

The digital effects, animation and computer games industries are an area where Australia has prospective and demonstrated ability to produce world competitive productions.

The Anglo-American cultural dominance in the world's media do give an advantage for Australia in having easier access to our productions than many non-English speaking nations, but it provides an attraction for US based organisations to use the technical and creative skills of our media professionals. Thus there is a growing interchange between US feature production companies and Australian organisations, recognised publicly in the high profile *Star Wars* and *Matrix* productions but occurring with less fanfare in a range of other productions such as *Ghostship*. The attractions for US producers includes lower exchange rate and a shared language. The stable political environment is of less relevance to the short production timetables of feature films in comparison to conventional manufacturing. But in the highly fluid and networked relationships of the film industry, personnel are rapidly drawn together for short involvements in individual projects. In this environment the presence of a skilled workforce of experienced professionals is a crucial attractant to foreign investment, as well as providing a base for the local industry.

Ireland has experienced a massive boom in IT development in the last decade such that it has become the largest exporter of software in the EU. This development has largely been driven by foreign investment, however Seán Óriain in his assessment in the Communication of the ACM (Vol 40, No 3 – "The Birth of a Celtic Tiger") of Ireland technology revolution from farming to software was founded on the Irish educational system that produced the skill pool of graduates to staff the IT industry. Australia needs to support its educational base in universities and TAFE for producing the skilled graduates to staff the local industry.

The University of Newcastle has introduced a Bachelor of Information Technology degree that commenced in semester 1 of 2003. The program introduces problem based learning into an IT program, but being based in a new School of Design, Communication and Information Technology, the degree is aimed at producing IT graduates suited to not only conventional software development but to the mixture of technical and creative ingredients required by the industries that are the focus of this inquiry. In their first semester students have designed a computer game using a game engine and built a web radio station. The degree has a major in Digital Entertainment that is aimed at this industry sector. The existence of the degree highlights the innovation that is occurring in regional areas such as the Hunter Valley, yet which has difficulty often appearing on the radar of capital city decision makers.

Within a fortnight of the writing of this submission, Newcastle will host the 24 hour short film Shoot-out that draws increasing numbers of entrants from around the country. This contest requires the production of a seven-minute film edited "in camera" within 24 hours. It highlights the creative and technical talents developing around the country, and the capabilities of the new digital technologies.

The Hunter Valley has a demonstrated cost differential of 15-20% to Sydney in many of the costs required to support IT based industries, and while areas of the Hunter Valley suffer limited bandwidth capabilities the Newcastle CBD has a number of local providers of high bandwidth to channel the large volumes of information needed in exchanging digital entertainment material. However, the ability for George Lucas to sit at the ILM

Skywalker Ranch in California and obtain digital rushes from Australia, means that these industries can be located in regional centres as well as state capitals. The success of the Hunter's NBN television to provide editing and transmission services for the ABC's satellite broadcasts demonstrate the high level of capability that exists in the Hunter. The success of Film Hunter in bringing many Sydney feature productions to shoot elements in the Hunter Valley demonstrates the importance of being able to bring producers out of the capitals to see the potential of regional areas and for the word-of-mouth networking in the industry that leverages such contacts. One of the unique characteristics of the Hunter both as a shooting location and as a production base is that its middle distance from Sydney makes it possible to conduct face-to-face meetings with only modest travel and yet to maintain a lifestyle that maintains a cost-of-living differential with Sydney.

Recommendations:

- No doubt other submissions have indicated how government funding could be directed to support creative arts but it appears a somewhat stark contrast that Iceland with a total population less than Newcastle can spend \$A 113 million on support for cultural activities.
- Acknowledgement in the tertiary funding models that courses in the digital entertainment and communication disciplines require significant infrastructure costs, and now surpass the overheads of conventional computing courses.
- Recognition of the episodic nature of many media productions in the application processes required by governments to secure assistance. The turnaround time and procedural requirements of applications for funding assistance, particular for regional programs, can take longer than the entire film project. In addition the concrete outcome measures suitable for agricultural production may not be appropriate to the dynamic media industries.
- Involvement in new projects is often the result of personal contact with others in the industry. Government could support forums for bringing together those involved in the various arms of the industry.

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