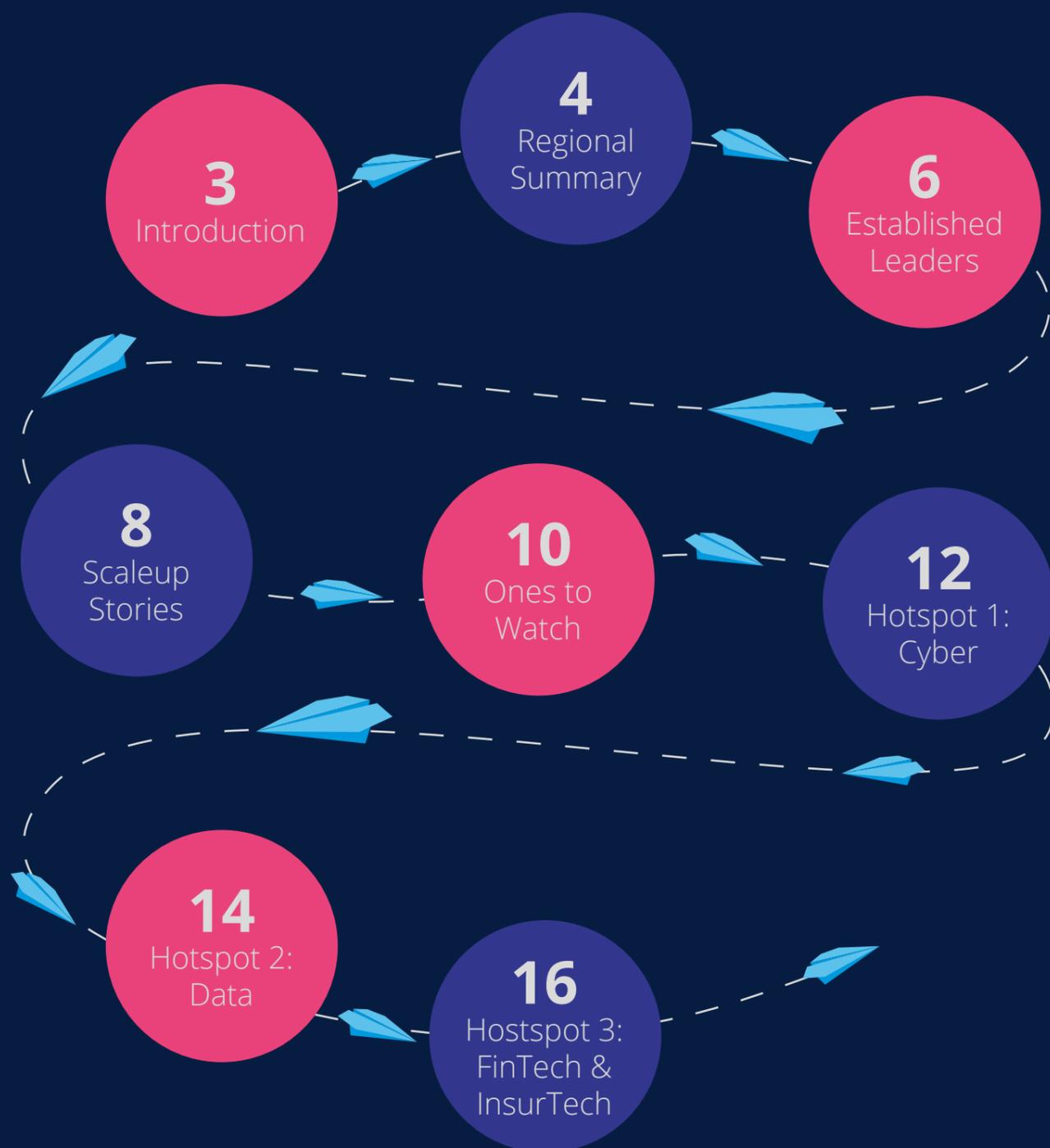


12 Clusters of Tech

Wales



Contents

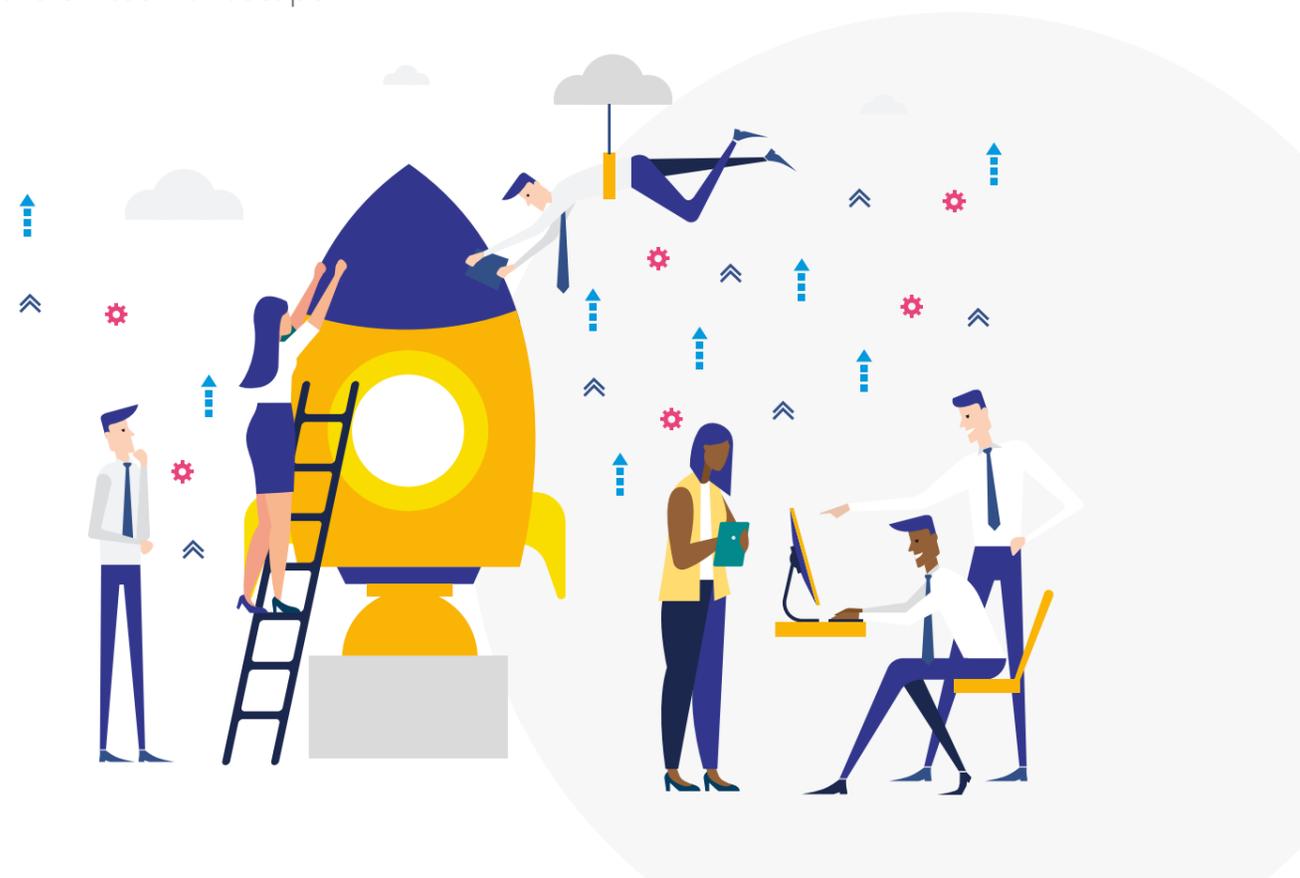


12 Clusters of Tech

September 2020 – August 2021

Introduction

This is the story of technology in the UK. Over 12 months, [London Tech Week](#) and [UK Tech Cluster Group](#) will explore the unique ecosystems and tech trends in every region of the UK. From space tech in the South West to cybersecurity in Northern Ireland, 12 Clusters of Tech charts the companies, sectors and case studies that make up the entire UK tech landscape.



Brought to you by



TCG UK Tech Cluster Group

Sponsored by



Regional

Summary



The Welsh Tech and Digital ecosystem is a thriving and rapidly-expanding sector. Wales' start-ups and scale-ups are adding to a growing base of established companies (SMEs to Primes), Government data agencies and Enterprise organisations.

This varied tech ecosystem is developing a deep-level understanding, commercial experience and scaling opportunities across Tech and into Cyber, Data and FinTech.

The sector includes:

- household names founded in Wales, such as InsureTech's Admiral, Go Compare and Confused.com
- technology centres for globally-recognised brands like Aston Martin, Airbus, Thales, BT, and Sony
- a High Performance Computing (HPC) facility with market leader Fujitsu
- contract Semiconductor manufacturing at the Newport Wafer Lab with world-leading tech manufacturer IQE

The strength and opportunities in the tech ecosystem in Wales, including the variety and quality of start-ups that are emerging from these green hills, is highly notable. Lab by Transport for Wales has emerged out of a desire to provide a growth platform to nurture young companies in the transport sector and to engage with new customers as they expand the size and scope of their transport infrastructure. The Startup Academy by Tramshed Tech delivers a 12-week programme of networking, instruction, coaching and support, culminating in a demo-day and investor pitching session to provide new companies with a structured

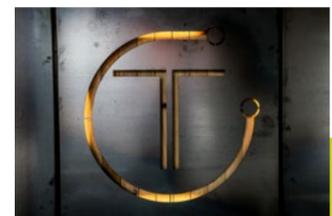
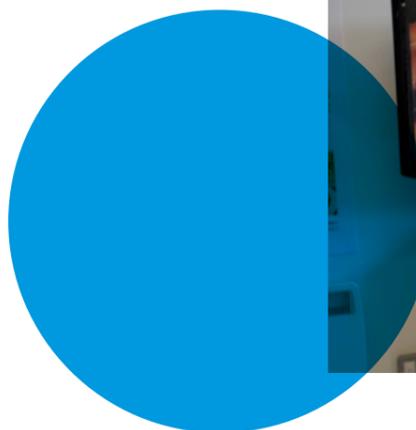


growth platform. The Alacrity Foundation delivers a world-leading accelerator program for graduates, providing practical business training, software skills and mentoring to help launch entrepreneurial businesses. In addition to the academy and accelerator support, IoT and Advanced Manufacturing start-ups are well catered for at Barclays Eagle Labs. Highly specific support for opto-electronic companies in the Health and Aerospace sectors is provided through the Glyndwr OptIC Technology Centre in St Asaph. The centre provides world-leading product development and consulting facilities. Lastly, the rapidly-expanding HealthTech & MedTech sectors in Wales are led by a range of innovative start-ups, scaling and fully-established tech organisations like Concentric and Creo Medical.

The tech sector in Wales is growing rapidly with £100million of Venture Capital investments in 2019 and an estimated £8.5bn contribution to the economy. The increasing expertise in Industry 4.0 technologies is augmented by innovative startups and a bedrock of more established companies using technology to provide a competitive advantage – providing a resilient and attractive sector. Sector support is underlined by the Welsh Government's new Digital Strategy for Wales, Seed and Early Stage equity funding from the influential Development Bank of Wales, the Angels Invest Wales network, the Business Growth Fund (BGF). This is in addition to regional funding available from Cardiff Capital Region, Swansea City Deal, the Mid Wales and North Wales Growth Deal, which have already delivered approx. £800m of funding into the sector.



Did you know?
THE TECH SECTOR
IN WALES EMPLOYS
UPWARDS OF
40,000
PEOPLE
(2019).



Established Leaders

Wales has a long history of commerce, from the former coalfields in the industrial heartland of South Wales to the strategically important Port of Holyhead in the North. Whilst agriculture and tourism continue to dominate much of the landscape outside of concentrated population areas, Wales' cities are increasingly becoming centres of service and digital companies, with Cardiff currently the fastest-growing city in the UK.



IQE

www.iqep.com
Location: Newport
Established: 1988

IQE is the leading global supplier of atomically engineered wafers that are made into advanced compound semiconductors. IQE-manufactured wafers are used in almost every mobile phone on the market and provide unique capabilities for sensor technologies such as 3D and Facial ID sensing.

Did you know?
WALES'S CITIES HOST OVER 3,600 TECH BUSINESSES



“As we go forward to higher performance requirements with 5G, then the need for compound semiconductors and IQE’s products will increase. A lot of other connected devices – including driverless vehicles with all their sensor technologies, power management and so on – will be dependent on them.

Because it’s a global business, we recruit in Wales, across the UK and internationally. We have strong links with Welsh universities, and also with the likes of Bristol and Manchester, as well as institutions in Scotland. We’re working particularly closely with Cardiff and Swansea: just last year, Cardiff University launched two Masters degrees specific to compound semiconductors”

Chris Meadows, Corporate Systems Manager, IQE

Admiral

www.admiral.com
Location: Cardiff
Established: 1992



Admiral is a multi award-winning FTSE 100 company, established in 1992 as a modest car insurer with just five employees. Admiral has grown in size and scope from car insurance to now offer a variety of products including travel, home and multicover insurance. Technology is at the heart of driving Admiral's business forward. Admiral has a large, established tech department and is a member of the #TechSheCan charter to inspire more women to play an equal part in the tech landscape by removing barriers and providing an environment where female talent can flourish.

Did you know?

ADMIRAL HAVE OVER 7,000 EMPLOYEES WORLDWIDE, 5,000 OF WHICH ARE BASED IN SOUTH WALES.



“Being based in Wales has played a big part in Admiral’s success; the quality and commitment of our employees in Wales has played a huge part in helping us grow from a start-up to the UK’s leading car insurer in just over two decades.”

David Stevens, Director, Admiral Group

Airbus Cyber Security

www.airbus-cyber-security.com
Location: Duffryn
Established: Circa 1990

Airbus is a global leader in aeronautics, space and related services. In 2019, it generated revenues of €70 billion and employed a global workforce of around 135,000, with over 6,000 in Wales. In Broughton, north Wales, Airbus manufactures wings for its commercial aircraft, and in Newport, south Wales, Airbus specialises in secure connectivity, cyber solutions and the security of critical infrastructure in the UK, serving as a key partner in government and NATO-led information infrastructure programmes.



“Airbus is proud to be a Welsh business. We are committed to working in partnership with the Welsh Government and Wales' world-leading academic institutions on wing technology and cyber security research, investing in local people and maintaining Wales' position as a major tech hub and an economic success story.”

Dr Kevin Jones, Chief Digital / Information Security Officer (CISO), Airbus



Scaleup

Stories



As the number of start-ups continues to grow in Wales, a strong sector cohort is breaking through and beginning their exponential growth. Establishing this network of successful entrepreneurs and sharing their knowledge of markets and lessons-learned, to provide mentorship to the next cohort, is a key focus for the Welsh tech sector.

Scale-Up success stories in Wales have benefited from: a strong Angel investor network; access to world-class talent via our university and HE sector; and a growing informed network of business advisors and support services. This is underlined by continued support from Welsh Government, who consider the start-up and technology sectors as strategically important as part of their inward-investment and International Strategy.

AMPLYFI

www.amplyfi.com

Location: Cardiff

Established: 2015

AMPLYFI's Insights Automation Platform powers decision making in global organisations like BP, NatWest, the US Air Force and Stanford University. The platform uses data science and machine learning to extract value from the billions of news articles, patents, papers and documents that are available across the internet, helping organisations react faster to disruption and to change with conviction.



"Part of the reason AMPLYFI is growing so fast is our location. People join our team from all over

the globe to solve hard problems without compromising on their quality of life. AMPLYFI's combination of ground-breaking technology, culture and Welsh countryside allows us to compete for the smartest people with the biggest organisations in the world, which in turn helps us build better solutions for global decision makers."

Chris Ganje, CEO, Amplyfi



Delio

www.deliogroup.com

Location: Cardiff

Established: 2015

Delio's configurable white-label technology, empowers financial firms to connect their clients with private market investments quickly, transparently and compliantly. Through their digital tools, institutions can originate, distribute, manage and report on investment opportunities through one digital hub. This makes their private markets proposition more manageable and accessible to their wealthy clients and investors. Delio has established an international client base of more than 80 organisations, including Barclays, ING and UBS. With over sixty employees, Delio is now represented across the UK, Australia, North America, the Middle East, Asia and Europe, working with top-tier financial institutions, angel networks and family offices. Delio has experienced rapid growth in the last three years. Delio has tripled their team since their first investment round in 2019, opening offices in Dubai, Singapore, Switzerland and New York.



"We know that digital tools are only as good as the way they are applied to our customers. That's why we take the time to explore and understand the very different needs of the financial institutions we serve, creating tailored solutions that solve their specific challenges. Over the last five years, the demand for our technology has increased significantly. Financial firms know they need to digitise their investment propositions and do not always have the capacity or resources to do so themselves. Delio offers them the solutions which they can tailor around their operational processes and the needs of their clients."

Gareth Lewis, Chief Executive and Co-Founder, Delio

Veeqo

www.veeqo.com

Location: Swansea

Established: 2013



"I wanted a new challenge, and there was this pull back to Wales. It's great to have the chance to get into a company when it's relatively small and young, and help it to reach exciting heights. And it says a lot about where the company is going when Matt Warren, the founder and CEO, is willing to put money into HR this early on."

Cerys Davies, Head of HR, Veeqo



The Swansea-based technology firm, has developed an all-in-one platform to help online retailers manage inventory and ordering, and deliver the best customer experience to customers everywhere. Veeqo was founded by experienced ecommerce retailer Matt Warren to allow their customers, small and large, to stay on top of being fast-paced omnichannel retailers. The investment received by Veeqo allowed them to add features and functionality to their platform, hire teams in key areas and scale up their growth strategy by utilising inbound marketing, outbound sales and strategic channel partnerships.

Ones to Watch



There has never been a better time for tech and digital startups in Wales. There are a large number of support mechanisms, funds and expertise available for businesses in the area. Startup friendly spaces are offering communities of like minded people areas to collaborate and innovate successfully. Many startups are coming out of local spaces such as Tramshed Tech, Barclays Eagle Labs, NatWest's Entrepreneur Accelerator and publicly funded hubs.

RiverSimple

www.riversimple.com
Location: Llandrindod Wells
Established: 2005

Not many car designs set out to change the world. From Powys to the planet, Riversimple has spent 15 years developing the technology and business strategies that have led to its carbon-fibre Rasa vehicle. Founder Hugo Spowers has a track record in good-looking motors.



 "Coming to Wales has been much better than we ever expected. We didn't realise just what advantages it would have. We get a lot of support from the Welsh Automotive Forum. It's fantastic for us, being able to leapfrog and establish cross-sectoral collaborations. We've also got a fantastic relationship with the Welsh Government and they really have been extremely supportive. This is a much better environment than if we'd stayed across the border; for what we're doing, it's easier to do it here in Wales."

Hugo Spowers, Founder, Riversimple

Concentric

www.concentric.health
Location: Cardiff
Established: 2019

Concentric is a digital consent application which transforms the paper process of giving consent for treatment. Based in Wales and in use by clinicians internationally, Concentric Health is transforming how we make decisions about our health, supporting patients to engage with, understand and own decisions about their care.



"Since launching in early 2020, and accelerated by the need for remote care pathways in response to COVID-19, we've seen the transformational impact of introducing Concentric at world-leading centres such as Imperial College Healthcare NHS Trust and Chelsea and Westminster Hospital NHS Trust. Concentric supports patients and clinicians with trusted, personalised, accessible information, supporting informed, shared decisions, both within the hospital walls and at home."

Dr Dafydd Loughran, CEO and Co-Founder, Concentric Health

Configur

www.configur.tech
Location: Cardiff
Established: 2019

Configur is a data-driven software company, empowering businesses and organisations by simplifying their digital transformation journeys. Configur Codex, their recently launched groundbreaking data platform, makes it simple for businesses and organisations to store, secure and safely share data. Configur's aim is to encourage companies of all sizes to be confident interacting with their data, unlocking new insights and savings across the organisation.



"We're very lucky in Wales to have a welcoming tech community built around hubs such as Tramshed Tech. Whilst the pandemic may have reduced face-to-face meetings, the partnerships and contacts we've made over the years have continued to be a big part of our success."

Josh Evans, Co-Founder, Configur

Hotspot 1

Cyber

The International Strategy for Wales launched by Welsh Government in early 2020 announced Cyber as one of the 3 key target sectors for which Wales is recognised as a world leader.

The hotspot benefits from innovative support. The support includes conferences like bSides Cymru which curate a roster of international speakers, dedicated accelerators such as Alacrity, who provide a funded 15-month accelerator programme and specialist consultancies with global reach such as 13 Fields. Wales is also home to an increasing community of remote-working employees for globally recognised leaders such as Sophos, ControlPlane and GitLab. The proximity to Cheltenham and the NCSC and the associated cyber community allows strong bonds to permeate the Welsh border, with new cross-border tech organisations like TechSPARK Wales about to come on stream to take advantage of the political impetus behind the Western Gateway alliance.

Did you know?

THE WELSH CYBER HOTSPOT COMPRISES OVER 400 SME'S, 9 PRIMES, 7 ACADEMIC RESEARCH CENTRES AND A PLETHORA OF DEFENCE ORGANISATIONS AND GOVERNMENT AGENCIES.

Awen Collective

www.awencollective.com

Location: Caerphilly

Established: 2017

Awen Collective produces cybersecurity products which help to secure critical infrastructures and manufacturers for a safer society.



“We’ve grown rapidly since founding; working with large organisations such as Raytheon, the UK’s water companies, and secured a large contract from the UK Ministry of Defence. We have also been on the first cohort of several initiatives, including CyberASAP, the IoT Accelerator Wales, Tech Nation Cyber and the Google for Startups UK Immersion Programme. In Wales, we have access to top quality talent straight out of the wonderful universities. We’ve found that Wales is a great place to live and work. We attract great people to work with us; when we solve cyber problems, we look both globally and locally, as our target market is here in Wales too - Wales-based manufacturers and critical infrastructure organisations - with whom we are gradually building up very good relations.”

Daniel Lewis, CEO & Co-Founder, Awen Collective

Wolfberry

www.wolfberrycs.com

Location: Cardiff and Dubai

Established: 2016

Wolfberry is an award-winning and rapidly-expanding Cyber Security consultancy, whose goal is to make cyber security accessible, understandable and affordable for any organisation. The specialist team at Wolfberry have a vast knowledge of the latest trends, technologies, and attack vectors. Wolfberry’s aim is to provide support to organisations working across all sectors and protect their processes and data from all types of cyber security risks, both internal and external.

“It’s an exciting time to be working in this field in Wales. We’re very lucky to have the Cyber Wales cluster, a group of cyber security businesses that supports both North and South Wales. Just six of us went to their first meeting, but we now have over 1,800 member businesses throughout the UK, and have been recognised internationally as a cyber ecosystem by GlobalEPIC. It’s expanding worldwide. We now have clusters in Dubai – where Wolfberry also has an office – and Japan. We’re looking at setting one up in Abu Dhabi.”



Damon Rands, Founder & CEO, Wolfberry

Cardiff University, Airbus Centre of Excellence in Cyber Security Analytics

www.cardiff.ac.uk

Location: Cardiff

Established: 2017

The Airbus Centre of Excellence is a leading UK academic research unit for cyber security analytics, focused on the interpretation and effective communication of applied data science and artificial intelligence methods through interdisciplinary insights into cyber risk, threat intelligence, attack detection and situational awareness. Cardiff University is recognised by NSCS as an Academic Centre of Excellence in Cyber Security Research.

Along with fellow cyber specialists from the Cyber Academy at the University of South Wales, they are also lead partners in a consortium bid to establish a new Cyber Innovation Hub for Wales in central Cardiff, with industry partners like Airbus, Thales, Tramshed Tech and the Alacrity Foundation:



“Our work supports the UK Government’s Industrial Strategy, which aims to put the UK at the forefront of the Artificial Intelligence and data revolution. Our ambition to be a world leader for innovation in AI for cybersecurity also underpins the Welsh Government’s international strategy, which has cybersecurity as a core pillar. The centre is interdisciplinary by design and is drawing together expertise in cyber security from across the whole University, including computer science, psychology and criminology.”

Pete Burnap, Professor of Data Science & Cybersecurity, Cardiff University, Airbus Centre of Excellence in Cyber Security Analytics

Hotspot 2

Data

The UK Government's commitment to open data continues to benefit the Tech ecosystem with development of skills, provision of data and bedrock employers. Wales is home to government agencies such as the Office for National Statistics (ONS), Companies House, the Intellectual Property Office (IPO) and the Driver and Vehicle Licensing Agency, leading the way in developing best practices to curate, deliver and publish open data.

A new generation of startups and scale-ups are building their businesses atop this bedrock, supported by knowledge-sharing partnerships, meet-ups and pan-Wales initiatives such as the Data Nation Accelerator.



Data Innovation / Data Nation Accelerator (DNA)

www.cardiff.ac.uk/data-innovation-accelerator

Location: Cardiff

Established: 2020

The Data Nation Accelerator (DNA) is a new pan-Wales initiative that is being developed to accelerate insight, foresight and intelligence from diverse data assets for societal, health and economic impact, building upon the work of the Data Innovation Accelerator, established in 2018. Through co-creation across business and other parties, the Wales Data Nation Accelerator seeks to fuel innovation in data and AI for new solutions, products and applications in key industrial clusters and public services, while also enriching the talent pool of skills in Wales for data science and AI.



“Building on the recommendations of the recent Brown review of Digital Skills and the Future of Work in Wales, the Wales Data Nation Accelerator (WDNA) is developing a comprehensive strategy to support the economic transformation for Wales through data science and AI. Consistent with the emerging UK Data Strategy, the WDNA is pursuing an agenda for partnership and co-creation aligned to unlocking Welsh data, enabling Welsh sustainability (spanning from health to energy and transport), empowering citizens and fuelling product and service innovation. This agenda focuses on Wales’ vibrant SME community through to corporate partners, government and the NHS.”

Professor Roger Whitaker, Director, DNA

Office of National Statistics (ONS)

www.ons.gov.uk

Location: Newport

Established: 1996

The UK's largest independent producer of official statistics and the recognised national statistical institute of the UK. The ONS are responsible for the collection, collation and publication of statistics related to the economy, population and society. ONS are responsible for planning and carrying out the census for England and Wales and have been a key support platform for health data provision during the Covid pandemic.



“The last year has demonstrated just how important the robust data, statistics and analysis produced by the ONS are in informing so many key decisions in the UK. As part of the ONS’s investment in data and digital capability, our Data Science Campus is strengthening data science capability across the UK public sector to ensure that we can take advantage of the tools, methods and practices of the digital age. This is driving new understanding and informing decisions affecting everyone, from how governments spend taxpayers’ money to the services we receive.”

Dr Louisa Nolan, Chief Data Scientist, ONS



Next Generation Data - Newport

www.vantage-dc-cardiff.co.uk

Location: Newport

Established: 2010

NGD opened its flagship 750,000 sq ft data centre in Newport in early 2010. One of the largest data centres in Europe, the site has its own private connection to the National SuperGrid, with up to 180 megawatts of power (sufficient to power a city the size of Bristol) generated from 100% renewable sources.

Located near the Welsh capital Cardiff NDG hosts BT, IBM, WiPro and Microsoft Azure in its facility, as well as being a market leader in High-Performance Computing Solutions.



“As the needs of our hyperscale, cloud and large enterprise customers continue to grow, Wales represents a highly attractive U.K. market, offering both lower cost and greater scalability versus London.”

Sureel Choksi, President and CEO, Vantage Data Centers

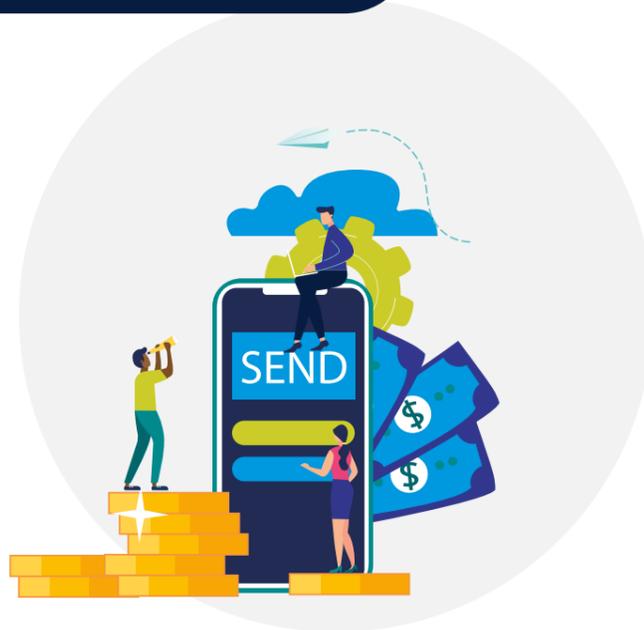


Hotspot 3

FinTech & InsurTech

Wales has long hosted a bustling insurance sector, with the bulk of the UK's price comparison sites being based here. Wales's expertise began with the Export Credit Guarantee Department, grew with 90's success stories such as Admiral, NCM and LexisNexis, then through internet pioneers like Confused.com and the Source, to latest InsurTech startups. These companies form part of a wider FinTech sector alongside busy startups like Sonnovate, who are reimagining contractor finance, BipSync who streamline research management, Delio's investment platform, Wealthify's robo-investing and Chetwood, a Wrexham based Challenger Bank delivering innovative products for customer segments that it considers to be underserved by the market.

Sectorial support is equally strong with higher education institutions providing dedicated resources, such as the Trading Room learning resource at the Centre for Financial and Professional Services at University of South Wales. The Cardiff University Data Science Accelerator project-based approach engages learners, industry and membership associations such as FinTech Wales, coordinating resources.



Confused.com

www.confused.com

Location: Cardiff

Established: 2002

Confused.com is the first and longest-running UK comparison site, formed in 2002. Confused.com started with just eight people in a room in Cardiff. It revolutionised the way we all compare and buy insurance – now, 88% of UK motorists use comparison sites at least once a year. Confused.com is now focused on disrupting the price comparison industry for a second and possibly a third time over the next five years.



“I think fundamentally to ensure success it is about the people and the talent that you have in your organisation... People ask me how many people work at Confused and I say 210. They then asked me how many of those are in tech? I say all of them because we are a tech business. What we find - and I talk to the likes of FinTech entrepreneur Richard Theo and the guys at tech co-working location Tramshed Tech - is there is a real hub building in Cardiff and South Wales around AI, data and automation. The skills that everyone is crying out for are technology, digital, data-based, as well as data scientists.”

Louise O'Shea, Chief Executive, Confused.com

FinTech Wales

fintechwales.org

Location: Cardiff

Established: 2019



FinTech Wales provides an independent voice for the FinTech industry, both within Wales and beyond, to help champion and maximise the potential for all businesses in the sector. As well as nurturing and supporting those businesses already in Wales, FinTech Wales aims to develop an ecosystem that will help new FinTech companies start-up or scale-up. Ultimately, the goal is to make Wales a leading pillar in the global FinTech community. FinTech Wales and FinTech Scotland have recently released a report (January 2021) proposing increased Research and Innovation (R&I) to drive acceleration in FinTech development across the UK, nationally and regionally, to support growth and new jobs. The report, entitled “Research and Innovation for UK FinTech” sets out a number of key actions to build longer-term Research & Innovation across the UK.



“The FinTech sector in Wales is thriving, at FinTech Wales we aim to raise awareness of the great firms that are already here as well as developing the community and ecosystem to support new and exciting startups. We work closely with the academic sector to ensure the skills and talent required to build FinTech businesses in Wales are readily available. It's invigorating to talk to our members who are developing and providing world leading FinTech businesses which stand strong on the UK and global stage.”

Sarah Williams-Gardener, CEO, FinTech Wales

Veygo

www.veygo.com

Location: Cardiff

Established: 2021



“We're in the phase of growing from start-up to scale-up; and as fully-digital operation, South Wales is the perfect place to be. We've hired some great talent locally who together with the existing team will get us to the next level, we have really ambitious targets and plans, and we want to be at the cutting-edge of technology and the products and experience we give to our customers.”

Gunnar Peters, CEO, Veygo

Veygo is the first start-up within Welsh FTSE100 insurer Admiral's Pioneer business unit, which will be looking to launch several new business over the next few years. Veygo's aim is to replace barriers with possibilities, currently through temporary car insurance (including learner driver insurance) helping customers get from A to B without needing to own a car. Future plans involve exploring other mobility solutions for customers.



2020 – 2021

12 months.

12 Clusters.

The whole of UK tech.

