

Impact case study (REF3)

Institution: Falmouth University		
Unit of Assessment: 32		
Title of case study: Falmouth's Launchpad Programme: Solving Economic Challenges in a Deprived Region		
Period when the underpinning research was undertaken: 2016-2020		
Details of staff conducting the underpinning research from the submitting unit:		
Name(s):	Role(s) (e.g. job title):	Period(s) employed by submitting HEI:
Dr Jeremy Richards	SL, Entrepreneurship	2002 - present
Dr Ufi Cullen	SL, Entrepreneurship	2019 - present
Professor Tanya Krzywinska	Director, Games Academy	2013 - present
Dr Michael Scott	Head of Computing	2015 - present
Professor Simon Colton	Digital Games Technologies	2014 - 2018
Associate Professor Rob Saunders	Computational Creativity	2016 - 2019
Period when the claimed impact occurred: 2017-2020		
Is this case study continued from a case study submitted in 2014? N		
1. Summary of the impact		
<p>Launchpad was created as a result of a strategically led research and innovation investment, led by the Vice-Chancellor & Chief Executive. It is an incubation and acceleration program that facilitates the creation and scale-up of businesses in the digital creative economy. It is formed around a methodology starting with an identified market opportunity, to form innovative products and services fused with development concepts emerging from Video Games Development. Between 2017 and the end of 2020 the programme incorporated 30 firms with an external investor lead valuation of £8.6m. It has created 59 Co-Founders with inward investment (pre-seed and seed) in excess of £1.5m. Launchpad has made a significant contribution towards the Local Industrial Strategy's ambition of becoming an internationally renowned rural creative region.</p>		
2. Underpinning research		
<p>Cornwall is a peripheral and rural region with a dispersed population that suffers from long-term economic challenges. Skill levels are low and annual income is 80% of the national average. The business landscape is dominated by micro-businesses and the self-employed are in traditional sectors: farming, tourism/hospitality, retail and construction. As part of its role as an anchor institution in Cornwall, Falmouth University partners with public and private sector organisations to support the county's economic, skills and enterprise agendas. Specifically, the university set up Launchpad - an incubator and accelerator programme - to help address the region's economic challenges by creating high-growth businesses in the creative economy. The research teams underpinning Launchpad were based in the School of Entrepreneurship and the Games Academy (Dr Jeremy Richards (2002) and Dr Ufi Cullen (2019), both Senior Lecturers in Entrepreneurship, Professor Tanya Krzywinska (2013) Director of the Games Academy, Dr Michael Scott (2015), Head of Computing, Professor Simon Colton (2014), Digital Games Technologies, and Associate Professor Rob Saunders (2016), Computational Creativity). Research focussed on the development of a sustainable incubator and accelerator programme, namely the principal aspects that can contribute to the failure of young entrepreneurial companies: (a) how to create a diverse mix of entrepreneurs; (b) managing rapid development of digital products and services and customer testing in the creative economy; and (c) risk of failure through entrepreneur non-progression of business plan implementation.</p> <p>Firstly, Dr Michael Scott et al investigated the co-creation of digital content and team building. They found that Salas' Five-factor teamwork model and agile development concept was accelerating team formation and the development of mutual trust, shared mental models</p>		

and closed-loop communication. [1] This research informed the development of the team formation process utilised in Launchpad. **Secondly**, in recognition of the under-representation of women in entrepreneurship, Dr Cullen's paper [2] investigated the **sociocultural aspects of female entrepreneurship** with an emphasis on the market entry and survival phases. This insight has influenced the programme ensuring that measures are in place to create a safe-space for women to develop and test their business concepts. Professor Krzywinska and Professor Colton et al's research on **democratisation of game design** [3,4] demonstrated the value of using visual development tools to create new digital product prototypes without the need for in-depth knowledge of software development. These methods lower the barrier of entry to digital product development; improving democratisation and enabling a broader audience to use their creativity and developing digital, scalable products and services. **Thirdly**, development methodologies described in [1,5] informed the design of the **agile product development** process used in the rapid testing and pivoting to the market stage of the Launchpad programme. Professor Krzywinska and Professor Colton et al's [3,4,5] demonstrated how a No-Code/Low-code technology approach enabled participants to create digital prototype products and services to test with users and markets, to **enable a pivot on early assumptions**. **Lastly**, the 'in betweenness' separating different stages of the entrepreneurial journey is recognised as being key points at which failure can occur (e.g. the transition between idea generation and building prototypes). Liminality is, therefore, a key theory underpinning the research related to Launchpad. Dr Richards' [6] recommended ways to improve the 'shape shifting' necessary to operate successfully in fluid networks in order to mobilise the support needed to make the transition from one state to the next.

3. References to the research

[1] Scott, M.; Parker, A.; McDonald, B.; Lewis, G. and Powley, E.J. (2019) *Nurturing Collaboration in an Undergraduate Computing Course with Robot-themed Team Training and Team Building*. In: CEP '19: Proceedings of the 3rd Conference on Computing Education Practice. ACM Press, New York, p. 5. ISBN 9781450366311 [Conference contribution] <https://doi.org/10.1145/3294016.3294019>

[2] Cullen, U. (2019). Sociocultural factors as determinants of female entrepreneurs' business strategies. *Journal of Entrepreneurship in Emerging Economies*. 12(1), 144-167 [Journal article] <https://doi.org/10.1108/JEEE-04-2019-0046>
Listed in REF 2 (Output identifier: 228)

[3] Powley, E.J.; Nelson, M.; Gaudl, S.; Colton, S.; Pérez Ferrer, B.; Saunders, R.; Ivey, P.; & Cook, M. (2017) *Wevva: Democratising game design*. Proceedings of the *13th AAAI Conference on Artificial Intelligence and Interactive Digital Entertainment*. Edmonton, Canada. [Conference contribution] <https://aaai.org/ocs/index.php/AIIDE/AIIDE17/paper/view/15855>

[4] Perez Ferrer, B, Colton, S, Powley, E, Krzywinska, T, Geelhoed, E and Cook, M (2016) *Gamika: Art Based Game Design*. *Art/Games, Beginnings* (1). pp.18-24. [Journal article] https://issuu.com/artslashgames/docs/artslashgames_ds7

[5] Gaudl, S.E.; Nelson, M.J.; Colton, S.; Saunders, R.; Powley, E.J.; Ferrer, B.P.; Ivey, P. & Cook, M.; (2018). Rapid game jams with fluidic games: A user study & design methodology. *Entertainment Computing*, 27, pp.1-9. [Journal article] <https://doi.org/10.1016/j.entcom.2018.02.007>
Listed in REF 2 (Output Identifier: 53)

[6] Gaggiotti, H.; Jarvis, C. & Richards, J. (2020) The Texture of Entrepreneurship Programs: Revisiting Experiential Entrepreneurship Education Through the Lens of the Liminal–Liminoic Continuum. *Entrepreneurship Education and Pedagogy*. 3(3), 236–264. <https://doi.org/10.1177/2515127419890341>
Listed in REF 2 (Output Identifier: 279)

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All outputs underwent rigorous peer review, being published in scholarly journals and conference proceedings which predominantly publish work at least 2* or higher.

Research grant directly supporting the impact outlined in this case study:

G1. ERDF. 'Launchpad'. 05R16P00611. Lead: Archer-Brown. £19,879,275. 01/07/16-31/08/22

4. Details of the impact

The Launchpad model's effectiveness in creating scalable start-ups in the creative sector is demonstrated by the creation of 30 scalable start-ups. This result evidences the effectiveness of Launchpad's methodology in market identification and team formation. Launchpad is centred around a four-phase methodology that reverses the traditional methods of entrepreneurship: (1A) pre-identified market opportunities are provided by the programme's strategic partners; (1B) teams are formed using data on skills and experience; (2) the teams then utilise rapid testing to pivot to the market; and (3) teams are incorporated into companies and external investment is sought. Launchpad provides a living laboratory to investigate and resolve knowledge gaps throughout the entrepreneurial journey, team building and how to democratise the development of scalable creative digital experiences. This model, based on market gap analysis, agility and a human-centred approach is influenced by the creative sector and is making a significant contribution to the innovation ecosystem in the region. Cornwall's burgeoning digital sector is attracting a significantly increased amount of talent to the region. The Games Academy itself has increased its student population by over 600% as a result. The Launchpad programme has influenced the University's overall strategy in turn, with the 2030 Strategy garnering significant national and international interest among other universities and by policy makers [5.1, 5.2].

Impact on regional economy

Launchpad has raised the region's profile as a place to create new businesses, winning the Entrepreneurship prize at the Guardian University Awards in 2017 [1.1] and gaining international acclaim at the Reimagine Education Awards in Philadelphia, USA (2016) [1.2]. Launchpad was also awarded University Enterprise Zone (UEZ) status by Research England in September 2019 [1.3]. National and international recognition of the Launchpad companies have placed Cornwall firmly on the map; Codices Interactive were identified as one of Tech Nation's Top 10 Companies to Watch 2020 [1.4] and as part of Creative England's Top 50 disruptive companies in the UK [1.5]; Data Duopoly were Finalists in the European Satellite Agency Top 50 Companies to Watch (1 of only 5 from the UK) [1.6].

According to Glenn Caplin-Grey, the CEO of the Local Enterprise Partnership: *"Launchpad is a critical component of our Local Industrial Strategy and our ability to accelerate our ambitions to secure Cornwall and the Isles of Scilly's position as an internationally renowned rural creative region. We have confidence in the market-led approach to innovation and this is enhanced by our knowledge that there is a constant re-evaluation and iterative approach to innovation design"* [2.1]. Increases within the creative and digital sector in Cornwall can be evidenced by the doubling of jobs in computer programming, consultancy and related activities, with the creation of 1,050 jobs between 2012-2017 (Cornwall and Isles of Scilly Local Industrial Strategy) [2.2].

Impact on start-ups and small to medium-sized businesses in Cornwall

Between 2017 and 2020, Launchpad has incorporated 30 high-growth potential digital businesses with an external investor led valuation of £8.6m. It has created 59 Co-Founders with an inward investment (pre-seed and seed) in excess of £1.5m, which is substantially disbursed in the county as the majority is for the creation of jobs situated locally.

The following are specific examples of how Launchpad has supported businesses to create competitive advantage in their fields;

Codices Interactive Limited have created a tool which helps games designers, artists and content creators to host quizzes on the global Twitch platform. It is now a team of 9 with a recent successful funding round of \$800k. Within a year of its 2019 launch, Codices had

already hosted millions of unique visitors each month, and has been recognised by Creative England as one of the ‘most exciting, innovative and disruptive creative companies and individuals across the country’ [1.5]. The ability to manage the transitions between different stages of their growth journey has been critical to them [B3:6], according to their CEO, Tim Edwards: “Launchpad has helped me overcome some of the ambiguity in making transitions between different stages of building our business. I genuinely think that without that ability, I wouldn’t have been able to steer the company to be as successful as it has been” [3.1]. **Data Duopoly Limited** have drawn upon games design technology to design an app which helps visitors navigate large visitor attractions. Dr Cullen’s research [B3:2] into multi-culturalism and gender diversity in entrepreneurship informed the design of the Launchpad Programme to create an environment where this diverse pair of female Co-Founders have been able to thrive and develop their leadership potential: “We know we’re recognised as strong leaders in the Launchpad community and we’re keen to share as much of our experience with other co-founders and to inspire women to become tech entrepreneurs”. Data Duopoly rapidly incorporated a response to social distancing in the wake of the COVID-19 pandemic. “Rapid, iterative prototyping is embedded in Data Duopoly’s DNA, so we were able to steal a march on our competitors and take something to market quickly and with confidence”, Tanuvi Ethunandan, CEO [3.2]. **Waving Bear Studios** are another pioneering games studio that has created a new games genre which has attracted significant levels of interest from international investors. The business has traction among international investors who believe so strongly in the concept that they are willing to invest for the game to be self-published. Tom Unigi, international investor stated; “The level of innovation emerging from the Launchpad programme at Falmouth University is really impressive. The skills the teams are learning and developing are analogous with entrepreneurs I’ve invested with both in London and the US West Coast. We are particularly interested in Waving Bear’s approach to game design and feel that it presents new opportunities in a saturated market, we’re excited to be involved at this stage” [3.3].

Impact on graduate entrepreneurship

The Launchpad model is at the heart of Falmouth University’s focus on employability and entrepreneurial skills which are of particular importance within the creative economy. This has contributed to Falmouth University as being recognised as having among the highest number of graduates moving into founder or CEO roles (ahead of Universities of Cambridge, Oxford and LSE (Hitachi Capital Invoice Finance [4.1]). This is underpinned by Falmouth’s performance in the 2020 Graduate Outcomes Survey which evidenced that 22% of Falmouth’s graduates are in self-employment, compared to 5% across all UK universities. This is particularly important in retaining graduates in the county, given the relatively low proportion of large employers within Cornwall. In addition, the University’s model of entrepreneurial employability was featured in a report by Jisc and Emerge Education [4.2]. As Cornwall’s anchor University, a key objective of the 2030 Strategy is ‘Taking Cornwall Global’. Fundamentally, the University is directly responding to the needs of the future economy by removing the boundaries between learning, enterprise and innovation. A report by Hatch Urban Solutions estimated that if the University meets its targets, its economic footprint will grow to £200m in GVA (2020 prices) and 4,260 FTEs, which would represent approximately £1 in every £54 in GVA produced in Cornwall [4.3].

Impact on policy

The Launchpad methodology provides a blueprint for demonstrating how university research and its practical implementation plays a substantial role in business incubation and knowledge exchange, while making an impact on regional economic regeneration. The programme has generated significant interest resulting in over 220 invitations to share best practice in incubation programme design. These have ranged from keynotes at national conferences including the Excellence in Education Conference (2019) and the UUK Graduate Employability Skills Conference. Falmouth was selected as one of just six universities to represent the UK at the GREAT Festival of Innovation held in Hong Kong in 2018, culminating in a conversation with Invest Hong Kong regarding the development of similar Launchpad schemes there. The approach has been recognised by a number of Universities who have visited Launchpad to learn how to adopt the programme in their own institutions. One example is Professor Liz

Barnes, Vice-Chancellor of Staffordshire University: “We are very interested in the Launchpad model as we share many factors in common with Falmouth. What gives us most confidence is that they have put so much effort into researching the detail of the model, which would take us years to replicate if we were to do it independently” [5.1].

Falmouth’s role in creating start-ups and the Launchpad programme are cited in the Cornwall and Isles of Scilly’s Local Industrial Strategy [2.2]. As an anchor institution, Falmouth will be instrumental in delivering the ambition to lift performance across the economy through nurturing an entrepreneurial ecosystem, embedding R&D, creativity and innovation in business to improve productivity. Sir Mark Walport, the Chief Executive of UKRI, visited Falmouth in 2019 and subsequently made the following statement to the Parliamentary Science and Technology Select Committee on Tuesday 26 March 2019: “Falmouth University has a very interesting entrepreneurial scheme [demonstrating that] there are very significant strengths in smaller institutions” [5.2].

5. Sources to corroborate the impact

[1] Regional economy - awards and prizes

- [1.1] Entrepreneurship prize. Guardian University Awards (2017). <https://www.theguardian.com/higher-education-network/2017/mar/30/entrepreneurship-category-award-winner-and-runners-up>
- [1.2] Reimagine Education Awards. Philadelphia, USA (2016). <https://www.reimagine-education.com/winners-2018-2017/#1591083590690-888828eb-6a87>
- [1.3] University Enterprise Zone (UEZ) Status. Research England (2019). <https://re.ukri.org/documents/2021/interim-evaluation-of-the-red-uez/>
- [1.4] Codices Interactive: Tech Nation’s Top 10 Companies to Watch 2020. <https://technation.io/news/winners-of-rising-stars-2-0/>
- [1.5] Codices Interactive: Creative England’s Top 50 disruptive companies in the UK (2019). <https://www.creativeengland.co.uk/ce50/2019-2/>
- [1.6] Data Duopoly: Finalists in the European Satellite Agency Top 50 Companies to Watch (2020). https://www.esa.int/About_Us/Business_with_ESA/ESA_Startup_competition_top_50_shortlist

[2] Regional strategy - LEP and LIS

- [2.1] G. Caplin-Gray. CEO. *Local Enterprise Partnership*, (letter, March 2021).
- [2.2] Cornwall and Isles of Scilly, Local Industrial Strategy, (Dec 2020) pgs. 4,35,39. <https://www.cioslep.com/vision/local-industrial-strategy>

[3] Start-ups and businesses

- [3.1] T. Edwards. CEO. *Codices Interactive* (letter, March 2021).
- [3.2] T. Ethunandan and E. Morris. CEOs. *Data Duopoly* (letter, March 2021).
- [3.3] T. Unigi. International Investor. (email, March 2021).

[4] Graduate entrepreneurship

- [4.1] Hitachi Capital Invoice Finance survey. <https://www.hitachicapital.co.uk/business-finance/invoice-finance/invoice-finance-blog/uk-university-s-students-most-likely-to-start-or-manage-a-business/>
- [4.2] Employability Rebooted. Jisc and Emerge Education Report (July 2020). <https://repository.jisc.ac.uk/7785/2/employability-rebooted-report.pdf>
- [4.3] Hatch Urban Solutions. Report (March 2021) https://issuu.com/falmouthuni/docs/hatch_economic_impact_report

[5] Policy

- [5.1] Prof L Barnes. Vice-Chancellor. *Staffordshire University* (letter, March 2021).
- [5.2] Sir M. Walport. CEO. *UKRI*, statement to the *Parliamentary Science and Technology Select Committee* (26 March, 2019) <https://parliamentlive.tv/event/index/c35b1424-c5c8-4778-b1db-c6cd02823e82?in=10:03:15&out=10:03:55>