# IMPROVING INTELLECTUAL PROPERTY HOUSEKEEPING IN SME GAMES DEVELOPERS TO ENHANCE INVESTABILITY

## Paul Durrant, Kirsty Gibson and Jenny Duncan

Business Development Office, Abertay University, Bell Street, Dundee DD1 1HG November 2014

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#### **EXECUTIVE SUMMARY**

The quality of a micro SME games developer's IP Housekeeping has been thought to affect investor confidence. The reality or otherwise of this perception was evaluated through the use of a fictional case-study based on real world information. The case study was used as a provocation in workshops with investors and lenders also to test broader concerns in the area of intangible assets and investment confidence. An improvement zone for early stage creative digital content companies became apparent, where a minimum standard of IP Housekeeping was thought to be necessary. In additional, cultural influences such as the personas of the founders and their focus on Agile type methodology across all activities, potentially at the expense of adequate business management practices were also revealed. Two linked tools have been developed to help stimulate better practice. The first tool is an on-line self-audit checklist that auto-generates a tailored report based on persona and responses containing recommendations for improvement. The second tool is an aide-memoir to tasks requiring action and improvement known as an IP Manifest. The latter tool is available on-line and via download. The writers will report further once the tools have been launched and evaluated.

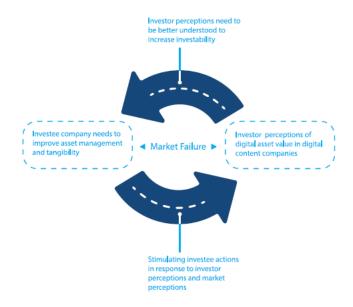
## **Background**

Challenges associated with the supply of sufficient working capital to micro SME creative businesses have been recognised (Creative Industries Council, 2014). One particular challenge, particularly relevant to SMEs with digital interactive content businesses, is that of the intangible nature of digital intellectual property (Brassell and King 2013) particularly in the context of security for investment and lending. This challenge is compounded by the failure of many companies to put in place adequate operational systems for managing the IP they create (Banking on IP: An Active Response 2014). For the purposes of this paper, the authors have termed the operational approach businesses adopt to managing their intellectual property "IP Housekeeping". Allinson, Robson and Stone 2013 reported a higher prevalence of formal business practices amongst successful applicants for debt finance in their evaluation of the Enterprise Finance Guarantee scheme.

The UK Prototype Fund helped over 70 companies produce original games IP between 2010 and 2014 through providing publicly-funded production finance grants (UKIE 2014). Around 23 companies have secured further external working capital as a result of this intervention (Prototype Fund 2014) though over 70% identified the availability of sufficient working capital as a business challenge. This experience aligns with findings that creative software companies generally experience higher rates of market failure in connection with the supply of adequate working capital (Fraser and IFF 2011). This market failure is sometime due to information asymmetry arising from a range of issues of which poor IP Housekeeping is thought to be one. The portfolio of supported companies provided a helpful

starting point for examining the hypothesis that making improvements in the quality of IP Housekeeping could help address this aspect of information asymmetry.

Fig 1 Market Failure



## Methodology

25 companies funded though the Prototype Fund were consulted about various aspects of the fund via an online questionnaire. From those, 10 provided additional face-to-face interviews with a focus on IP Housekeeping practices. The findings of the on-line consultation and the face to face interviews were condensed into a fictional Case Study and management accounts for a company described as Specimen Games Ltd. The Case Study is reproduced in Annex 1 to this paper.

The Case Study was deployed at a series of workshops and one-to-one interviews to generate discussions regarding the challenges for investors and lenders with this type of company. Interviewees have retained anonymity but included accountants, lawyers, technology investors, games-savvy investors, business angels, lenders, games development entrepreneurs, grant funders and business support providers.

In addition to the Case Study, participants were prompted with a hypothesis that a "gold standard" of IP Housekeeping would be expected by them if they were to invest in, lend to or otherwise support Specimen Games. No detail was provided of what a gold standard might represent as the intention was to draw out further discussion on this matter.

Other questions were asked to explore the potential for other interventions around intangible assets. For example, the potential to securitise debt finance against Games Tax Relief certification was explored with participants.

In parallel with this work, the experiences of working with over 300 SME applicants for the fund were discussed with Portfolio Managers from the fund. These findings were combined with the questionnaire responses and the face-to-face survey results to design a set of five typical personas describing common characteristics of early stage games development company founders. These personas are attached as Annex 2.

The qualitative feedback was condensed into an interim report with ideas for tools to help support companies IP Housekeeping. Additional feedback and clarification was sought from participants regarding the interim report. From those responses, two linked tools were developed. An early version of the tools was iterated further through a design workshop with Innovate UK, the UK's innovation agency.

#### Results

Inevitably the semi-structured nature of the discussions elicited qualitative responses about other business challenges faced by Specimen Games. Some of these comments are reproduced in Annex 3 and many represent areas outside the scope of this project but worthy of additional study.

One of the other characteristics to emerge from discussions was the extent to which early stage games development company businesses are project focussed and run using Agile methodology where having a working piece of software is valued more highly than full documentation. A hypothesis was expressed that companies of this type tended to apply this Agile thinking to their whole business planning, strategy and development and this is one of the reasons why IP Housekeeping is weak.

One of the key outcomes was a widely shared perception that early stage games businesses did not have to display a "gold standard" of IP Housekeeping in order to provide confidence for investors and lenders. A gold standard was taken to refer to the "data room" level necessary for a major equity investment or acquisition where lawyers for the parties would sit continuously to finalise the deal surrounded by physical copies of all necessary paperwork. However, using the same analogy, respondents used the description "bronze" to highlight what they saw as a minimum standard. On further probing, a bronze standard was thought to mean that all possible issues with third party IP had been properly managed. This included obvious issues such as middleware licences etc. but extended to include open source tools, content contracted from external suppliers ensuring the employee as a third party had fully assigned rights.

Figure 2 describes the iterative nature of the status quo in terms of IP Housekeeping levels, reflecting a steady improvement from virtually zero at founding level through to a gold standard by exit.

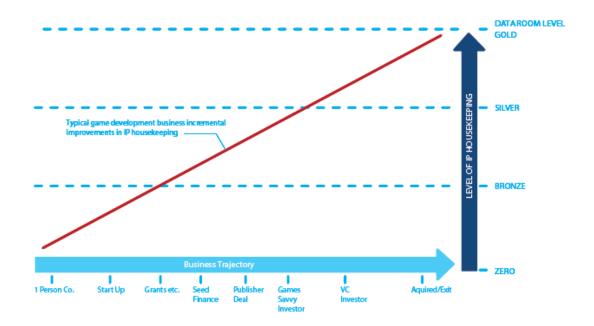
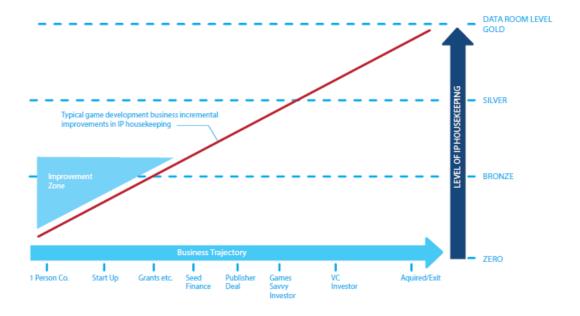


Figure 2 has been designed to represent feedback received that very early stage companies (through the one person foundation to initial start-up grants phase) often fall below the minimum bronze standard. This leaves a target improvement zone for such companies, potentially using tools arising from this project, as shown in Figure 3.

Figure 3 The Improvement Zone



#### **Tool development**

As a result of the workshop and interview processes two linked tools have been developed.

The IP Self Audit tool presents the user with a series of structured questions regarding their IP Housekeeping approaches. Questions have been drawn from the breadth of experiences reflected by consultees where weak points in practice had been experienced and / or identified. Users also select their persona. In the tool, a background scoring and reporting algorithm generates a personalised report for the user based on their individual answers, together with a general checklist for use in enhancing their company's IP Housekeeping. This report introduces them to the second tool, the IP Manifest.

The IP Manifest has been developed to embody the principle of working as a creative craftsperson where consideration of IP Housekeeping is intended to become an intuitive part of Agile project management. To create visual cues in support of this, a simple chevron design is used as an aidememoire to highlight the three key areas of Controlled, External and Regulated elements of IP. Further explanation and a prototype of the IP Manifest is provided as Annex 4.

The writers will publish further information regarding the uptake of and impact from these tools once they have been publicly launched.

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