

# Digital Dundee

## Building a 21st Century Digital Economy

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### Executive Summary

The “Digital Dundee” plan aims to transform Dundee into a thriving hub for technology and innovation, driving economic growth, job creation, and global competitiveness.

By leveraging Dundee’s 'Digital Powerhouse' strengths in gaming, life sciences, and education this plan outlines a strategy to grow the technology sector and use technology to enhance the broader economy.

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# Strategy in Action

Dundee isn't transforming by accident — it's executing a deliberate, top-to-bottom digital masterplan. Aligned with Scotland's national strategy "A Changing Nation," the city is turning policy into progress across three pillars: People & Place, a Strong Digital Economy, and Digital Government & Services.

The numbers tell the story: the Tay Cities region hosts ~8,000 digital/data jobs, with 43% (around 3,440) based right in Dundee. The Dundee City Council Digital Strategy 2023-2027 puts this talent to work, shifting the council's IT team from "keeping the lights on" to driving innovation, automation, cloud, and data-led transformation that puts citizens first.

Backed by the £300m Tay Cities Region Deal (halfway through its 10-year run), over £155m has been released, unlocking an extra £180m in private leverage and supporting/protecting 2,451 jobs. Key digital plays include the Biomedical Cluster, CyberQuarter at Abertay, 5G testbeds, and rural connectivity projects closing the urban-rural gap.

Everything stays grounded in public priorities — the latest budget consultation (record 3,906 responses) made clear: digital must enhance, not replace, the services people value most like culture, leisure, and community.

Bottom line: Dundee has the strategy, the funding, the jobs, and the alignment. It's not just going digital — it's building a smarter, fairer, more connected city on purpose.

## Smart City Infrastructure

Dundee isn't just talking smart city — it's deploying it at scale. Through the £40m "Scotland's 8th City – the Smart City" ERDF programme, the city has built an integrated ecosystem of IoT, data platforms, and citizen-focused tech to tackle real urban challenges.

Phase 1 wins:

- Open Data platform — 43 datasets released, fuelling third-party apps and innovation.

- Smart Waste — solar-powered compactors with fullness sensors + route optimisation software, slashing fuel use, emissions, and costs.
- Upgraded CCTV + AI analytics — boosting public safety while generating 9 new datasets for city planning and active travel.

Phase 2 ramps it up:

- Britain's largest fully accessible EV charging hub (Cleington Road, 2023).
- The MILL (Mobility Innovation Living Lab) — a £1.4m–£2.5m testbed turning Dundee into a living lab for car-sharing, smart parking, fleet tech, and the ShareMORE Mobility-as-a-Service platform.
- £2m 5G testbed + public Wi-Fi on the waterfront to power low-latency, data-heavy future apps.

Bottom line: Dundee has moved from pilots to practical, integrated smart infrastructure that cuts costs, reduces emissions, improves mobility, and opens the city to innovation. It's a blueprint for how a compact city can punch above its weight in the smart future.

## Eradicating Digital Poverty and Empowering Communities

Dundee's tech boom means nothing if half the city gets left behind. While waterfront sparkle and games studios grab headlines, deep poverty, low skills, and digital exclusion still lock too many residents out of the digital economy.

The city's Fairness Strategy and "A Fair Way to Go" report make it clear: tackling poverty and digital exclusion is essential, not optional. Without devices, skills, or confidence, people can't access jobs, services, or opportunity.

Enter DigiTay — the Tay Cities Digital Skills Project, backed by £1.5m+ from the Scottish Government. It's upskilling locals, supporting 1,296 people so far, and paying businesses up to £3,000 to host 6–8 week paid placements in AI, cybersecurity, games dev, software engineering, and more. The goal: fill the region's 1,000+ projected digital vacancies by 2025 and build a pipeline of ready talent.

Public libraries serve as trusted frontline hubs, offering devices, training, and judgment-free help — especially for older and excluded residents. Broader efforts like the Connecting Scotland programme and Scottish Digital Academy are redesigning

services to be simpler and more inclusive.

Bottom line: Dundee isn't just building a digital powerhouse — it's making sure everyone can plug into it. Real progress demands both cutting-edge tech and closing the fairness gap.

## **Scotland's Games Powerhouse – Lemmings to Virtual Frontiers**

Dundee isn't just in Scotland's games scene — it is the scene. With ~40 studios, the UK's highest concentration of games developers per capita, £400m+ in inward investment since 2019, and a 164% surge in direct GVA, this compact city punches like a global giant.

It started in 1984 when a group of friends from a local computer club founded DMA Design in Dundee. They delivered Lemmings (1991 global smash) and the original Grand Theft Auto (1997). That indie-to-blockbuster DNA still runs through the city's veins.

### **Abertay University: The Talent Engine**

Abertay launched the UK's first undergraduate computer games technology degree and has topped global rankings for games education for years. The School of Design and Informatics feeds the ecosystem: most local devs are Abertay grads.

Flagship initiatives:

- InGAME (£11.5m R&D centre): Hands-on innovation labs, tech testbeds, workshops, and collaborative R&D vouchers. Partners with University of Dundee, St Andrews, and industry to push product, service, and experience breakthroughs.
- CoSTAR Realtime Lab (£9m virtual production studio at Water's Edge): Real-time tech, AI integration, and immersive tools bridging games, film, screen, and live performance. Already launching academies and international creative-tech collaborations.
- Abertay Game Lab: Experimental and applied games for culture, health, and

public engagement.

## The Studio Cluster

Dundee hosts a tight, high-output mix of indies, scale-ups, and anchors:

- Rockstar Dundee (ex-Ruffian Games) – Crackdown 2 pedigree.
- 4J Studios – console ports of Minecraft and more.
- Fast-scaling indies like Hyper Luminal Games (tripled revenue, doubled headcount) and Puny Astronaut (Skye Tales on Switch).
- Others: Tag Games, Hutch, Cobra Mobile, and dozens of micro-studios.

## Community & Acceleration

- GameSpace Scotland: Dundee-based hub for mentoring, events, outreach, and cross-sector links. Runs ProtoPlay (UK indie showcase returning September 2025 at LiveHouse) and just secured UK Government Regional Tech funding.
- GAME-ER (EU project): Abertay-led research mapping the entire Dundee cluster and benchmarking non-capital success stories. Lecturer Martin Lynagh is crowdsourcing updates from the community right now.

## Esports & Civic Infrastructure

The city is building an esports arena on the waterfront (multi-use venue, originally 4,000 seats, now refined amid delays but still targeted as a 2025 ecosystem catalyst). It will host tournaments, training, and events while feeding council “digital twins” and smart-city projects.

## Applied Games & Cross-Sector Fusion

Gaming tech here isn't siloed. It powers:

- Cybersecurity simulations (via Abertay CyberQuarter).
- Biomedical visualisation and drug discovery.
- Virtual production for screen industries.
- Inclusive design and public engagement projects.

This “Dundee effect” turns games skills into high-value applications across life sciences, manufacturing (Michelin Scotland Innovation Parc), and net-zero tech.

Dundee’s ecosystem thrives on proximity, university-industry lockstep, and a gritty pivot from jute/jam/journalism to joystick innovation. It’s not just surviving — it’s exporting the blueprint for resilient, non-capital games clusters worldwide. The next wave of talent, startups, and applied breakthroughs is already in the pipeline.

## Cyber Defense Trailblazer

As digital systems permeate everything from infrastructure to governance, vulnerabilities multiply. Dundee is fighting back—positioning itself as Scotland’s top cybersecurity stronghold.

At its core is the Abertay CyberQuarter, backed by an £11.7 million Tay Cities Deal investment. This isn’t just an academic lab—it’s a live hub uniting industry, universities, and law enforcement to tackle real threats, create high-value jobs, and retain top talent that might otherwise flee to London or elsewhere.

## Unique UK Edge

- Police Scotland partnership: Officers train in Abertay’s malware labs, while funded PhDs tackle AI deepfakes, digital forensics, and cybercrime psychology.
- Dundee City Council: MSc Ethical Hacking students build secure “digital twins” of council websites, stress-testing them with Kali Linux and Nessus to fix vulnerabilities offline.
- Key partners include NHS National Services Scotland and the Care Inspectorate, securing health and social care data.

## National Impact

CyberQuarter co-leads the £6 million UKRI-funded CRANE project (launching 2025) with Oxford, UCL, and others, researching AI and quantum threats to critical infrastructure. It aligns seamlessly with Scotland’s Scottish Cyber Coordination Centre (SC3) and tools like “Exercise in a Box,” which has trained over 800 organizations.

Dundee isn't just keeping up—it's helping shape the UK's cyber future.

## **Startup Ecosystems and Commercial Scaling**

Dundee is rapidly emerging as a key hub for game dev, immersive tech, and cyber expertise. To turn academic ideas into scalable businesses, the Scottish Government's Techscaler programme—delivered by CodeBase—provides accelerators, investor networks, and support hubs.

The new Techscaler hub at Water's Edge gives local founders direct access to national resources, helping startups move from concept to commercial success. Since 2022, Techscaler has backed 1,591 companies, raised £257.6M in investment, and delivered MVP grants that have leveraged millions more.

## **Blending Old Industries with New Tech**

Dundee is smartly fusing digital innovation with its legacy strengths in manufacturing and life sciences.

The former Michelin tyre factory has been reborn as the Michelin Scotland Innovation Parc (MSIP)—a 32-hectare net-zero advanced manufacturing hub with innovation labs, pilot production spaces, and green energy infrastructure. It's already attracting big commitments, like Wilkie's £50M investment to triple its workforce.

On the life sciences side, the city leverages world-class university research in biology and AI-driven drug discovery. The new £25M Tay Cities Biomedical Cluster and Life Sciences Innovation Hub offer turnkey labs and offices for biotech and digital health firms, slashing startup costs. Backed by the £19M Science Futures initiative, it's building a skilled talent pipeline to fill hundreds of new jobs and inject £190M into the economy.

In short, Dundee is transforming post-industrial challenges into a thriving, converged ecosystem of digital creativity, sustainable manufacturing, and biomedical innovation.

# Dundee's Digital DNA: A Blueprint for Scotland's Tech Future

Dundee is executing a sophisticated, interconnected digital strategy that fuses gaming, cybersecurity, AI-driven life sciences, and smart city infrastructure. Far from isolated projects, it's rewriting the city's economic and civic core for compound growth and resilience.

## Cross-Sector Synergies

Europe's top game design hub at Abertay feeds directly into council "digital twins," drug discovery at Exscientia, and high-stakes data security at the Life Sciences Innovation Hub. Gaming tech powers civic simulations; proximity to elite cyber experts protects sensitive health data. This fusion creates a resilient ecosystem that weathers sector shocks.

## Repurposing Industrial Legacy

The Michelin tyre factory is reborn as the Michelin Scotland Innovation Parc (MSIP) — a powerhouse for hydrogen energy, Industry 4.0, and digital simulation. Backed by major private investment, Dundee is pivoting its manufacturing roots into high-value, net-zero tech without abandoning its heritage.

## Inclusion as Economic Imperative

Smart city features like 5G testbeds, autonomous mobility, and intelligent lighting must reach everyone. Programs such as DigiTay, Dundee Fairness Commission, and library initiatives tackle digital poverty and literacy — essential to fill ~1,000 projected new tech jobs by 2025 and fuel Techscaler and the Tay Cities Biomedical Cluster.

## Strategic Scale

Over £300 million in aligned regional investment positions Dundee as the operational blueprint for Scotland's national digital ambitions. Council, universities, and industry are

moving in tight unison to build a resilient, inclusive, world-leading digital economy.