RULES OF ENGAGEMENT: UNDERSTANDING THE DYNAMICS OF SOCIAL ENTERPRISE AND BUSINESS REQUIREMENTS ON ACADEMIC COLLABORATION

Examples of the development of University based collaborations between Canalside studios, industry and social enterprise.

Canalside Studios
University of Huddersfield

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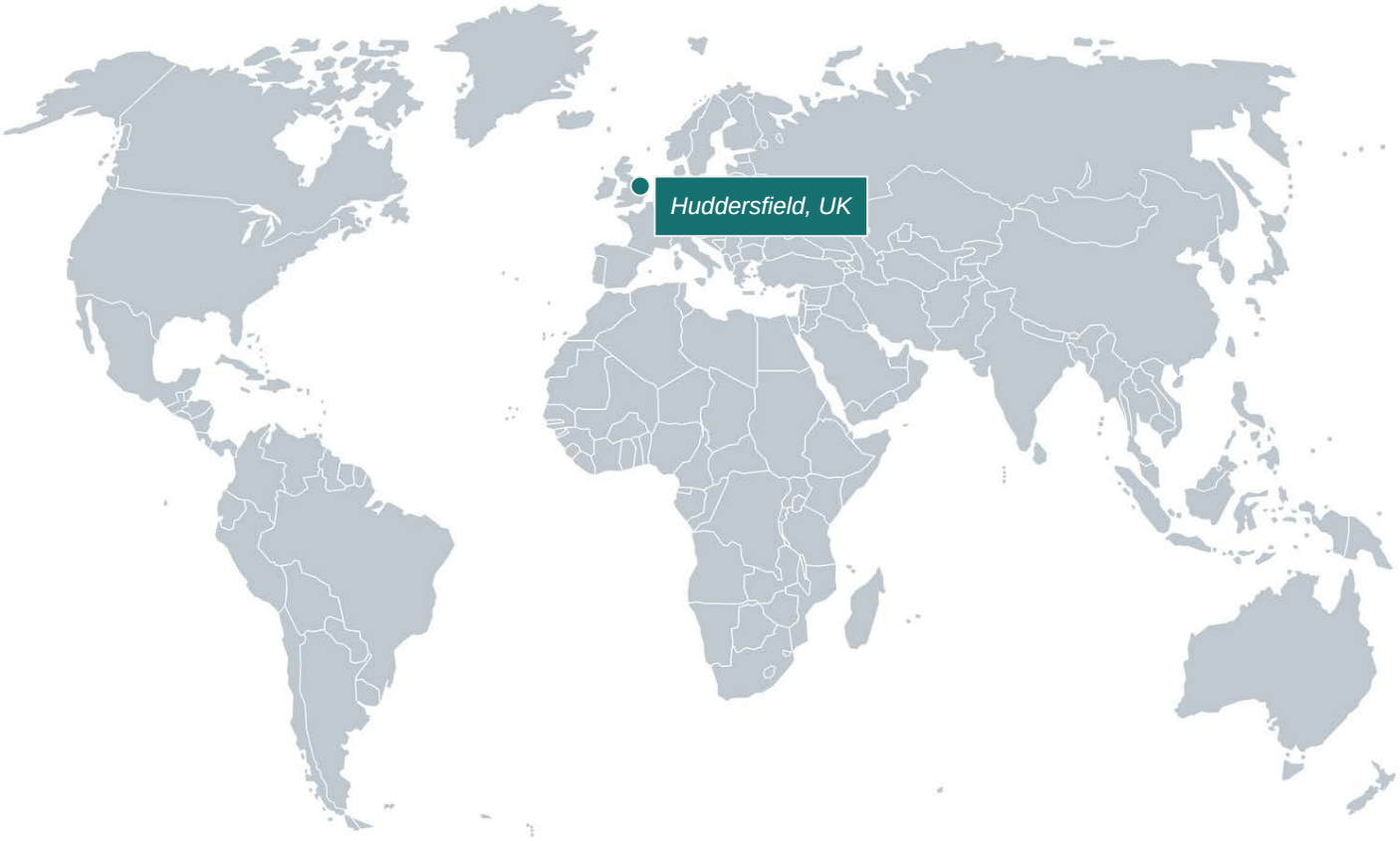

GENERAL INFORMATION

Title of the case	**RULES OF ENGAGEMENT: UNDERSTANDING THE DYNAMICS OF SOCIAL ENTERPRISE AND BUSINESS REQUIREMENTS ON ACADEMIC COLLABORATION**
Sales pitch	Examples of the development of University based collaborations between Canalside studios, industry and social enterprise.
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Nature of interaction	[x] Collaboration in R&D [ ] Academic mobility [ ] Student mobility [x] Commercialisation of R&D results in science [x] Lifelong learning [x] Curriculum development and delivery [x] Entrepreneurship [ ] Governance [ ] Other (please specify)
Supporting mechanism	[x] Strategic instrument [ ] Structural instrument or approach [x] Operational activity [ ] Framework condition

CASE STUDY PROFILE

1. SUMMARY

As part of its remit to support University Business collaboration the University of Huddersfield provides seed funding for collaborative ventures between academic and industry partners to initiate small-scale projects that have the potential for growth. (This is trickle down funding from the UK government Higher Education Innovation Fund). This case study explores the experience of University-Business collaboration of Canalside Studios, the University of Huddersfield's in-house games research and development studio.

Individuals and companies seeking help and advice to develop business products frequently approach the University with business ideas but matching the needs and expectations of both University and business can be difficult. This paper provides a reflective case study account of the experiences of one academic team working with different external partners on serious games and software development projects. The partners range from a fire service requiring a training command simulator to a reading game to encourage elementary stage learners for use in the classroom and at home.

The findings show that managing relationships between the University and external partners is time consuming with a great deal of effort needed, particularly in the early stages of a project, to achieve shared understanding of goals and outcomes. Partnerships with smaller organisations or individuals often require more intensive management than those with larger organisations who are more familiar and may have prior experience or existing mechanisms to support this. Collaborations with partners who value the research and educational values of the University are likely to result in mutually agreed success and are more valued by academics as these lead to publication of the product and the dissemination of the learning. Collaborations with partners with purely business-oriented goals or who are not perceived to understand academic values are more likely to falter; academics can see these relationships as "time theft". Seed funding for this type of project is valuable and tempting but can attract interest from individuals and organisations who are looking for a way of off-setting costs rather than seeking a genuine University-Business partnership, with benefits for all.

As a continuing study, we suggest strategies gained through the initial 8 years experience of University-Business collaborations through Canalside Studios. Our experience suggests that universities can and should adopt filtering techniques with potential business collaborators, to match expectations and ensure higher chances of project success for all stakeholders and a better focus on relationships with potential for long term partnership and mutual success.

2. BACKGROUND

In 2006 the University of Huddersfield launched an in-house computer games studio, Canalside Studios. The Studio was initially created to provide work placement opportunities for students studying computer games (programming and design). The early teams were made up of undergraduates and two members of academic staff.

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After delivering successful entertainment games for Microsoft Xbox (YoHo Kablammo and Missing Reel) this success of the studio delivering commercial software raised the profile of the studio team and highlighted its potential for other types of project including those with a more academic focus. Colleagues approached the Canalside Studio team from the Arms and Armour Research Institute to work with The Royal Armouries museum in Leeds to develop digital interactive museum displays that would appeal to the Xbox generation. The studio went from strength to strength, many projects were undertaken with various commercial and social enterprise partners.

External Partners			Internal Partners		
Organisation	Project	Business	Organisation	Project	Business
Microsoft Xbox	YoHo Kablammo	Commercial Game	University of Huddersfield / European Union	EU Researcher Night	Game
Microsoft Xbox	Missing Real	Commercial Game	History Department UoH*	Tudor Trumps	Serious Game (Education)
Royal Armouries (Leeds)	Gun Viewer & Digital Interactive	Serious Games (Public engagement)	History Department UoH*	Social identity and class	Serious Game (Education)
Frazier International Museum	Digital Interactives	Serious Games (Public engagement)	Podiatry Department UoH*	Orthopaedic (podiatry) surgery simulator	Serious Game Simulation (Educational training)
Blue Chair Creative	Prototype	Serious Game (Education early readers)	Child Nursing Department UoH*	Huddle street	Serious Game (Virtual learning environment)
Castle Hill School (special educational needs)	Prototype	Serious Game (Accessible Education)	Nursing Department UoH*	Human heart anatomy	Serious Game (Education training)
Apple Inc. & Google play	Smart phone games Katu Toka & Lapsus	Commercial Game	Music Department UoH*	Stonehenge visualisation	Serious Games (Public engagement)
Mold Green School	Reading application Prototype	Serious Game (Education training)	Music & History Departments UoH*	Aural History application	Serious Games (Public engagement)
West Yorkshire Fire Service	Driving Simulator	Serious Games (Public engagement)	Arms and Armour Research Institute UoH*	Various Digital Interactives	Serious Games (Education & Public engagement)
West Yorkshire Fire Service	Command simulator	Serious Games (training)			
West Yorkshire Police Commission	Student awareness game / application	Serious Games (Public engagement)			

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The above table highlights the projects undertaken since 2006 by the two key members of staff and the wealth of experience gained. The students involved in the enterprise are placed from their undergraduate bachelors degree after two years of study. The students spend a single year in the studio on work placement and then return to their studies.

3. OBJECTIVES

The studio has four main stakeholders in the relationship; the studio, academic staff, business partners and the students. As can be seen from the table above the business partners ranged from commercial platform holders, social enterprises to internal University partners. The table below lays out the key objectives of the initiative and highlights stakeholder criteria.

Objective	Studio outcome	Staff outcome	Partner outcome	Student outcome
Work Placements		☐		☐
Enterprise	☐	☐	☐	☐
Education	☐	☐		☐
Research	☐	☐		
Curriculum Development		☐		☐
Entrepreneurial mind-set	☐	☐		☐
Esteem	☐	☐	☐	
Impact	☐	☐		
Community	☐	☐	☐	☐
Ecosystem	☐	☐	☐	☐
Sustainability	☐	☐	☐	☐
Financial income	☐		☐	☐

4. RESPONSIBILITY

The projects table indicates the studio is a route for both commercially aware partners and also charitable and social enterprises to engage the University. The responsibility for the various projects is shared between the two key members of studio staff and the support structures within the University. A typical route for a client to the studio could be through the University Enterprise office; the contact is passed on to the studio, which, after consultation with the client determine if the project is feasible, given the capabilities of the studio and a match to the studio strategy. After the initial years the studio formed networks within the working partnerships and through both the game and academic publications, leading to word of mouth referrals from existing partners. The responsibility for the management of the studios is with the two core academics and the responsibility for the successful implementations of the project lies with the entire stakeholder team.

IMPLEMENTATION & FUNDING

5. STRATEGY & ACTIVITIES UNDERTAKEN

Universities are now being asked to fulfil an economic role outside of providing highly educated workers. Government policy now requires universities to become more self sustaining through student fees and more enterprising through the exploitation of their

intellectual property and research and enterprise activities. The policy makers see the modern university as an entrepreneurial establishment; a partnership between government, industry and universities, 'the triple helix' creating innovation, wealth and economic prosperity.

The University and School strategic plans emphasise the move by UK Universities to engage in the wider economic and enterprise direction of government policy. The studio model has allowed the government policies on placements, research and enterprise to be partly fulfilled.

Commercial and research projects

- 5 Commercial games
- 7 Public engagement serious games
- 5 Educational serious games
- 4 Simulation / training serious games

The studio's strategy initially to develop knowledge of computer video games practice and to provide staff authenticity and student placement opportunities was successful. Over the eight years of projects the studio has moved from a commercial games studio manned by academic staff and placement students to a hybrid video games studio and serious games research facility. This shift in focus is aligned to the developments and strategy of the University. In 2006 the university of Huddersfield was a mainly teaching led institution, by 2014 it is a research led institution, Times Higher Education (THE) Entrepreneurial University of the Year 2012 and THE University of the year 2013. The studio has mirrored the University strategy and has moved from students being exclusively from the University undergraduate taught programmes to a combination of postgraduate research (PGR) and undergraduate students. This shift in strategy and focus can be seen in the profile of projects undertaken, initially being commercial game focused to a serious game visualisation focus.

6. MONITORING AND EVALUATION

The studio monitors it outputs based on the deliverables for any given project and the satisfaction of the stakeholders and clients concerned. The studio uses both qualitative and quantitative methods to determine the Cost Benefit Analysis (CBA) of the studio projects and the appropriate outputs as the benefits to the various stakeholder are numerous and complex.

The following table is an example of benefits to stakeholders.

Benefits	Studio	Staff	Partner	Student
Placements		☐		☐
Enterprise • Projects / Software • Research • Consultancy • Spin out	☐ ☐ ☐	☐ ☐ ☐	☐	☐ ☐
Education		☐		☐
Research • Journal papers • Conference presentations • Masters by Research awards		☐ ☐ ☐		 ☐

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Curriculum Development • Currency • Feed in • Authenticity		☐ ☐ ☐		☐ ☐
Entrepreneurial mind-set	☐	☐		☐
Esteem • Industry value • Research esteem • Recruitment	☐	☐ ☐ ☐	☐	☐ ☐
Impact • Research impact • Software impact	☐	☐ ☐		
Community	☐	☐	☐	☐
Ecosystem	☐	☐	☐	☐
Sustainability • Stakeholder value • Student recruitment	☐ ☐	☐	☐	☐
Financial income	☐		☐	☐

The table above are not the full benefits of the studio and it is not always possible to translate benefits into straightforward monetary value.

Through CBA we attempt to measure the positive or negative consequences of a project:

a. Value and effects on users or participants
b. Value and effects on non-users or non-participants
c. Internal effects
d. External effects
e. Social benefits

7. SUSTAINABILITY MEASURES

The establishment of Canalside studios back in 2006 and the initial seed funding of £200,000 led to a successful first title and subsequent commercial games releases. The studio model is not simply based on income generation. As can be seen from this case study, stakeholders derive different value through the outputs of the studio. The main output that benefits teaching is increased student entry profile and sustainability in student numbers recruited to the games degrees. Through questionnaire and empirical evidence we found students chose to study at Huddersfield because we do not just teach games we make games. Therefore the University selects to annually fund the studio bursaries and on-going costs. The additional income through sales, grants and venture funds is used to purchase project specific equipment, fund PGR students and to fund dissemination of the studio good practice through events such as UIIC.

Prior to the change in UK University funding (2011) the Higher Education Funding Council for England (HEFCE) provided funding to universities for students on a placement year. The HEFCE pro rata contribution was allocated by the school to cover over 50% of costs of student bursaries in the Studio.

8. COSTS

The table below indicates running costs.

Item	Cost
Student Bursaries	£8,000 per student (typically 8)
Equipment maintenance	£2,000
New equipment	£3,000
Travel	£2,000
Miscellaneous	£1,000
Total costs	£72,000

NB. All indirect costs i.e. room, heating, Internet and telephone are covered by the School.

9. FUNDING

The studio was initially seed funded through an internal University strategic grant of £200,000. The studio used the money to establish a studio environment; desks, equipment, licences and student bursaries. The University provides annual funding as described above and subsequent additional case-by-case project funds have been sought through various means.

1. Research council bids (research)
2. European Grants (ERDF) funds, i.e. to support University outreach programmes.
3. Higher Education Innovation Funds (HEIF)
4. Collaborative Venture Funds (CVF) Designed to inject initial funding into a project. These funds are small pockets of money design to rapidly develop an idea to see if any future potential value exists
5. Self funded projects
6. Regional development grants
7. Combinations of the above

OUTCOMES & IMPACT

10. OUTCOMES

Student placements
Masters by Research awards (PGR)
Staff authenticity
Staff publications
Studio publications (games)
Contract research
Consultancy
Joint funding applications
Research software
Heritage tools
Educational tools

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Intellectual property (research)
Collaborative networks
Ecosystem (Research & Enterprise)

11. IMPACTS

Studio activities help to inform teaching and curriculum and add authenticity to the studio academic team. The studio is an interface with industry partners from the both the video game and other industry partners. The studio allows external facing interdisciplinary cross-university working, supporting diverse industry / academia networks. These have culminated in an ecosystem being developed around the University Innovation centre with three games companies taking up residence within the first year of the centre opening. The advantages for the companies involved are numerous, with access to academic staff and the ability to recruit from the current student base.

Short-term impacts

- Access to CVF funding
- Authenticity
- Industry recognition
- Awareness

Long-term impacts

- Proven track record in development
- Access to higher level funding
- Academic & Industry recognition
- Diverse partnerships
- Video / Serious Games ecosystem

12. INVOLVED STAKEHOLDERS AND BENEFICIARIES

Student Perspective	
Goals	Computer Games Development and knowledge transfer. A good work place experience. Esteem, publication of their work
Method and measurement	Student attendance. Suitable and completed projects. Improving and developing knowledge
Success indicator	100 % of students successfully complete work placement. Publication and recognition of their work. Clear knowledge increase. Increase in maturity.

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	Improvement in their social networking skills.
Risk	Lack of management. Lack of commitment. Disappearance of early management enthusiasm Instructor ability to maintain the motivations
Academic Perspective	
Goal	Academic authenticity. Esteem, publication of project and dissemination of research findings. Increased social capital.
Method and measurement	Recognition by students, colleagues and industry colleagues. Publication of project outputs. Publication in peered reviewed journals of research findings. Increased access to potential collaborators.
Success indicator	Increase in course and studio recognition. Increase in capabilities. Studio outputs Research outputs Increase in potential projects and their scope in terms of size and complexity, multi disciplinary nature
Risk	Lack of personal commitment Lack of management support and commitment. Lack of focus on project objectives and or stakeholder outcomes.
Industry Perspective	
Goal	Project is delivered to brief. Access to social capital and knowledge. Access to funding. Access to future employees and their education.
Method and measurement	Milestones hit and project delivered on time and within budget. Increased company knowledge and potential projects. Increase in co-funded projects and R&D. Growth and capable employees.
Success indicator	Published projects yielding an income stream.

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	Increase in project type and scope. Increase in financial support from funding bodies. Strong growth and future potential.
Risk	Overly ambitious project expectations, resulting in project not delivering to brief. Lack of commitment from management and staff. Over reliance on co funded income streams. Lack of market take up and resulting growth.
University Management Perspective	
Goal	Student satisfaction. Staff satisfaction. Improved research and teaching. Institutional esteem.
Method and measurement	National Student Survey. Well being at work survey. Student recruitment metrics; quantity and quality. University league tables.
Success indicator	Top 10% for student satisfaction. Top 10% for staff wellbeing. Higher entry profile students, while maintaining or improving student intake. Continuous improvement in league table position.
Risk	Student satisfaction drops due to focus on enterprise and research. Staff work-life balance, leading to key staff leaving the institution. Insufficient students to make a course of study viable. Drop in league table and esteem, leading to reduced income.

13. AWARDS / RECOGNITION

The studio has been recognised as an area of best practice by the UK computer games industry and regionally by Game Republic. The studio has won awards from Microsoft for games design. The University of Huddersfield has awarded a member of studio staff an enterprise merit.

Both academic staff are Fellows of The Royal Society of the Arts (FRSA) due to the studios achievements.

Other UK universities have now implemented a similar studio model on their games and multimedia departments.

LESSONS LEARNED

14. PRIMARY CHALLENGES

The academic staff leading the project had no commercial video games development experience and limited research and enterprise experience. The studio is an alternative to the more traditional research led activities, however the University had no formal mechanism for training and development of academic staff that wished to engage in these types of enterprise activities.

The initial development of working relationships between academia and the computer video games industry was not easy; the 'Industry' perception of the Studio was 'a foolhardy endeavour' with 'limited chances of success' given the inexperience of the team involved. Interactions between industry and the University needed to be moved from mainly curriculum based to 'How to make a game'. It was clear that the staff team would need developing, the Studio students having limited knowledge would need developing and industry help and guidance would be required to ensure that the first game development project succeeded.

The initial publishing contract from Microsoft Xbox required business approval and was unfamiliar to both the University and the School senior staff; involving American contract law, American tax system and indemnity insurance. This unfamiliarity meant senior staff were reluctant to sign the contract until approved by the University legal team. The lack of knowledge around indemnity insurance for computer games initially led to long delays until total liability per case had been explained.

Problems arose between the working practices of the University and the games industry, for example in arranging suitable security both physical and for computer networks. Suitable levels for both had to be implemented and the studio required a separate network to the academic network provided through JANET the UK government computer network for research centres and universities. The video games industry (Microsoft Xbox team) were timely in their responses and precise in their details; having a multinational partner was initially intimidating for the staff involved, however the Xbox team were always understanding, business like, friendly and supportive removing any anxieties. The University moved at a somewhat slower pace on decision-making and could be vague when presented with these non-traditional commercial activities.

The School initially labelled the studio as a teaching activity and not as an enterprise activity leading to issues with budget control and access to further funding. The problems encountered highlighted the lack of commercial awareness in this sector and for enterprising staff the lack of understanding and agility in University administrative practices in supporting this type of activity. Staff needed a greater understanding of how the University operated and a change in ways of working in order to facilitate the projects. A shift in culture was required from teaching related values; 'individual learning', 'experience', 'process' in a safe

environment where failure has value to practical industry values like ‘time’, ‘cost’, ‘quality’ and ‘team work’.

Key stakeholders in the studio had different notions of success and the outputs from a single project varied. Academics needed to produce strong research focused outputs together with providing a sound studio base to feed into the curriculum. Students required a valid placement experience. The games industry and project partners required a fully tested and polished final software solution, which adhered to technical and design requirements.

15. SUCCESS FACTORS

Success factor from social enterprise collaborations

Collaborations between universities and social enterprise organisations often encounter issues that can impede or challenge the undertaking. Many of these issues are predictable and can be alleviated to an acceptable level for all concerned once precise goals are determined and the scope and limits of a project are agreed.

Because universities in the UK are publicly funded, and as educational establishments are broadly perceived as working for the benefit of the public and therefore for ‘public good’, it could be argued that there is a natural affiliation between universities and social enterprises based on values. However changes to funding in UK universities and the move to more corporate forms of management and organisation in the sector, including issues around diversification of income and industry engagement, means that there have been significant shifts in the culture and governance of universities making them more business like and less philanthropic than in the past.

Social enterprises seeking to work with universities may not fully understand the changing nature of the university and how a university conducts research and enterprise. Whilst collaborations between universities and external partners may not always be revenue generating for the university there is an expectation of alternate quantifiable value in order to justify the effort, for example in the form of research outputs or ‘impact’.

Our own experiences through the Studio found that partnerships with social enterprises were often complicated by the many voices represented within the organisation and that the problem or project being proposed was not quite resolved enough to be worked on effectively leading to different ideas and approaches on how resource should be employed, and the major direction in which the collaboration should go. This is highlighted when a single organisation commissions a piece of software many competing interests are brought to the fore and have to be resolved before priorities can be established and design work begun.

Social enterprises have knowledge and expertise of their own domain and understanding of the business world in general, however a software studio can seem quite alien as the processes and complexity of making even a small piece of software are often poorly understood and the amount of work involved frequently underestimated. This can lead to embarrassing requests and awkward moments as it becomes necessary to explain that although software, games and apps are everywhere in our society they are seldom quick or cheap to make. This in-turn can lead to emergent goals and a reduction of scope for the project. Clear, measurable goals and objectives need to be tied down from the outset. Even with these in place, interpretation of the deliverables can be mismatched; partners need to be

in constant consultation over the early stages of the project, with regular updates and discussions on the project flow. A clear lesson on what each partner requires and how often partners input into the project needs to be defined, in terms of human input, time, complexity and deliverables.

To avoid misunderstandings a clear time line needs to be established and knowledge transferred between the parties on working practices of their respective organisations.

All parties must understand their input in the costs and benefits from the project. Typical not for profit budgets have many competing interests, and many have experienced projects where minimal deliverables were achieved. Social enterprises tend to have limited financial resources and are likely to be risk averse and they will understandably be concerned with their responsibility to their own stakeholders. This conservatism can impact on their activities and ventures with new partners where too little risk and initiative translates into fewer benefits, both parties must ensure their skills and resources are complementary. Social enterprises may not fully appreciate the value their brand can bring to a product and esteem attached to working for the enterprise; they may not understand the value created through their partnerships and visa-versa. As the project moves forward parties must maintain focus and not become complacent with their new partners and the responsibilities each has. Communication and sharing knowledge is important to prevent uncertainty and this must be consistent for the duration of any project.

The structure and the culture can be a major source of mismatch, reflected in their working practices, from decision making to availability, the hierarchical nature of the university is in contrast to the consensus driven approach of the social enterprise partner.

Conclusion

Social enterprise and university relationships need to be carefully planned, structured, nurtured, maintained and developed in a synergistic nature that enables all to contribute to the undertaking. Fulfilling objectives for the university and the social enterprise and generating value and outputs for all. Recognising and realising the benefits is not straightforward and requires commitment in terms of resources and skills for both parties. There is no simple solution or single best practice to ensure success, certain problems are foreseeable and can be avoided, however some difficulties inevitably arise and effective communication and a willingness to learn is necessary on both sides. Projects are most effective where a team comes together and understanding, forming, norming and performing are developed together with a shared determination to overcome any obstacles.

Principals from both require a full and rich understanding of the factors and processes that drive, sustain, and support their partners' organisations and the rich crossover that these partnerships may bring. Universities are ideally placed to ensure the social enterprise opportunities are developed and theories, concepts and frameworks disseminated, ensuring future success for all.

16. TRANSFERABILITY

The above case study is broadly transferable and the lessons applied to any university and industry projects. A technology studio capable of producing or prototyping software has multiple applications and provides opportunities for working with diverse partners.

Industry benefits

- Universities can provide bespoke software solutions and training solutions with on-going, results driven, cost effective solutions.

- With collaboration in place, organisations can access a wealth of cross-disciplinary knowledge and consultancy. Within the Universities, organisations can also access academic social capital.

- Access to this social capital creates the opportunity for organisations to access open research throughout the university, with the potential to apply developments in technology or research to practical or industry problems.

- Organisations with good working relationships with a university are in a position to contribute to courses and curriculum development by providing advice on current industry needs and practice. Industry relevant curricula are important for graduate employability as this gives employers confidence in the university and its students and helps students develop and demonstrate appropriate skills.

- Organisations with close relationships with a university or course (particularly where they contribute to teaching through occasional studio support, guest lecturing etc.) can get early indication of high performing individuals and therefore 'cherry pick' students, and a type of pre-interview can be established.

- Larger organisations can collaborate and then influence the software requirements of a course within the University and influence the direction of the curriculum and tools used to deliver it. This has huge advantages once the students who experience these tools graduate and influence their new organisations technology choices.

- Continuing and professional development for the partner organisations can be assessed and appropriate training courses designed and delivered.

- Partners can access University research and innovation funding streams through these collaborations; these can be joint ventures in either the universities core business of education and or enterprise/research activities.

Academic benefits

- Placement of students within partner organisations provides employment opportunities and intern opportunities.

- Industry input into the curriculum and it's delivery through shared experiences and projects. This will enhance the curriculum and in turn maintain curriculum currency. Industry provides feedback on the skills and competencies required.

- Working with industry allows partners to recognise future projects and collaborations. These can take the form of commercial work or research or continuing education.

- Strategic partnerships between a particular industry or organisation and a university allow for longer term planning and help to develop centres of excellence and local

clusters of specialist knowledge and expertise.

- Working with industry opens up new funding streams; research councils are increasingly interested in the commercialisation of research and therefore look favourably on joint bids.
- Credibility with industry gives recruitment advantages with future students.
- □□□□□□□□□□□□□□□□□□□□ maintains the scholarly knowledge of the academics involved.
- Industry–university cooperation is very effective in generating innovation.
- Economic advantage benefits the local community.

Conclusion

This case study has examined and discussed the main issues and important success factors to emerge from empirical evidence from two academics involved in industry-university collaboration across eight years of study. Common themes have emerged through the investigation and good practice models have emerged providing a useful tool that could be applied to future collaborative projects thereby improving the success of the project and stakeholder outcomes.

Essential to the success of any project is strong project management, a shared vision and agreed objective set. Milestones are set and achieved with strong management and monitoring of the project. Good communication with the project manager and stakeholders ensures no misunderstanding of the brief agreed.

Both unidentified external and internal factors such as corporate strategies and changes in management mean the collaboration and management of such activities needs to be flexible enough to cope with unforeseen change.

Successful collaboration is based on a clear set of objectives and deliverables, with a relationship based on trust, commitment, knowledge and skill transfer.

Benefits to collaboration must include measures that maintain the commitment and interest of all parties; these should be clearly defined and revisited during the course of the relationship. A good relationship will ensure a balance of benefits.

The issues in this case study have wide relevance. This research needs to be taken forward with colleagues from across academia and industry to further validate the existing success factors and models and identify others. Future research will concentrate on the validation of these findings and models through additional cases involving other academics and industries engaged in similar collaborative projects. This work will enable further testing and refinement of the good practice models as a tool for future collaborations.

FURTHER INFORMATION

17. PUBLICATIONS / ARTICLES

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18. LINKS

- http://www.canalsidestudios.com
- http://www.hud.ac.uk
- http://gamerepublic.net/

19. KEYWORDS

Innovation, academic, industry, partnership, collaboration, enterprise, social enterprise, values

20. PUBLIC CONTACT DETAILS

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