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# **Economy, Energy and Tourism Committee**

## **Economic impact of the creative industries**

Submission of written evidence

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Terms of Reference: "How the issues that hinder the growth of the creative industries can be overcome and how to capitalise on the opportunities."

#### 1. Overview

The issues facing the video games industry in Scotland are varied. A study undertaken in 2009/2010 identified six key barriers to its development namely: (i) industry market and technology conditions; (ii) negative perceptions of the industry; (iii) company start-up, growth and sustainability; (iv) geographic location; (v) funding and (vi) public sector involvement. These are summarised in this paper but additional information from this study, which examined the industry's development in Scotland, is available if required.

Despite inevitable changes since the study was undertaken, the findings may provide useful context for this element of the enquiry. They are also supported by research currently being undertaken about the business models adopted by video games development firms. This new research indicates that several of the themes remain relevant in relation the issues of company startup, growth and sustainability; industry, market and technology conditions; funding and the negative perception of the industry.

# 2. Perceived barriers to the development of the video games industry in Scotland as at 2010

# 2.1 Industry, market and technology conditions

The video games industry is one of rapid change, responding to disruptive innovation and technology both in the levels of the firm and the value chain. The industry is characterised by four key features<sup>iii</sup> namely the importance of firm capabilities to effectively respond to change, the high level of firm entry, growth and exit, evidence of emerging and specialist activities in the value chain, and a buyer driven value change which exhibits changing power dynamics from the actors therein. Games developers, and those in related activities, have traditionally held less power due to the domination by the platform owners, 'super developers' or the publishers<sup>iv</sup>. Additionally, a 5-6 year cycle has been evident in terms of console technology developments<sup>v</sup>, one of the platforms upon which games are played. This has implications for developers who have to respond to such changes and adapt their tools and processes. Vi Much of this response has traditionally been brokered via the

publishers and, as they have traditionally undertaken the commercialisation activities, it is they who have had the commercial power, skills and networks. This has resulted in companies, whilst innovative in terms of games content, sometimes have little opportunity to take ownership of product (whether or not intellectual property is involved) and strategically direct its commercialisation.

The Scottish industry has traditionally been dominated by games developers creating content for publishers and games related activities (e.g. technology, components etc.). These are early stage value chain activities with the power residing elsewhere in the value chain. This has generated uncertainty for the companies, funders and support providers. Opportunities to change this have emerged in recent years in relation to new platforms, particularly mobile. Firms have more opportunity to increase their value and power by controlling more of the value chain activities through activities such as the origination and commercialisation of their own intellectual property. However to do so requires a different set of resources and capabilities and not all firms are equipped to take advantage of this.

# 2.2 Company start-up, growth and sustainability

A range of company specific issues have created barriers to start-ups, growth and sustainability namely lack of entrepreneurship, motivational issues, commercial models, and skills:

- Entrepreneurship a perceived lack of entrepreneurship in the industry. This was illustrated as a business/creativity tension combined with a lack of ambition, confidence and willingness to take risk at the management level, and a lack of business development, sustainability and growth activities at the firm level.
- Motivational issues questions around the motivations of management and whether the aims were compatible with economic success. teams for starting-up and/or business growth was affected by The rationale the 'business ownership v employment' decision (with owners employment for financial reasons) and/or the sometimes reverting to (particularly where start up drivers were 'business v creativity' conflict linked to a love of games or technology rather than business). negative outcomes of this were reflected in how the companies were perceived (e.g. hobbyist, not business- minded etc.), their ability to manage/grow businesses, and their effectiveness in achieving long-term sustainability.
- Suitable and sustainable commercial models in terms of firm growth sustainability, the traditional dominance of the publisher model has and reliance on 'work-for- hire' (subcontract) activities, and a lack of created a finance. experience and proprietary product that can be commercially model is often characterised by project-based activities, exploited. This intellectual property for the developer, a weak little or no proprietary financial model, and limited opportunities to build value into the firm. However, since the study was undertaken in 2010. new opportunities have emerged for development firms adopt more

proprietary intellectual property-based business models and move away from work-for-hire. Such opportunities have been facilitated by a combination digital convergence, the changing role of actors in the value chain, the broadening audience demographic, and the potential to apply gamesrelated skills, technology and content in non-games areas. The assumption is that a proprietary Intellectual Property-based business will provide a firm with more control over the creation and model commercialization of its intellectual property, allow the retention of value, weaknesses in the work-for-hire model. However despite and address the the attraction of these new models, and support from industry and there are varying degrees of success and the policymakers for firms, issues for this requires further examination.

Skills - the lack of skills in relation to business management, marketing and commercialisation (creating intellectual property and exploiting it in the market) were problematic. The two key issues mentioned the skills of founders and management senior management, particularly the lack of appropriate skills within managerial the businesses that would facilitate the operation and growth of a profitable, sustainable business, and the appropriateness of graduate talent. Graduates were criticised in terms of lack of fit with industry needs. particularly in relation to recent developments and trends. An allied issue was that of matching graduate aspirations to the characteristics of Scottish games industry - the type of games that were attractive to graduates, and the size of companies they wanted to work for, was not always compatible with the companies and games produced in Scotland.

### 2.3. Negative perception of the industry

A number of negative perceptions existed about the industry from academia, the investment community, the general public, public sector and the games industry itself. These were viewed as influencing funding, willingness to engage, perceptions of risk and credibility, and consistency in support. It was thought to have negatively impacted on the willingness to commit to the sector by the public and academic sectors and, in some cases, has resulted in firms avoiding positioning themselves as 'games' in order to avoid the negative connotations about the industry.

## 2.4. Geographical issues

Geographical-related issues were in the main focused on the relationships between Dundee and elsewhere. The strong connections within Dundee and its positive profile have enabled the growth of the industry. However, the disconnect between Dundee and other parts of Scotland was perceived as a barrier. Additionally, there was potential for recycling of bad habits, an insularity that was not useful and some unwritten rules about business conduct (e.g. avoiding direct competition and not head hunting staff from each other), which may impact on drive and competitive aims.

## 2.5 Funding

In terms of impacting on the industry's development, private investment was not a notable factor but the lack of it was at the root of many of the issues experienced in terms of company growth. The overriding theme was that private sector funding did exist but that games firms were not an attractive proposition because of their characteristics namely the lack of intellectual property, a project based model, and constant change.

#### 2.6 Public sector issues

Public sector related barrier related to the variability and inappropriateness of support. However, it should be noted that the public sector was also cited as a key enabler and it was evident that companies did not think it was the public sector's responsibility to drive the industry.

- Variability this existed in relation to the delivery, geography and political focus. There was a perception that while policymakers expressed willingness to engage, the actual reality was different in terms of visible delivery within the industry. Additionally within the political and economic infrastructure, the changes to policy, organisational structures, and tensions between public sector agencies, had created confusion and a lack of continuity. Geographically, Dundee was perceived as receiving a disproportionate amount of support and profile.
- Inappropriate support and evaluation the metrics used to evaluate the industry were problematic, as they did not take account of industry characteristics, particularly in terms of employment and financial targets. Additionally, the support mechanisms were not tailored to the needs of the firms, with interventions often being based on that required by technology or manufacturing firms.

#### 3. Final remarks

This paper provides a short summary of the findings from a Scotland-specific study on the video games industry which was undertaken as part of a Masters project. It would be beneficial if the Scottish Government were to undertake a more comprehensive review of the industry in Scotland, combining both quantitative and qualitative data, to provide a timely and insightful assessment of firm needs and key issues. There is also a real need to improve the data provision about the video games industry in Scotland. There is currently no core source of data. That which does exist requires access to a variety or organisations with the inevitable variability in research approach, aims, and accuracy. Additionally, the data which does exists is proving to be inaccurate as it fails to capture all aspects of the industry particularly those not adopting games-related SIC codes and/or which are not registered. The recent study by NESTA and UKIEvii emphasised this fact at a UK-level. This highlighted that the current statistics on the UK industry substantially underestimate its size, with only one third of the companies that were identified being captured by SIC code. My own discussions with a range of organisations about Scotland-related data have resulted in a confirmation that this is an issue.

I am grateful for the opportunity to submit this information to the Committee and welcome any requests for clarification or additional information.

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<sup>&</sup>lt;sup>i</sup> Mullen, H (2010) Cluster origination and development: a case study of Scotland's video games industry, Master's thesis, July 2010. The University of Strathclyde (unpublished)

ii Mullen, H (2015 forthcoming) "Business model innovation: a case study of independent video games development firms and their transition from the 'Work for Hire' model. PhD thesis, The University of Glasgow (unpublished)

iii Readman and Granthan, 2006 Readman, J. & Grantham, A. (2006) 'Shopping for Buyers of Product Development Expertise: How Video Games Developers Stay Ahead', *European Management Journal*, 24 (4), pp. 256–269

iv Readman and Granthan, 2006 Readman, J. & Grantham, A. (2006) 'Shopping for Buyers of Product Development Expertise:H ow Video Games Developers Stay Ahead', *European Management Journal*, 24 (4), pp. 256–269

<sup>&</sup>lt;sup>v</sup> Johns, J. (2006) 'Video games production networks: value capture, power relationships and embeddedness', *Journal of Economic Geography*, 6, pp. 151-180.

vi Cadin, L., Guerin, F. & DeFillippi, R. (2006) 'HRM Practices in the Video Game Industry: Industry or Country?' *European Management Journal*, 24 (4), pp. 288–298.

vii Mateos-Garcia, J., Bakhshi, H. & Lenel, M. (2015) *A Map of the UK Games Industry* NESTA and UKIE: London. Accessible at: http://www.nesta.org.uk/publications/map-uk-games-industry