hub.

- Since Glasgow won Innovate UK's £24 million demonstrator project, the city has continued to charge ahead as **one of Europe's leading smart cities**. Enabling infrastructure and smart technologies to enhance day-to-day living for citizens and businesses throughout the city.

- Glasgow is undergoing a digital transformation, as CityFibre makes its largest core infrastructure investment, rolling out almost 300km of full fibre digital

infrastructure across the city.

This investment in Glasgow's initial core infrastructure is delivering gigabit-capable broadband to almost all of Glasgow's businesses and public sector buildings. With modern, fit-for-purpose digital infrastructure at its foundation, **Glasgow is rising in the ranks as a UK digital leader; promoting greater levels of innovation and productivity and making the city more investable.**

- Glasgow is also paving the way for the next generation of internet. A public-private collaboration has installed **one of the world's most advanced Internet of Things networks** and is driving the development of devices to monitor environmental conditions, track assets and support social care.

“Scotland, specifically the Glasgow metro area, provide a compelling value proposition, enabling AcuSoft to deliver the solutions our customers need at a much lower cost than the traditional technology centers. AcuSoft is able to leverage a well-trained and highly-educated workforce, in a city with the modern infrastructure necessary for operating a technology services company without the progress inhibiting overheads of London, Seattle or Silicon Valley.”

Rebecca Hansen, Director, AcuSoft
Source: FDI Markets

9 STRATEGIC INTERNATIONAL LOCATION

- Scotland's largest city is now a digital tech heavyweight where business, trade and investment flourish.
- Strong investment environment – Glasgow is one of the top performing cities for attracting FDI, ranked no. 6 in the UK for 2018 (outside London).
- Glasgow is the only metropolitan area in Scotland. The population of the greater Glasgow conurbation is around 2.3 million, accounting for 43% of the country's entire population. The population is steadily rising with the metropolitan population forecast to grow by 175,000 by 2035.
- 19,000 companies make their home

- in Glasgow generating a combined annual turnover of £38 billion.
- An economic powerhouse, Glasgow City Region generated £41.4 billion gross value added (GVA) for Scotland's economy in 2017.
- As Scotland's 'business capital', the city's connected eco-system allows companies rapid growth opportunities. Glasgow has a long tradition of success in 'applied knowledge and technology sectors'.
- Glasgow's lead in developing Scotland's first two Innovation Districts - Glasgow City Innovation District and Glasgow Riverside Innovation District - will leverage

- local clusters to stimulate growth and further grow the business base of leading edge firms utilising advanced technologies to enhance productivity.
- Glasgow is Scotland's main transport hub, with excellent road, rail, shipping and air services. The city is easily accessible from 3 airports serving over 150 worldwide destinations with Glasgow Airport only 15 minutes away from the city centre.
- As a designated Assisted Area, Glasgow qualifies for Regional Selective Assistance, a discretionary grant towards capital and/ or revenue costs of new business projects in Scotland – usually between 20%–30% of total costs.

11 COST-EFFECTIVE WITH A HIGH QUALITY OF LIFE

- Out of 20 major cities across the UK, Glasgow offers young professionals the **highest level of disposable income** (CV Library 2018).
- **Significant labour and property costs savings** compared to London, Manchester and Birmingham and other parts of Europe.
- **Strong investment environment** – 32% of the Scottish Investment Bank's portfolio is in the technology and advanced engineering sector, making it the most prolific investor in the UK.
- **Multi-cultural with a large international population.**
- **Great Natural Beauty** – the archipelago of the Clyde Coast and Islands and the Highlands' stunning scenery is on the city's doorstep, just 45 minutes away.
- The fDi Intelligence Quality of Life **ranks Glasgow higher than Los Angeles and Rome.**

Labour costs comparison (average salaries)

ROLE	GLASGOW	LONDON	MANCHESTER	BIRMINGHAM
Software Development Project Manager	£47,500	£55,000	Not available	£51,000
DevOps Engineer	£50,000	£70,000	£52,500	£57,500
Business Data Analyst	£35,000	£60,000	£40,000	Not available

(Source: IT JobsWatch – Full-Time IT Posts – Median Salary to October 2018)

- Glasgow is the **19th most millennial friendly city in the world**, and 3rd in the UK.
- Glasgow is the **12th most 'Hipster' city in Europe.**
- **Glasgow now ranks in the top 25% of cities globally for social cohesion**, well ahead of established world cities such as London and Paris.
- The Finnieston area of Glasgow was named **one of the top ten places to live in Scotland in 2018 and the hippest place to live in Britain** in 2016 (Sunday Times).

LABOUR COSTS ARE ALSO SIGNIFICANTLY LOWER IN GLASGOW THAN IN OTHER PARTS OF EUROPE:

20% lower than Dublin

37% lower than Oslo

43% lower than Paris

44% lower than Frankfurt

(Source: fDi Benchmark Tool 2017)

12 STRONG ECOSYSTEM OF BUSINESS INCENTIVES AND SUPPORT

- Investment incentives (Regional Selective Assistance, Venture Capital Fund and Equity Funding)
- R&D and innovation grants
- Tax incentives including tax credits and Patent Box (pay up to 56% less corporation tax)
- Lowest corporation tax rate of the G20 countries
- Location and property advice

- Access to partners and networks
- Access to Scottish research capabilities
- Investment advice
- Business development support
- Staffing and recruitment support and subsidies
- Dedicated aftercare and account management

“Glasgow is probably the friendliest place I have ever been in the world – and I'm not just saying that. In particular, when we looked at Scottish staff we found that the passion for what they do, their character and work ethic, is absolutely world-class.”

Peter Platzer, CEO of Spire
(Source: Scotland is Now)

Glasgow City Council's Inward Investment Team provides one point of contact for all companies interested in Glasgow's digital technology sector. For more information, please contact:

invest@glasgow.gov.uk
investglasgow.com
+44 (0) 141 287 8616

@invest_glasgow
Invest Glasgow

PEOPLE MAKE GLASGOW



INVEST GLASGOW