



Digital Dundee

Securing Tomorrow, Today: Dundee's Bold Blueprint for a Tech-Driven Economy

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 existing strengths in gaming, life sciences, and education, and addressing gaps in infrastructure, talent, and investment, this plan outlines a strategy to grow the technology sector and use technology to enhance the broader economy.

The plan focuses on four key pillars: Infrastructure Development, Talent and Skills, Innovation and Investment, and Community and Connectivity. Over five years, Digital Dundee will position the city as a leading digital economy in Scotland and beyond.

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Digital Dundee - Action Plan

Vision

To establish Dundee as a globally recognized technology hub by fostering innovation, attracting investment, and leveraging technology to drive economic growth across the region.

Dundee has a strong foundation in technology, notably as the birthplace of the global gaming industry (e.g., Grand Theft Auto by Rockstar North) and a leader in life sciences and medical technology.

The city hosts world-class institutions like the University of Dundee and Abertay University, alongside a growing startup scene. However, challenges such as limited investment, talent retention, and digital infrastructure must be addressed to unlock its full potential.

Goals

- Grow the technology sector by attracting and retaining tech companies.
- Create high-value jobs in technology and related industries.
- Enhance Dundee's reputation as a center for digital innovation.
- Use technology to improve productivity and sustainability in traditional sectors like manufacturing, agriculture, and tourism.
- Foster a vibrant, inclusive tech ecosystem that supports startups, scale-ups, and community engagement.

Strengths

- **Gaming Heritage:** Home to globally successful gaming companies and Abertay University's renowned game design programs.
- **Life Sciences Cluster:** Strong presence of biotech and medical tech firms, supported by the University of Dundee's research excellence.

- **Educational Assets:** Two leading universities producing skilled graduates in tech-related fields.
- **Cultural and Creative Hub:** Vibrant arts and cultural scene, including the V&A Dundee, attracting creative talent.
- **Strategic Location:** Proximity to Edinburgh and Aberdeen, with potential for regional collaboration.

Weaknesses

- **Digital Infrastructure:** Gaps in high-speed broadband and 5G coverage limit scalability.
- **Talent Retention:** Graduates often leave for opportunities in larger cities like Edinburgh or London.
- **Investment Gaps:** Limited access to venture capital and angel investment compared to larger UK tech hubs.
- **Perception:** Dundee is less recognized as a tech hub compared to Glasgow or Edinburgh.

Opportunities

- **Emerging Technologies:** Growth potential in AI, IoT, fintech, and healthtech.
- **Government Support:** Alignment with Scottish Government's Digital Strategy and UK innovation funding.
- **Sustainability:** Opportunity to integrate green tech into traditional industries like manufacturing and energy.
- **Global Connectivity:** Leverage Dundee's airport and port for international trade and collaboration.

Threats

- **Competition:** Rivalry from established tech hubs like Edinburgh, Manchester, and London.

- **Economic Uncertainty:** Potential impacts of global economic shifts or post-Brexit trade challenges.
- **Skills Shortages:** National and regional competition for highly skilled tech workers.

Strategic Objectives

- **Develop World-Class Digital Infrastructure:** Ensure universal access to high-speed broadband and 5G to support tech businesses and remote working.
- **Attract and Retain Talent:** Create pathways for graduates to stay in Dundee and attract external talent through incentives and quality-of-life improvements.
- **Foster Innovation and Investment:** Build a robust ecosystem for startups and scale-ups, supported by increased access to funding.
- **Leverage Technology for Broader Economic Growth:** Integrate digital solutions into traditional industries to boost productivity and sustainability.
- **Promote Dundee as a Tech Destination:** Enhance Dundee's global brand as a hub for digital innovation and creativity.

Strategic Pillars and Actions

Pillar 1: Infrastructure Development

- **Action 1.1:** Partner with telecom providers to achieve 100% 5G coverage and gigabit-capable broadband by 2028. Leverage Scottish Government's Digital Infrastructure Investment Fund.
- **Action 1.2:** Develop a "Digital Dundee Campus," a dedicated tech park with co-working spaces, incubators, and high-speed connectivity.
- **Action 1.3:** Upgrade public Wi-Fi in key areas (city center, waterfront, university districts) to support digital nomads and visitors.
- **Action 1.4:** Pilot smart city technologies (e.g., IoT for traffic management, energy efficiency) to position Dundee as a leader in urban innovation.

Pillar 2: Talent and Skills

- **Action 2.1:** Expand partnerships between universities and industry to align curricula with tech sector needs (e.g., AI, cybersecurity, data science).
- **Action 2.2:** Launch a “Stay in Dundee” campaign, offering graduate retention incentives like housing subsidies or startup grants.
- **Action 2.3:** Create a Dundee Tech Talent Hub to provide career services, mentorship, and networking for tech professionals.
- **Action 2.4:** Host annual “Digital Dundee Summit” to attract global talent and showcase local opportunities.

Pillar 3: Innovation and Investment

- **Action 3.1:** Establish a Dundee Tech Fund, seeded with public-private investment, to provide seed funding and scale-up capital for tech startups.
- **Action 3.2:** Create a Dundee Innovation Accelerator, offering mentorship, office space, and investor connections for early-stage tech firms.
- **Action 3.3:** Strengthen ties with UK and European venture capital networks to attract investment in gaming, healthtech, and AI.
- **Action 3.4:** Promote Dundee as a testbed for emerging technologies, offering incentives for firms to pilot projects locally.

Pillar 4: Community and Connectivity

- **Action 4.1:** Launch a “Digital Dundee” branding campaign to promote the city globally as a tech hub, leveraging V&A Dundee and gaming heritage.
- **Action 4.2:** Host regular hackathons, tech festivals, and meetups to foster a vibrant tech community.
- **Action 4.3:** Develop digital inclusion programs to ensure underserved communities gain access to tech training and opportunities.
- **Action 4.4:** Build regional partnerships with Edinburgh, Aberdeen, and Glasgow to create a “Scottish Tech Corridor” for collaboration and resource sharing.

Implementation Plan

Year 1 (2025-2026): Foundation

- Secure funding for Digital Dundee Campus and Tech Fund.
- Launch broadband and 5G expansion projects with telecom partners.
- Initiate “Stay in Dundee” campaign and Tech Talent Hub.
- Host inaugural Digital Dundee Summit.

Year 2-3 (2026-2028): Growth

- Open Digital Dundee Campus and Innovation Accelerator.
- Roll out smart city pilots and public Wi-Fi upgrades.
- Expand tech training programs and digital inclusion initiatives.
- Secure first major VC investments and attract two anchor tech firms.

Year 4-5 (2028-2030): Scale

- Achieve 100% 5G and gigabit broadband coverage.
- Establish Dundee as a recognized tech hub with 10+ new tech firms annually.
- Integrate digital solutions into at least 20% of regional SMEs in traditional sectors.
- Host international tech events, positioning Dundee as a global player.

Key Performance Indicators (KPIs)

- **Infrastructure:** Percentage of city with 5G and gigabit broadband (Target: 100% by 2028).
- **Talent:** Number of tech graduates retained annually (Target: 50% retention rate by 2028).
- **Innovation:** Amount of VC and public funding secured (Target: £50M by 2028).
- **Jobs:** Number of new tech jobs created (Target: 2,000 by 2030).

- **Economic Impact:** Increase in tech sector contribution to GVA (Target: 10% growth by 2030).
- **Community:** Number of participants in digital inclusion programs (Target: 5,000 annually by 2028).

Funding and Partnerships

- **Funding Sources:**
 - Scottish Government (Digital Strategy and Infrastructure Funds).
 - UK Government (Levelling Up Fund, Innovate UK).
 - Private sector (telecoms, tech firms, VCs).
 - EU grants (where applicable, e.g., Horizon Europe).
- **Key Partners:**
 - University of Dundee and Abertay University.
 - Scottish Enterprise and Dundee City Council.
 - Tech Nation, CodeBase, and regional tech clusters.
 - Major employers (e.g., Rockstar North, NCR, local SMEs).

Conclusion

Digital Dundee will transform the city into a dynamic tech hub by building on its gaming and life sciences heritage, investing in infrastructure, and fostering a vibrant ecosystem for talent and innovation. By aligning with national strategies and leveraging partnerships, Dundee can drive economic growth, create high-value jobs, and establish itself as a global leader in digital innovation by 2030.

Industry Accelerators

Gaming

Dundee's gaming heritage is a cornerstone of its identity as a burgeoning tech hub, rooted in its role as a pioneer in the global video game industry. Below is an exploration of this heritage, its significance, and its potential to drive the "Digital Dundee" vision.

- **Economic Contribution:** The gaming sector contributes significantly to Dundee's economy, with an estimated GVA impact of £50M+ annually and hundreds of high-skill jobs.
- **Startup ecosystem:** Abertay's Dare to be Digital competition (now Tranzfuser) has incubated numerous successful startups.
- **Cluster Effect:** The concentration of gaming companies has fostered a collaborative ecosystem, with talent moving between studios and startups.
- **Education and Talent Pipeline:** Abertay produces around 100 graduates annually in games-related fields, with many staying in Dundee to join local studios or start their own.
- **Global Brand:** Dundee's gaming heritage gives it a unique selling point, attracting international attention and talent.
- **Cultural Influence:** Events like the Dundee Design Festival and gaming meetups (e.g., Dundee Game Dev Meet) integrate gaming into the city's cultural fabric, alongside landmarks like V&A Dundee.

Opportunities for "Digital Dundee"

- **Promote Dundee as "The Home of GTA"** to attract investment, talent, and tourism. A "Gaming Heritage Trail" could highlight key sites like DMA Design's original offices.
- **Talent Retention:** Use Dundee's gaming legacy to attract and retain graduates by offering incentives like studio internships or startup grants tied to staying in the city.

- **Diversify Gaming Subsectors:** Support growth in emerging areas like virtual reality (VR), augmented reality (AR), and esports, leveraging Abertay's expertise. Encourage cross-sector innovation, e.g., applying gaming tech (like Unreal Engine) to healthtech or education.
- **Incubators and Accelerators:** Expand Abertay's Tranzfuser program into a permanent gaming startup hub within the proposed Digital Dundee Campus.
- **Global Connectivity:** Partner with international gaming hubs (e.g., Montreal, Tokyo) to position Dundee as a node in the global gaming industry.
- **Gaming Innovation Hub:** Establish a dedicated space within the Digital Dundee Campus for game developers, offering subsidized rents, mentorship, and access to cutting-edge tech (e.g., VR/AR labs).
- **Global Marketing Campaign:** Launch a "Dundee: Gaming Capital" campaign, highlighting GTA's origins and Abertay's role, targeting investors and talent via platforms like X and gaming media.
- **Esports and Events:** Develop a Dundee Esports Arena to host tournaments and attract younger demographics, boosting the city's gaming profile.

Conclusion

Dundee's gaming heritage is a unique asset that underpins its potential to become a global tech hub.

By building on its legacy, investing in infrastructure, and fostering a vibrant ecosystem, Digital Dundee can position the city as a leader in gaming and beyond, driving economic growth and innovation. Integrating this heritage into the broader Digital Dundee plan will ensure the city's tech sector thrives while honoring its pioneering past.

Cybersecurity

The cybersecurity industry in 2025 is experiencing rapid growth and transformation, driven by increasing cyber threats, technological advancements, and regulatory pressures.

Below is an exploration of key cybersecurity industry trends, tailored to how Dundee can leverage its tech ecosystem, academic strengths, and the “Digital Dundee” vision to position itself as a cybersecurity hub.

Key Cybersecurity Industry Trends for 2025

The global cybersecurity market is projected to reach \$376 billion by 2029, growing at a CAGR of 13.4% from 2024. This is driven by escalating cyber threats, with ransomware attacks increasing 37% year-over-year and 80% of organizations experiencing identity-related breaches in 2024. AI-powered attacks, including deepfakes and phishing, are also on the rise.

Dundee can capitalize on this demand by fostering cybersecurity startups and attracting established firms. Abertay University’s expertise in ethical hacking and cybersecurity education positions the city to train specialists to combat these threats.

AI and Machine Learning Integration

- **Trend:** AI is transforming cybersecurity, with 76% of organizations adopting AI-driven tools for threat detection, response automation, and predictive analytics. However, adversaries are also using AI to create sophisticated attacks, necessitating advanced defenses like behavioral analytics and zero-trust architectures.
- **Relevance for Dundee:** Abertay’s programs in computing and game technology can pivot to include AI-driven cybersecurity solutions. A dedicated AI cybersecurity lab within the Digital Dundee Campus could foster innovation and attract R&D investment.

Cloud and Hybrid Security Growth

- **Trend:** With 60% of corporate data stored in the cloud, cloud security solutions are expected to grow at a CAGR of 15% through 2030. Secure Access Service Edge (SASE) and multi-cloud security are gaining traction as organizations adopt hybrid work models.
- **Relevance for Dundee:** Developing cloud security expertise could attract tech firms to Dundee's Digital Campus. Training programs focused on SASE and cloud-native security could align with Abertay's curriculum to meet industry needs.

Cybersecurity Skills Shortage

- **Trend:** A global shortage of 4 million cybersecurity professionals persists, with 71% of organizations reporting unfilled roles. Demand for skills in threat intelligence, incident response, and ethical hacking is particularly high.
- **Relevance for Dundee:** Abertay's world-leading Ethical Hacking degree (first in the UK, launched in 2006) can address this gap. Expanding programs and offering scholarships could retain talent and attract professionals to Dundee.

Zero Trust and Identity Management

- **Trend:** Zero-trust architecture, emphasizing continuous verification, is adopted by 65% of enterprises in 2025. Identity and Access Management (IAM) solutions are critical as phishing and credential theft rise.
- **Relevance for Dundee:** Dundee can foster startups specializing in zero-trust and IAM solutions. Collaborations with local firms like NCR (a Dundee-based tech company) could integrate cybersecurity into financial tech innovations.

Cybersecurity for IoT and Smart Cities

- **Trend:** The proliferation of IoT devices (30 billion by 2025) and smart city initiatives increases attack surfaces. Cybersecurity for IoT is projected to grow at a CAGR of 18%, with demand for secure device management and data encryption.
- **Relevance for Dundee:** Aligning with the Digital Dundee plan's smart city pilots (e.g., IoT for traffic management), the city can develop IoT security expertise, leveraging its gaming and tech heritage for simulation-based testing.

Action Plan

- **Public-Private Partnerships and Government Investment:**
 - **Trend:** Governments are increasing cybersecurity funding, with the UK investing £2.6 billion in its National Cyber Security Strategy (2021–2030). Initiatives like the NCSC's Cyber Accelerator support startups and innovation.
 - **Relevance for Dundee:** Partnerships with the NCSC and Scottish Enterprise could secure funding for a Dundee Cybersecurity Incubator, fostering startups and attracting government contracts.
- **Cybersecurity Awareness and Training:**
 - **Trend:** Human error accounts for 68% of breaches, driving demand for cybersecurity awareness training. Gamification and immersive training platforms are gaining popularity to engage employees.
 - **Relevance for Dundee:** Dundee's gaming expertise can be leveraged to develop gamified cybersecurity training tools, creating a niche market. Abertay's game design programs could pivot to create such solutions.
- **Global and Regional Opportunities:**
 - **Trend:** North America and Europe dominate the cybersecurity market, but Asia-Pacific is growing fastest (CAGR of 17%). The UK's cybersecurity sector contributes £10.5 billion to the economy, with Scotland's tech scene expanding rapidly.
 - **Relevance for Dundee:** Positioning Dundee as a UK cybersecurity hub within the "Scottish Tech Corridor" (with Edinburgh and Glasgow) could

attract global firms. Hosting cybersecurity conferences could enhance visibility.

Conclusion

The cybersecurity industry's 2025 trends—rising threats, AI integration, regulatory pressures, and skills shortages—present a significant opportunity for Dundee to build a robust cybersecurity ecosystem.

By leveraging Abertay's expertise, integrating gaming heritage, and aligning with the Digital Dundee plan, the city can position itself as a UK and European leader in cybersecurity, driving economic growth, job creation, and innovation.