

ITEM No ...9....

REPORT TO: CITY DEVELOPMENT COMMITTEE – 9 SEPTEMBER 2019
REPORT ON: SECTOR DEVELOPMENT PLAN – CREATIVE/DIGITAL/TECHNOLOGY
REPORT BY: EXECUTIVE DIRECTOR OF CITY DEVELOPMENT
REPORT NO: 218-2019

1 PURPOSE OF REPORT

1.1 This report provides an update on the creative/digital/technology sectors in Dundee representing all Scottish Government creative industries classifications and Standard Industry Codes and seeks committee approval for a plan that supports their growth and development.

2 RECOMMENDATION

2.1 It is recommended that the Committee:

- a notes the findings of the report, the work undertaken to support these sectors and the associated economic impacts;
- b approves the plans, at Appendix 1, for future development of the sectors; and
- c remits the Executive Director of City Development to produce an annual update on progress to Committee within twelve months,

3 FINANCIAL IMPLICATIONS

3.1 The cost of implementing the Development Plan will be contained within the City Development Revenue budget for sector support with potential for external match funding from other sources to enhance overall investment.

3.2 European Regional Development Funding (ERDF) underpins operation of the Smart Cities Programme referred to in paragraph 4.10 (j) whilst European Interreg funding underpins operation of Create Converge referred to in paragraph 4.10 (i). This funding is expected to be underwritten by the Treasury Guarantee announced in August 2108 by UK Government in the event of a no deal exit from the European Union.

4 BACKGROUND

Context

4.1 The creative/digital/technology sectors are important contributors to the UK, Scottish and Dundee Economy. Dundee is particularly strong in the largest sub-sector in terms of economic output being software, programming and related activities which account for 36% of all these Scottish sector outputs. Economic output from the digital sector has grown considerably in recent years. Between 2010 and 2015, the digital sector grew by 22%, whilst the whole UK economy grew by 17% (DCMS). The city's strategy for the sectors is in alignment with Scottish and UK strategies and those such as the Digital Strategy for Dundee.

4.2 The UK DCMS reported in November 2018 that the digital and creative industries have broken previous records and are now worth more than £130 billion and £100 billion respectively growing at nearly twice the rate of the rest of the economy since 2010. The UK Government also recognises the value of the sectors as playing a key role for the UK

Industrial Strategy. The Creative Industries and Artificial Intelligence Sector Deals reflect the role and potential of these sectors to grow economic competitiveness and success.

- 4.3 In Scotland, creative industries are now larger than each of life sciences and sustainable tourism in terms of economic output (gross value added), and employ more people than the energy sector. The Scottish Government Economic Strategy recognises creative, screen and digital Industries as key growth sectors employing more than 77,000 in 2017.
- 4.4 Dundee City Council (DCC) and its offices Digital Dundee and TayScreen have their principal focus on business development. They collaborate with key partners and perform valuable services that are essential interventions to market and promote Dundee and develop the sectors. They have developed and are supporting delivery of a strategy to make the most of the opportunities across sectors that offer significant potential for Dundee and its citizens and are key enablers for diverse other sectors, The creative/digital/technology sectors offer significant potential for business growth, inward investment and not only jobs, but jobs that are meaningful, encompass a range of skill sets including those of high value and jobs that are resistant to automation.
- 4.5 In Dundee, according to the Scottish Government's Local Authority Area Growth Sector Database, there were 240 companies operating in the sectors compared to 205 in 2008. Rapidly evolving technology and SIC (Standard Industry Classification) codes that do not reflect contemporary sectors are two of many challenges for mapping the sectors and compilation of data. Research based on Companies House registrations shows that there were more than 400 companies operating in the sectors in 2019 compared to over 250 in 2015. Additional to this are sole traders (that may also be employers) and according to Scottish government research represent at least half of the sector. The sector in Dundee reflects trends in Scotland and globally in using diverse, just-in-time skills for different projects and being heavily dominated by sole traders and micro-enterprises. At least 15 of the current companies employ more than 50 employees. The sectors represented in Dundee include, digital content and services, games, software and design. Whilst the sectors consist largely of SMEs, their strengths include the ability to rapidly adopt and adapt to new technologies and opportunities and increase productivity and sustainability.
- 4.6 According to the UK digital/technology sector catalyst, Tech Nation, in terms of economic output (gross value added), the sectors alone in Dundee were worth £205 million to the local economy in 2017 with turnover increasing from under £100 million in 2014 to over £180 million in 2017. Employment in the sectors was 2,660 in 2018. The sector is, therefore, a small but significant contributor to the local economy but it continues to require support to maintain and nurture employment opportunities.
- 4.7 The Regional Skills Assessment report for Dundee City by Skills Development Scotland predicts notable increases by 2027 for service sectors that includes creative/digital with the creation of an additional 1,700 jobs. The report also predicts that ICT/digital and creative will achieve the fastest growing GVA of the city's key sectors increasing by 3% each by 2027 to generate a combined total in excess of £350 million. Successive reports by Tech Nation identify outstanding capabilities in Dundee where the city is highly productive and has the potential to compete at both national and global levels such as games, mobile development and digital media content, entertainment and applications.
- 4.8 Digital technology is transforming the creative sector (particularly creative media industries) as well as being an important driver behind the growth of ICT products and services and key enabler for diverse industry sectors, Dundee is an important creative/digital/technology centre in Scotland. Through the development of the gaming industry, with high-profile successes such Grand Theft Auto and Minecraft and more recently Halo and being home to companies like NCR, Dundee has a strong digital track record. The digital technology ecosystem in Dundee goes well beyond games to wider digital production and software development that is combining creativity with technology to develop innovative content, applications and services

across entertainment and beyond for sectors like HealthTech and FinTech. Development is underpinned by the presence of Abertay, Dundee and St Andrews Universities, Perth College UHI, and Dundee & Angus College that play crucial roles across R&D, supporting spin-out companies and supplying crucial skills. Companies include 4Js Studios (digital entertainment), Broker Insights and Cherwell (Fintech/financial services), Banntech (digital business services), (Exscientia (biotech), Zudu (digital applications) and Etherplay Entertainment (Fintech gaming).

- 4.9 Dundee offers an attractive location for inward production and areas of strength in these sectors and emerging strengths across immersive technology (such as Virtual Reality (VR) / AR (Augmented Reality)), cybersecurity, biotech, data analytics, digital marketing AI (Artificial Intelligence), robotics and IoT (Internet of Things). Screen and media production also represent a growth opportunity for the city.

Actions to Date

- 4.10 A range of actions have been, and are being, undertaken by Dundee City Council and partner agencies to support growth in these sectors and to generate economic output in the wider economy through investment in digital infrastructure and convergence of creative/digital/technology solutions with other key sectors for the city.
- a **Sector Development** - through Digital Dundee and TayScreen, Dundee City Council promotes and markets the creative/digital/technology sectors of the city and, for screen production, the wider Fife Tay region encompassing Fife and Perth & Kinross. They research, identify, stimulate and support business and project opportunities; and contribute to securing global recognition of the city's strengths. They are voices of advocacy and change to foster the conditions and ecosystem to support and attract both business and media production. The city's strengths in these sectors are also promoted through web platforms such as TayScreen, Digital Dundee and Create Converge.
 - b **Digital Skills** - digital companies report that getting skills is a key business challenge. Digital Dundee and TayScreen are engaging with companies to develop an initiative to map skills and demand and grow on current work such as Dare Schools Challenge, Code Clubs/Hacks, Hit the Ground Running and Discovery/BFI Film School. Dundee City Council is also engaging with Digital, Data and Design Dundee (DDDD) a digital skills group initiated by NCR with a focus on design and programming skills. Key conclusions include the need to identify skills gaps, promote Dundee's digital identity, address current demand, ensure a collaborative approach across agencies, capitalise on the city's networks, harness emerging opportunities and engage younger generations. The sectors are characterised by continuous technological change and development that give rise to specific skill needs. For example security skills will be important as data protection is a key concern for the sector. New forms of technology including cloud computing and the continued convergence of IT and communications technologies mean security has to evolve to keep-up with threats. Across creative/digital there is a growing shortage of skills needed to produce multi-input and output content across multiple-platforms. Technology drivers and business models are also producing high demands for managerial, professional and technical skills over the medium term.
 - c **Addressing Property/Space requirements** – provision of space that can meet the requirements of the sectors including current and future-ready digital connectivity and that can serve businesses at different stages of their evolution. There is a broad range of development land and property available to meet the needs of sector companies, offered by the Council, Scottish Enterprise and private developers. Council Officers maintain research, including through regular contact with local and national property agents, on existing and planned office, retail and industrial space and current availability. They prepare promotional web content and customised information for all inward investment and business development enquiries.

- d **Digital Infrastructure** - Dundee is already among those UK cities with the fastest and most widely available superfast broadband (>30 Mbps) at 98.9% and ultrafast (>100 Mbps) 93.3%. Dundee City Council is actively supporting and encouraging the wide-scale deployment of public Wi-Fi and next generation technologies such as 5G and fibre based ultra-fast broadband. These will underpin the UK's modern Industrial Strategy and areas where the UK can lead the global technological revolution. Digital Dundee is closely engaging with providers that bring investment and sources of strategic funding to lever this investment such as the UK Department for Culture, Media and Sport. Cities all over the world, are rapidly changing into smart cities. In doing this, interconnected technologies play a crucial role in capturing, transferring and translating data into meaningful material which is required to develop and reinforce urban infrastructure. All of this is possible with high-speed fibre optic networks that provide the communications infrastructure to transport an enormous amount of data from one end to the other end, including the cloud-based systems. The advent of fibre optic cables opened the opportunities to have ultra-broadband and low latency communication in cities as opposed to the traditional copper cable network which had its own limitations. Whether for crime prevention surveillance, autonomous drones to survey land, smart traffic management system to tackle congestion or smart buildings for sustainable living, this is based on fibre optic in smart cities. There are three systems connecting to the central supply office: Fibre to The Home or Premise, Fibre to The Cabinet (and from there copper to homes/premises), and Fibre to The Tower connecting to cellular network towers. The first of these is the most powerful and advanced currently operating in the world and essential to remain competitive with other cities. The key challenge is to create an attractive environment for investment of fibre direct to homes/premises instead of only to street network exchanges. Dundee currently sits at 0.3% with Scotland at 4% lagging behind world leaders like South Korea (c.99%), and Japan (c.97%).
- e **InGAME** - Led by Abertay University (with partnership support from Dundee City Council, University of Dundee, University of St Andrews, Disney and Microsoft), InGAME was one of a dozen UK clusters selected as part of the UK Industrial Strategy for Creative Industries. It has established a creative research and development centre around the experience and expertise held in the Dundee Games Cluster. Its mission is to drive products, service and innovation across the Dundee games sector and act as model for UK-wide games sector innovation.
- f **Digital Dundee** – supports the games and digital sectors including working with new companies and spin-outs and facilitation of attendance at key global events such as Game Developer Conference, Playstation Experience and Gamescon, the office supports games networks and acts as an Observatory to identify new business processes and their potential for business development. This includes initiatives such as Smart Cities, Wi-Fi projects, digital marketing and e-commerce.
- g **Tay Cities cyberQuarter Project** – Indicative funding of £11.7 million was announced in the Tay Cities Deal Head of Terms in November 2018 for the creation of a 15-year academic-industrial programme to position the Tay Cities Region as a centre of applied research and development and knowledge exchange in the cybersecurity sector. The project is led by Abertay University and the Scottish Business Resilience Centre. An Outline Business Case for the project is currently being finalised.
- h **TayScreen** - operates the Screen Office service for Dundee, Fife and Perth & Kinross and is supported by those Councils. The office proactively conducts research to generate leads, maintains detailed research on city and regional assets, promotes and directly markets the region globally to attract media production of all types and supports production across the full cycle from development through to distribution. Production is supported to source regional locations, services and skills and with research and official processes. Inward screen production generates economic impact for the region of £5million. . It also contributes to the region and city's attractiveness as a tourism destination with Visit Scotland reporting that 40% of destination decisions are due to

screen. Recent high profile productions have included Emmy nominated, HBO media magnate drama *Succession*, perennially popular BBC production, *Antiques Roadshow* and new forensic crime drama for UKTV, *Traces*.

- i **Create Converge** – is a £3million transnational project managed by Dundee City Council fostering the use of creative digital solutions to show, tell and sell. The project is raising the profile of the city across the five member countries and beyond and making connections between services such as animation, screen, visual effects, virtual reality, augmented reality, games, AI and data so they can embrace new opportunities. It is fostering connection with diverse markets beyond entertainment like energy, healthcare and tourism to use these for R&D, service delivery, training and marketing. With nine partners in five countries including Abertay, the project is supported by the EU North Sea Region. It has also generated benefits through financial support for work that is in alignment with project outcomes such as growing business networks, attendance at industry events in the UK and Europe and financial support for conferences in Dundee including Screen Ready, Arcadia, Digital Health and Bio Dundee.
- j **Smart Cities Programme** – This is an ERDF programme match-funded by the Scottish Government. It is coordinated across Scotland by Scottish Cities Alliance (SCA) and programme managed by Glasgow City Council with Dundee City Council managing its own projects and hosting the Data Cluster project post. Smart Cities are the integration of data and digital technologies into a strategic approach towards sustainability, citizen well-being, economic development and competitiveness. Placing citizens and business need at the heart of the decision making process Smart Cities technology will help improve urban life. Dundee has four projects funded by the SCA supported 8th City Programme across Smart Mobility such as £6m investment managed by Urban Foresight, Smart Public Safety, Smart Waste and Open Data.
- k **Creative Dundee** - Creative Dundee offers support for the creative talent base to help sustain their practice in the city. The team leads collaborative projects including the Amps supporters network, production of 99 Things to See and Do in Dundee, a crowdsourced tourism guide, regular Pecha Kucha networking nights and Dundee Soup, supporting community based projects. They also produced a Creative Industries Strategy for Dundee in collaboration with Dundee City Council and other sector partners. Key themes addressed include making creativity sustainable, creating big collaborations in a small city and developing innovative ways to share spaces and resources. Creative Dundee is supported by Creative Scotland and Dundee City Council.
- l **UNESCO City of Design** – Dundee, now home to the V&A Dundee, Scotland's First Design Museum, was named in 2014 as the UK's first, and remains the only, UNESCO City of Design in the UK. Dundee is actively participating in the global UNESCO Creative Cities Network and has been represented at and raised the profile of Dundee at major UNESCO cultural events including those in Europe, China and the USA. The project delivery office is hosted by Leisure & Culture Dundee and along with Dundee City Council supports the programme through the Dundee Partnership. UNESCO status is awarded on a permanent basis but based on Dundee's pro-active participation in the programme, the city's status has been formally recognised and extended to 2022. This also marks Dundee's use of culture and creativity as key drivers for social and economic regeneration. In addition to hosting international network meetings, there has also been delivery of events and projects such as the annual Dundee Design Festival. The third festival was held in 2019 in the Keiller Centre on the theme of what makes a Liveable/Loveable City. Work is being done to attract a new UNESCO global culture festival in 2022.

Sector Development Plan

- 4.11 Dundee City Council will work with local and regional partners to build on the support in place from the national agencies. The Development Plan for supporting the sectors over the next 5 years is set out in Appendix 1. Priorities include attracting inward investment, skills development, market development and internationalisation, research & development and continuing to build effective public – private partnerships that support the growth of the creative/digital/technology sectors. The actions contained within the development plan aim to grow additional direct and indirect jobs across these sectors over the next 5 years through the attraction of additional inward investment and through support for sectors developing original content/IP and those providing digital services.
- 4.12 The Tay Cities Deal Heads of Terms has made available £3m towards the Studio Dundee office space and accommodation development, £37m towards tourism and culture projects and £11.7m towards the cyberQuarter project. A £20m regional skills programme is also being funded. These provide significant opportunities to support infrastructure development and skills enhancement across the creative, digital and technology sectors as key enablers.
- 4.13 The aims and objectives of the development action plan are to:
- a Work in collaboration with agencies such as SE and SDI to promote and market the city to attract inward investment and support business growth.
 - b Develop and promote the ecosystem and supply-chain for creative/digital/technology and reinforce Dundee's identity as a city of innovation, services and expertise and facilitate collaborative alliances.
 - c Work with Skills Development Scotland, further and higher education providers and industry to meet the skills and efficiency improvement needs of the creative/digital/tech sectors.
 - d Share and develop knowledge and understanding of the creative/digital/tech sectors to position and maximise business and employment opportunities in Dundee.
 - e Capitalise on Dundee's diverse national and global networks and support Dundee entities to engage with, capitalise on and compete for UK-wide and international opportunities.

5 POLICY IMPLICATIONS

- 5.1 This report has been subject to an assessment of any impacts on Equality and Diversity, Fairness and Poverty, Environment and Corporate Risk. There are no major issues.

6 CONSULTATIONS

6.1 The Council Management Team were consulted in the preparation of this report.

7 BACKGROUND PAPERS

7.1 None.

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Appendix 1: Development Plan

Theme	Action	Time-scale	Partner/s
Inward Investment & Business Growth	Collaborate with key national partners such as Scottish Development International, Scottish Enterprise, Tech Nation and Creative/Screen Scotland to attract enquiries to Dundee.	2019-2024	DCC, BG, SDI, SE, CS/SS, TN, Sector Groups
	Promote Dundee across all aspects of the creative/digital/tech ecosystem including skills, land and property, digital infrastructure, networks and the Dundee/Tay Cities Region quality of life offer.	2019-2024	DCC, BG, SDI, SE, CS/SS, CD
	Implement marketing communications plan; create and use current information and assets for distribution through digital marketing materials and web channels such as Invest in Dundee, Digital Dundee, TayScreen, Create Converge, Creative in conjunction with social media Raise profile of Dundee as a creative/digital/technology hub that has both established credentials and ambition for innovation and growth.	2019-2024	DCC, HFE, Sector Groups
	Conduct research based direct marketing.	2019-2024	DCC
	Research opportunities for regional hosted events including in collaboration with partners and sponsors. Support events that will contribute to Dundee/Tay Cities Region as globally recognised creative/digital/technology centre.	2019-2024	DCC, SDI, SE, CS/SS TN, DACC, DACB, HFE, CD, UCOD
	Attend, exhibit and identify speaker opportunities at key exhibitions and conferences and identify and promote partner participation.	2019-2024	DCC, SE, SDI, HFE, CD, UCOD
Enhancing Dundee's Creative/Digital/Tech ecosystem & supply chain – skills & entrepreneurship	Identify existing and evolving skills initiatives including within Tay Cities Deal and gaps in provision. In collaboration with public/private sector including relevant agencies such as SDS, DACC, Screen Skills), develop and implement a skills action plan for the creative/digital/tech sectors.	2019-2024	DCC, SDS, DACC, HFE Sector Groups
	Research/map existing skills availability and areas of demand across full spectrum of creative, digital & technology sectors relevant to Dundee.	2019-2024	DCC, HFE, Sector Groups incl. Digital, Data and Design Dundee
	In collaboration with stakeholders and partners, promote, support and organise representation of creative/digital/technology sectors at Dundee Jobs Fair 2019 and other careers fairs in the city.	2019-2024	DCC, SDS, DACC, DCC, HFE, Sector Groups

	In collaboration with partners, research feasibility of and facilitate creative/digital/technology innovation/production space or hub such as Codebase in Dundee. Organise virtual network of expertise in the city for sharing of demand and supply information between universities/colleges and creative/digital/tech SMEs in Dundee and Tay Cities Region. Work with universities/colleges and the support ecosystem to explore approaches to commercialisation and ways to increase and accelerate spin out activity.	2019-2024 2019-2024	DCC, HFE, Sector Groups DCC, HFE
	Ensure adequate signposting to business support, incubation and entrepreneurship programmes through marketing assets, direct marketing and relationship management.	2019-2024	DCC
Contributing to further development of a nationally significant creative/digital/tech cluster & supply chain - networks, investment and internationalisation	Build on baseline data for the sectors and map capability.	2019-2024	DCC
	Build on current creative/digital/technology and other business networks (regional, national, international) and generate increased interaction between networks and inform their approach to influencing information about, and interest in, Dundee.	2019-2024	DCC, HFE
	Promote Dundee/Tay Cities Region for commercial investment in the creative/digital/technology sectors at all stages of business development and growth. Engage with creative/digital technology advisers and investment funds that can facilitate early stage growth finance and beyond.	2019-2024	DCC, Sector Groups
	Account/Relationship Manage key businesses across the city for the creative/digital/technology sectors and engage with companies in supported sectors.	2019-2024	DCC
	Identify Dundee/Tay Cities Region inward investment expertise and industry market knowledge. Develop the angel investor network, particularly by making potential angel investors aware of the opportunities presented by the creative/digital/technology sectors.	2019-2024	DCC, Sector Groups
	Promote and collaborate including with DACC/Tay Cities Deal on events/opportunities so that creative/digital/technology businesses access and engage with programmes that support trade and export activity.	2019-2024	DCC, DACC

Enhancing Dundee's Creative/Digital/Technology ecosystem - space, infrastructure	In collaboration with stakeholders, research and develop plans for innovation/studio space as key assets to raise the profile of DCC/Tay Cities Region, and ensure the region can compete effectively and attract inward investment.	2019-2024	DCC, HFE, Sector Groups
	Regularly research and update information on and plans for relevant space on a current or potential alternative use basis across industrial, office and retail.	2019-2024	DCC
	Engage with broadband/5G/Wi-Fi partnerships. Continue to lobby for investment across Dundee and Tay Cities Region including hard to reach and Exchange Only type locations. Use best efforts to deliver widespread coverage of a range of ultrafast connectivity technologies such as full fibre, 5G, mobile and satellite and build on Smart Cities Scotland investments. Ensure use of public assets to support digital connectivity.	2019-2024	DCC
	Embed creative/digital/technology sector into infrastructure and space design and planning process through work with DCC property and planning, other relevant departments and public/private sector organisations. Research and respond to the challenges and opportunities across policy, investment and delivery.	2019-2024	DCC, HFE, Sector Groups
Growing creative/digital/technology activity and capacity and inspiring innovation, development and production.	Broker and support opportunities to access funding programmes and for Dundee/ Tay Cities Region creative/digital/technology businesses to collaborate for innovation through funding bids. Identify new and existing challenge-based funding.	2019-2024	DCC, HFE, Sector Groups
	Build effective partnership working between DCC, higher education and companies. Locate a DCC Business Development Sector lead at InGame one day per month.	2019-2024	DCC, HFE, Sector Groups
	Share best practice across Dundee and Tay Cities Region and identify opportunities for use of creative/digital/technology and approaches in organisations including DCC, NHS Tayside and other public bodies for regional creative/digital businesses.	2019-2024	DCC, NHS Tayside, Sector Groups

Partner Key:

BG – Business Gateway
 CD – Creative Dundee
 CS/SS – Creative Scotland/Screen Scotland
 DACC – Dundee & Angus Chamber of Commerce
 DACB – Dundee & Angus Convention Bureau
 DCC – Dundee City Council
 HFE – Higher and Further Education
 SDI – Scottish Development International
 SDS – Skills Development Scotland
 SE – Scottish Enterprise
 UCOD – UNESCO City of Design

