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## Models and Lenses for Entrepreneurial Academics and Enterprise Educators

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### Abstract

Adapting ideas of framing and metaphor from the work of Lakoff and Johnson (Johnson & Lakoff, 1980) and lenses from Jesse Schell (Schell, 2008) the research will offer participants a set of lenses and models for entrepreneurial academics and enterprise educators. Presented as a set of cards and or a digital app version currently under development, it is intended as a working toolset where each model provides a set of lenses that provides a set of questions and references for academic, students and educators to apply to the processes and situations around enterprise.

### Introduction

Gibb's (1988) *The Enterprise Culture: Threat or Opportunity?* Defines Enterprises as:- "The exercise of enterprise attributes in any task or environmental context"  
He further defines the enterprise attributes as

- Initiative
- Strong persuasive powers
- Moderate rather than high risk-taking ability
- Flexibility
- Creativity
- Independence/autonomy
- Problem-solving ability
- Need for achievement
- Imagination
- High belief in control of one's own destiny
- Leadership
- Hard work

and an entrepreneur as:- "Someone who demonstrates a marked use of enterprising attributes, usually in commerce or business" From Gibb's definitions it could be argued that the business and commerce of Higher Education is Education, Research and Enterprise. Although much research has furthered the Gibbs model, we see this as a valid starting point for developing the models and lenses. Various typologies have been proposed in the past to describe different types of entrepreneur (Birley, 2002; Brennan, Wall, & McGowan, 2005; Dickson, Coles, & Smith, 1998; Jones-Evans, 1995; Landau, 1982)

The research explores the notion that entrepreneurship is a mode of behavior in which different entrepreneurial types engage differently based on motivations, opportunity, working styles and environments and that therefore the individual must adopt different strategies and tools for success. By comparing different entrepreneurial types and their context and operational styles (within the HE environment) it is hoped to extrapolate models which can be adapted and applied as a set of tools or lenses.

Once the individual's entrepreneurial type and preferences have been assessed it should be possible to identify the lenses most useful to them.

### University of Huddersfield Enterprise Models

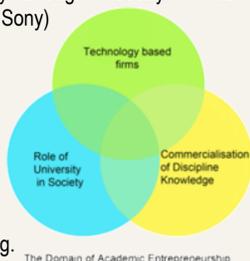
Looking around the University of Huddersfield the following non-validated models were recognised.

### The Apprentice Entrepreneurial Academic (The Canalside Model)

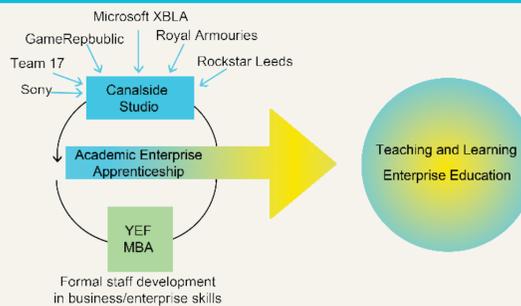
In 2005 in response to a shortage of work placement opportunities for students studying computer games, the University of Huddersfield established its own in house games studio. Canalside Studios employs a small group of students each year from the Games Design and Games Programming routes. Supported by members of academic staff the studio has successfully produced and published computer games for PC, Xbox Live Arcade and mobile platforms and translated research into serious games. Canalside studios over the years have experience a wide range of both commercial and academic partners. Informed by the shared experience between partners, students and staff, designing and delivering commercial products to market in the studio, we are currently developing a "set of lenses for enterprise" as a practical toolset based on academic models for use by other students and staff interested in exploring enterprise in the curriculum or commercialising research.

Staff responded to both the needs of the students and the studio by undertaking personal development, both formally (MBA, Yorkshire Enterprise Fellowship) and informally through industry friends and mentors (Rockstar, Team 17, Microsoft, Sony)

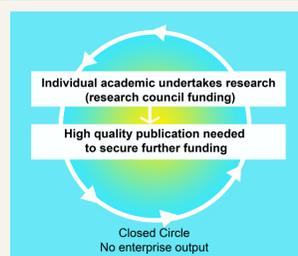
The domain of academic entrepreneurship, adapted from: (Brennan, et al., 2005)  
As staff, business and enterprise awareness increases the classroom environment becomes more open/permeable to business and enterprise opportunities, ideas and ways of working.



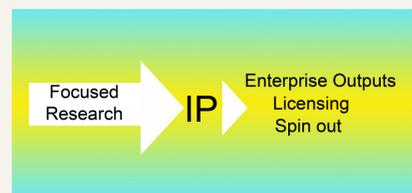
### The Canalside Model



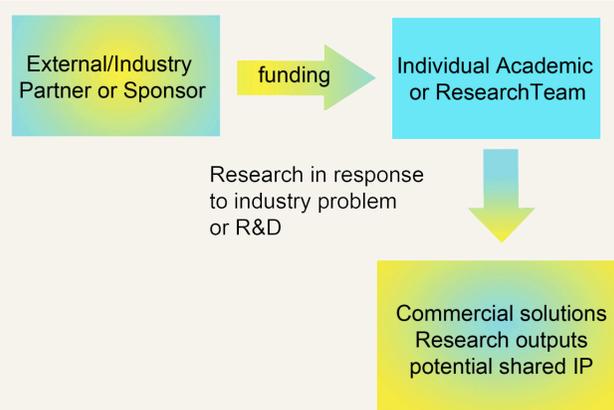
### The Traditional Academic Model



### The IP / Patent Enterprise income Model



### Industry Sponsored Research Model



### Knowledge Transfer Studio Enterprise Educator Model



Example undergraduate pathway diagram (3 years degree)

### Example Lenses

Lenses allow the user to view their enterprise activity from many different perspectives. The lenses will be ground in entrepreneurial and enterprise fields as diverse as marketing, ethics, economics, organisational behaviour, strategy and leadership. It is intended that the lenses will be both available as a set of cards and as an app for smart phones.

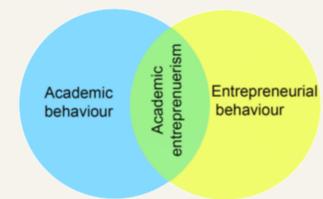
An example lens :-

The lens of Time Thieves.  
Can this collaboration achieve mutually positive outcomes  
Is this collaboration SMART  
Is there any contradictions or clashes  
If so, how do I change that for both parties

The lens of Institutional Support  
Do I have the support of my superiors?  
Is my activity inline with the Institutions strategy?  
Are the resources available  
If not, can the resource be acquired?  
Is the activity within the remit of my job?



### Academic vs. Entrepreneurial Behaviour



Whilst some authors suggest that there are tensions within higher education between academics who see themselves as protecting traditional academic values which undertaking traditional research and organisations' changing mission to contribute to economic growth through increased enterprise activities, paid for research or spin out activities (Philpott, Dooley, O'Reilly, & Lupton, 2010; Rinne & Koivula, 2005; Williams, 2002) it is clear that entrepreneurial activity is more prevalent in some areas of academia than others for example biosciences, engineering and technology subjects and where collaborative partnerships with industry or external partners are more likely (Belcher & Trowler, 2001; D'Este & Fontana, 2007; Martinelli, Meyer, & von Tunzelmann, 2008).

Hay *et al* (2002) suggest the difference between academic behaviour and entrepreneurial behaviour may not be quite so distinct as some suggest, a key difference being attitudes to risk-taking with traditional academics being generally more risk averse and therefore the nature of the work environment may be significant. Etzkowitz (2003) states that in research universities, research groups function in a firm like way and share many of the qualities of a start-up company so the transition from academic to enterprise culture is less difficult and this may support spin out activities.

### Types of Academic Entrepreneurs

Brennan (2005) recognises four clear types of academic entrepreneur from a selection of nine academics across different disciplines.

**Hero** – a highly social academic producing knowledge at the forefront of their discipline, using their social capital to be fully engaged in the entrepreneurial environment.

**Maverick** – an academic with a strong interest in interdisciplinary knowledge production and on the application of knowledge to problems outside academia using their own scanning network and tend not to engage with university systems.

**Broker** – a highly social interested in inter-disciplinary knowledge trading or exchange and the application of knowledge in the wider entrepreneurial environment. They use all their social capital and network both internal and external entrepreneurship environment.

**Prospector** – a highly individualistic academic who's main interest is in the application of discipline knowledge and interdisciplinary knowledge trading/exchange. The have low use of university-based systems as they are strongly oriented towards the external, wider entrepreneurial environment.

### Conclusion

It is hoped that the research will lead to a set of valid enterprise models and lenses and analysis of character and approaches. The application will use a needs based recommendation agent providing the user with a set of lenses to facilitate the appropriate model. The user rates what is important in terms of enterprise and the app will present the user with a suitable tool kit.

### Sign Up and Participate

Participants will be provided with a prototype card set and application to use in their everyday enterprise activities. It is intended that the participants will continue to apply the models and lenses and by employing a Delphi approach an iterative design process will be set in motion. After each round the data will be analysed and the application will be updated. It is hoped that the lenses will be applied to a variety of enterprising activities within the Higher Education environment. The lenses and research will be used to form models for Academic Enterprise, these when coupled with the lenses will provide an invaluable toolset. The interested parties will participate, develop and share best practice through continuous improvement.

### References

- Belcher, T., & Trowler, P. R. (2001). *Academic Tribes and Territories: Intellectual Enquiry and the Cultures of Disciplines* (2 ed.). Open University Press.
- Birley, S. (2002). Universities, academics, and spinout companies: lessons from Imperial. *International Journal of Entrepreneurship Education*, 1(1), 133-153.
- Brennan, M. C., Wall, A. P., & McGowan, P. (2005). Academic entrepreneurship: Assessing preferences in nascent entrepreneurs. *Journal of Small Business and Enterprise Development*, 12(3), 307-322.
- D'Este, P., & Fontana, R. (2007). What drives the emergence of entrepreneurial academics? A study on collaborative research partnerships in the UK. *Research Evaluation*, 16(4), 257-270.
- Dickson, K., Coles, A., & Smith, H. (1998). Science in the market place: the role of the scientific entrepreneur. In W. Daring & R. Oakey (Eds.), *New Technology-based Firms in the 1990s* (pp. 27-37). London: Paul Chapman.
- Etzkowitz, H. (2003). Research groups as 'quasi-firms': the invention of the entrepreneurial university. [doi: 10.1016/S0048-7333(02)00009-4]. *Research Policy*, 32(1), 109-121.
- Gibb, A. (1988). The Enterprise Culture: Threat or Opportunity? *Management Decision*, 26(4), 5.
- Hay, D. B., F. Butt, & Kirby, D. A. (2002). Academics as Entrepreneurs in a UK University. In G. Williams (Ed.), *The Enterprising University: Reform, Excellence and Equity*. The Society for Research into Higher Education and Open University Press.
- Johnson, M. M., & Lakoff, G. (1980). *Metaphors we live by*. Chicago: University of Chicago Press.
- Jones-Evans, D. (1995). A typology of technology-based entrepreneurs: A model based on previous occupational background. *International Journal of Entrepreneurial Behaviour & Research*, 1(1), 26-47.
- Landau, R. (1982). The innovative milieu. In S. B. Lundstedt & E. W. Colglazier (Eds.), *Managing Innovation: The Social Dimensions of Creativity*. New York: Pergamon Press.
- Martinelli, A., Meyer, M., & von Tunzelmann, N. (2008). Becoming an entrepreneurial university? A case study of knowledge exchange relationships and faculty attitudes in a medium-sized, research-oriented university. *The Journal of Technology Transfer*, 33(3), 259-283-283.
- Philpott, K., Dooley, L., O'Reilly, C., & Lupton, G. (2010). The entrepreneurial university: Examining the underlying academic tensions Kevin Philpott a, Lawrence Dooley a,n, Caroline O'Reilly b, Gary Lupton. *Technovation*, 31 161-170.
- Rinne, R., & Koivula, J. (2005). The Changing Place of the University and a Clash of Values? The Entrepreneurial University in the European Knowledge Society A Review of the Literature. *Higher Education Management and Policy*, 17(3), 91-123.
- Schell, J. (2008). *The art of game design: a book of lenses*. Amsterdam: Morgan Kaufmann.
- Williams, G. (2002). *The Enterprising University: Reform, Excellence and Equity*. The Society for Research into Higher Education and Open University Press.