



Evaluation of Ufi Grant Funded Projects 2015-2019

Ufi VocTech Trust

RESEARCH REPORT

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1 EXECUTIVE SUMMARY

Background and Methodology

Ufi VocTech Trust is a UK-based charitable trust that supports the development of digital technologies to help vocational learners obtain the skills they need for work. Its grant funded projects develop pioneering solutions that can be rolled out at scale to expand vocational learning within and outside the workplace and improve learner outcomes.

From 2015-2019, Ufi supported a wide range of projects through its grant funding calls that related to four overarching themes: Digital Learning for the Workplace; Digital Learning Collaborations; Understanding the Learning Journey and Seeding the Market. Projects were targeted at adult learners over the age of 16 and sought to support scalable, digital delivery of learning associated with workplace skills.

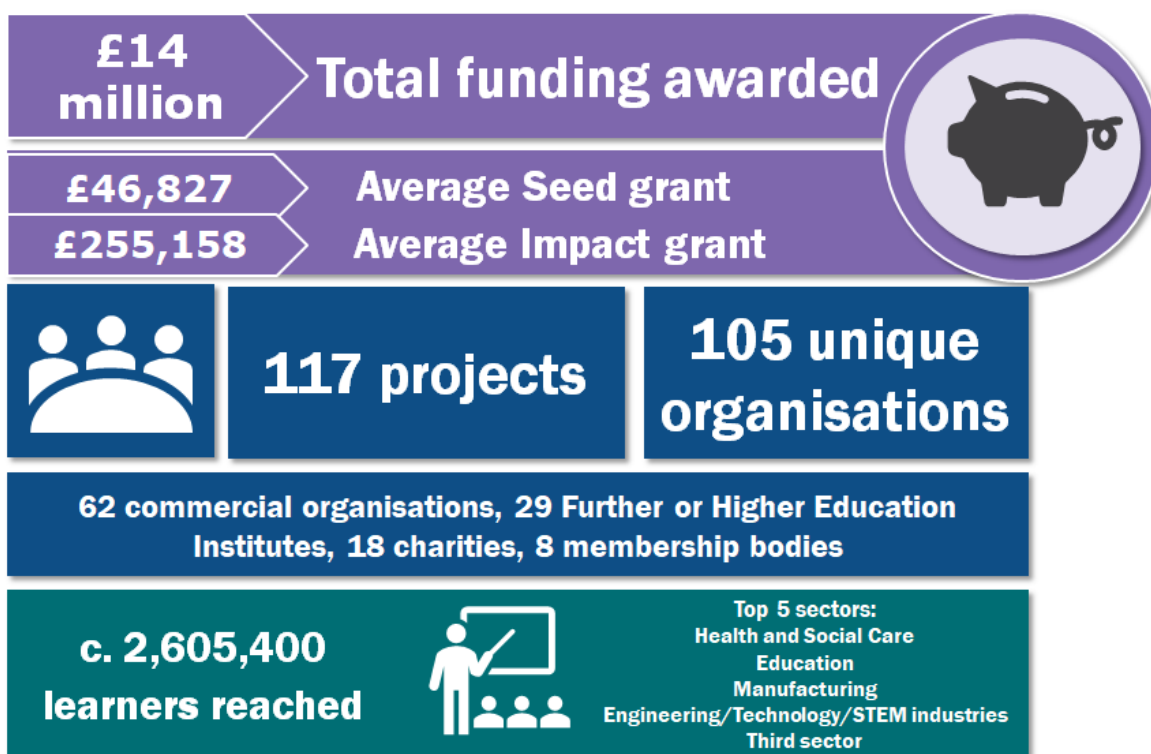
In late 2019, Ufi commissioned York Consulting LLP (YCL) to undertake an interim evaluation of 2015-2019 grant funding to determine the extent to which Ufi was delivering against its strategic aims and to understand its impact. The interim evaluation covered 59 closed projects.

By mid-2022, the majority of the 117 funded projects had closed. Ufi therefore commissioned YCL to undertake a full evaluation in order to understand the breadth of impact of its 2015-2019 funding activity.

To meet the objectives of the evaluation, YCL undertook a multi-stage research programme comprising:

- A full review of project documentation, outcome, impacts and continuation status (all 114 closed projects).
- Online survey with grantees (20 responses from 92 organisations, a 22% response rate).
- Interviews with projects (33 consultations covering 40 projects).
- Interviews with Ufi Employees (nine interviews).

Key findings



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The evaluations indicate the 2015-2019 funding strategy has been impactful and has made a positive contribution to organisations, learners and at a wider digital sector level, generating outcomes and impacts described below. Ufi's subsequent funding strategies have included VocTech Venture investments and strategic partnerships. The 2015-2019 funding strategy was focussed on grant funding.

Continuation status of projects

Of the 71 projects directly consulted across the two evaluations, the majority (50) are continuing in some form, either through commercialisation, expansion into new markets or are continuing to be developed. Across all 117 projects, evidence was found that 74 are continuing in some form.

Outcomes and impacts

The 2015-2019 strategy has been impactful for funded organisations, users and the wider digital sector in the following ways:

Organisational impact

Company growth / revenue generation	Embedding new knowledge and/or working practices
Access to new clients / Markets	Collaboration with other Ufi funded projects
Adoption of new business practices or business models	Raising the organisation's profile
Greater digitisation within organisations and/or plans to increase use of digital solutions	

User, learner and employer impact

Reaching individuals lacking in access to mainstream education and/or are furthest from the job market	Development of cutting-edge, simulated environments and tools that provide accessible learning opportunities
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Digital sector impact

Understanding and gathering insight into learner barriers and pathways	Wide applicability and cross-sector appeal	Demonstrating the power of new technologies and generating stakeholder interest
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Perspectives on the Ufi grant funding strategy

Overall views towards Ufi, its approach to funding, project management and delivery are extremely positive amongst the organisations it funds. Ufi is generally praised for its willingness to take risks, encourage experimentation and the variety of grants offered. Its perceived uniqueness as a funding body is due to:

Focus on VocTech	Connector, networker, influencer
Innovative, brave and encouraging experimentation	Collaborator, partner-friendly funder
Accelerator	Additional, wraparound support
Technical expertise and market knowledge	Well-structured approach to project management

Lessons learnt and best practice

Projects generally felt that working with Ufi was a valuable learning exercise. This applies across a number of areas such as general project management, the development of technical products and enhancing the knowledge of users (e.g., what works and barriers for different learning approaches). Lessons included:

Project design

Start with the problem, rather than the solution	Know your market
Consider the level of internal and senior buy-in	Identify the skillset of the people that you need

Engaging with stakeholder and/or user groups

Early engagement is paramount	Time and energy required to support users through change
Importance of good quality user-testing and numbers required	Physical demonstrations of prototypes help secure engagement

Project delivery

VocTech development is resource intensive	Flexibility and the ability to be agile are key
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End product

Good quality user-experience	Sector partners give credibility	Content, content, content
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Through the 2015-2019 funding strategy, Ufi's mission has been addressed via:

- **Championing the power of technology to improve skills for work and deliver better outcomes for all:** The funding has stimulated a community to produce a wide variety of products and innovations, many of which have continued.
- **Acting as a funding partner and essential friend to innovators in skills development, looking to help people progress in the workplace:** Projects commend Ufi's partnership working approach and willingness to support success. Ufi's approach to project delivery and support is highly valued, with projects embedding the approaches and working practices following funding.
- **Acting as a catalyst to cause a fundamental shift in how individuals, employers and UK society view, embrace and benefit from vocational skills development through digital innovation:** Change has been stimulated in a number of ways at different levels, contributing to shifting perceptions in how technology can be harnessed to support workplace skills development.

2 INTRODUCTION, RESEARCH BACKGROUND AND METHODOLOGY

Ufi VocTech Trust

Ufi VocTech Trust is a UK-based charitable trust that promotes, endorses and funds the increased use of digital technologies to enhance the skills of the UK workforce. Its grant funded projects develop pioneering technologies to expand vocational learning within the workplace, granting access to learning to a greater number of UK businesses, organisations and learners. Ufi's mission and vision is to:

Champion the power of technology to improve skills for work and deliver better outcomes for all.

Act as a funding partner and essential friend to innovators in skills development, looking to help people progress in the workplace.






Catalyse a fundamental shift in how individuals, employers and UK society view, embrace and benefit from vocational skills development through digital innovation.

Ufi has a particular interest in projects that use innovative methods to enhance workplace skills where traditional vocational learning methods can fail to adequately address needs, focusing on:




- Geographical areas where access to learning is problematic.
- Industry sectors where it is difficult for employers to provide training due to low-productivity or low profit margins.
- Groups of learners who are difficult to engage through conventional learning approaches.

Learning Without Walls funding activity

As outlined in the strategy document “Learning Without Walls: A strategy for funding 2015-2019”, included within Ufi’s strategic objectives as an organisation are to¹:

Support and promote lifelong learning	
Drive access to learning and vocational skills to ensure the UK’s competitiveness in a global market	
Generate and facilitate a community of developers and learning providers working in the digital arena	
Promote the value of scalable digital technologies as a viable means to aid and improve vocational learning and a credible investment market	
Encourage long-term change in the ways in which providers and learners engage with each other, with a focus on those who have typically been disenfranchised in the past	

In order to achieve these objectives, from 2015-2019, Ufi supported a wide range of projects through its grant funding calls that related to four overarching themes.

A Digital Learning for the Workplace		Projects and ideas that help employers to communicate current and future skills needs to the learning tech market to develop effective learning solutions.
B Digital Learning Collaborations		Exploration of how effective collaborative working between learning providers and developers can tackle technical and business challenges of shared platforms, content creation/ dissemination and accreditation.
C Understanding the Learning Journey		Action-based projects that focus on understanding needs and provide examples of how learners engage with digital technologies.
D Seeding the Market		Projects at an early, experimentation stage of development that can demonstrate how the product or service will be applied in adult vocational learning.

¹ Please note: Throughout the report cases study examples are used to illustrate key themes. The case studies use the icons in the graphic to highlight which of the Learning Without Walls objectives projects were targeting and/or achieved.

Overview of grant types

Generally, projects were targeted at adult learners over the age of 16 and sought to support scalable, digital delivery of learning associated with workplace skills. Projects needed to demonstrate that they had, or would have, the potential to reach high volumes of learners and enact real change through delivering accessible, easily implementable, impactful, high-quality learning. Projects were also expected to demonstrate that products and learning resources had been, or would be, designed and developed with a knowledge of digital-specific learning pedagogies and tested by target groups (notably learners, providers and employers) prior to launch.

Ufi offered a range of different grant sizes and types in order to support the development of products at different stages. Throughout the 2015-2019 funding programme the following grants were offered:

- **VocTech Seed (all years 2015-2019):** Test bed grant funding projects that are at a relatively early stage, helping to prototype ideas and work out the next steps necessary on the journey to long-term success.
- **VocTech Impact (all years apart from 2016):** Funding for larger, longer projects which provide large scale demonstration of what can be achieved with digital vocational tools.
- **Manufacturing Skills Fund (2017):** Funding for demonstrator projects to develop interesting and creative ideas that have the potential to deliver efficient / effective learning to help showcase the benefits of VocTech in the manufacturing sector.
- **VocTech Specialist (2019):** A ‘challenge led’ funding call aiming to support innovation in adult vocational skills provision to directly tackle the issues which are arising from the changing nature of work.
- **VocTech Springboard (2015) / Ad hoc/Other (2015 and 2016):** Pilot grant calls to support digital learning at scale.

In late 2019, Ufi commissioned York Consulting LLP (YCL) to undertake an interim evaluation of 2015-2019 grant funding. This evaluation determined the extent to which Ufi was delivering against the strategic aims and identified the impact of the funding. The interim evaluation covered 59 closed projects².

By mid-2022, the majority of the 117 funded projects had closed. Ufi therefore commissioned YCL to undertake a full evaluation in order to understand the full breadth of the short-, medium- and long-term impacts of its 2015-2019 funding activity.

² Ufi’s “Learning Without Walls 2015-2020: Evaluating our Impact Summary Report²” outlines the key findings from the evaluation and Ufi’s response to the recommendations. [Learning Without Walls 2015-2020: Evaluating Impact Summary report](#)

Methodology

The evaluation methodology involved the following stages.

Review project outcomes, impacts and continuation status

YCL began by identifying, cataloguing and exploring project-level data and documentation. For each closed project, the project plan, closure documents and evaluation reports (where available) were reviewed to determine its outcomes and impacts, record its continuation status and the number of beneficiaries it had reached. This was supplemented by an online search to ascertain whether there was any evidence of ongoing projects and/or products.

The resulting output was a database providing a snapshot of outcomes and impacts across the whole funding programme against key project demographics such as funding year/cohort/round, level of funding, target audience, geographical area, size and scope.

Online survey with grantees

YCL distributed an online survey to all closed projects. The survey was a streamlined version of the one used for the interim evaluation and focused primarily on lessons learnt, outcomes, impacts and the status of projects since the end of the funding period. After duplicate contacts were removed and after accounting for bounce-backs, the survey was circulated to 92 contacts and 20 of those responded (a 22% response rate).

Interviews with projects

YCL conducted in-depth one-to-one discussions with projects. In total 33 contacts were consulted covering 40 projects. The balance of the consultations was weighted towards newly closed projects not covered in the 2019-20 evaluation, but a portion of the interviews were used to re-contact some of those projects YCL spoke to previously (5 contacts covering 8 projects). This enabled YCL to track and explore their journey since the end of the funding and to capture longer-term impacts.

YCL worked closely with Ufi to identify projects to establish a balance between those considered exemplary examples of best practice, as well as those that were deemed to have mixed or lower levels of success.

focused on the following topics:

- Journey through funding.
- Outcomes and impacts.
- Challenges and solutions.
- Lessons learnt and best practice.
- Project delivery and working with Ufi.
- Perceptions of Ufi grant funding strategy.

Interviews with Ufi employees

YCL conducted interviews with Ufi project account managers in order to gain a deeper understanding, at a strategic level, of the extent to which the funding cycle has achieved its objectives. In addition, the discussions focused on the projects consulted on a one-to-one basis to enable us to triangulate findings and establish a rounded picture of how projects performed.

In total, nine consultations were undertaken with Ufi project account managers focusing on the following topics:

- Perspectives on the Ufi strategy and its objectives.
- Key achievements of projects, including indirect/unintended outcomes.
- Challenges and lessons learnt.
- Short- and longer-term impacts and the 'ripple effect'.
- Key achievements of the strategy as a whole and perspectives on next steps.

Information about **57 projects** was captured during this 2022 evaluation either through the one-to-one discussions or the survey responses. In total, across the two evaluations, YCL has gathered direct feedback covering **71 projects**. The table in Appendix A outlines response breakdown across the two evaluations and the stage(s) of the methodology to which each project contributed.

About this report

The rest of this report presents the findings from the key stages of the research. Where useful for supporting the research finding themes, examples are presented. To avoid repetition with the 2019 evaluation report, examples are largely drawn from the grantees who participated in the 2022 evaluation interview and survey stages. However, as this is a full evaluation of the entire funding cohort, key findings from the 2019 interim evaluation are built in where appropriate.

3 PROFILE OF ORGANISATIONS AND PROJECT CHARACTERISTICS

Year and cohort

The 117 projects spread across five years of funding 2015-2019 (Table 3.1). The projects covered six funding streams, with VocTech Seed representing 55% of projects.

Table 3.1: Completed projects by year and cohort

	2015	2016	2017	2018	2019	Total
VocTech Seed	8	9	15	20	12	64
VocTech Impact	1		9	13	9	32
VocTech Specialist					10	10
MSF (Manufacturing Skills Fund)			5			5
VocTech Springboard	4					4
Ad Hoc/Other	1	1				2
Total	14	10	29	33	31	117

Source: Ufi data 2022

Sector

Funded projects were operating in a number of different areas, the highest number covering Health and Social Care, Education, Manufacturing and Engineering/STEM. The breakdown demonstrates the fund has had a broad sector reach and has provided support in areas not traditionally associated with technological learning solutions.

Table 3.2: Projects by sector

Sectors	Projects
All (or non-specified)	38
Health and Social Care	17
Education	15
Manufacturing	10
Engineering and Technology / STEM industries	9
Third Sector	5
Construction	3
Automotive	3
Agriculture / Animal Care / Wildlife	3
Other	13
Total	117

Source: Ufi project records, 2022

Other categories included: Transport and logistics (2), Retail (2), Hospitality and Tourism (2), Textiles / Fashion, Police, Pharma, Employment (general), Waste and resource management sector, Culture and Heritage, Youthwork and Horticulture.

Award value

In total the projects represented a value of just under £14 million over the five years (Table 3.3). The average Seed project was £46,827 across the lifespan of the grant programme and £255,158 the average Impact fund.

Table 3.3: Total awards by year and cohort

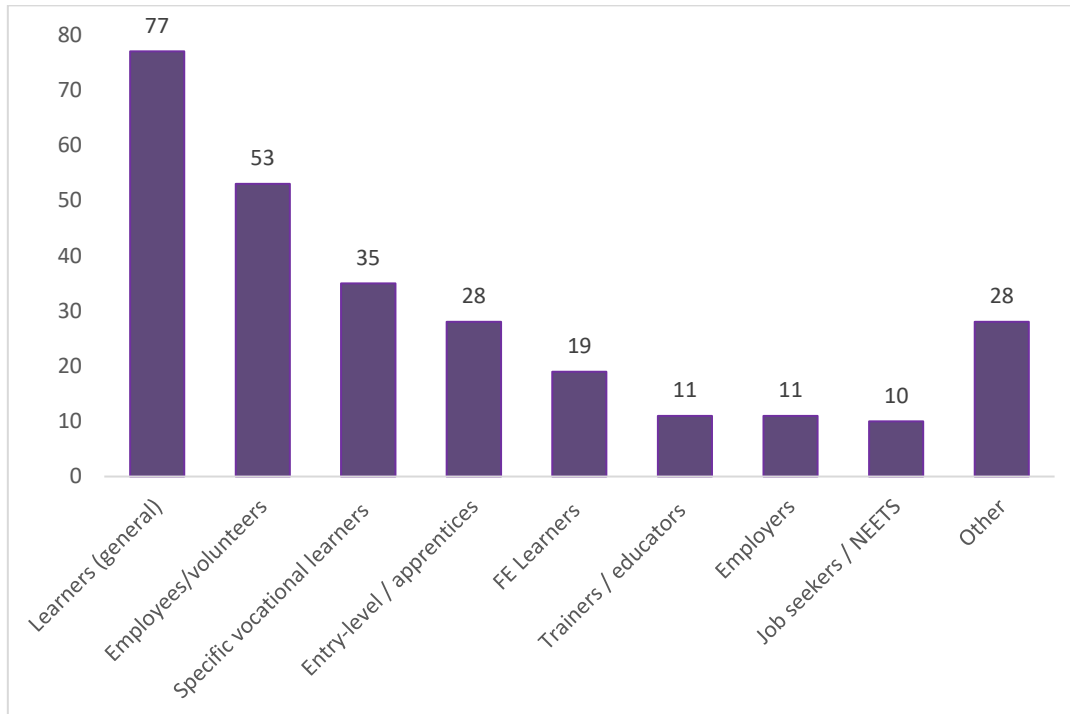
Year and Cohort	Total Award	Number of projects	Average award
2015	£1,124,609	14	£80,329
VocTech Seed	£342,673	8	£42,834.13
Ad Hoc/Other	£339,000	1	£339,000.00
VocTech Impact	£245,000	1	£245,000.00
VocTech Springboard	£197,936	4	£49,484.00
2016	£682,799	10	£68,279.90
VocTech Seed	£406,799	9	£45,199.89
Ad Hoc / Other	£276,000	1	£276,000.00
2017	£3,570,032	29	£123,104.55
VocTech Impact	£2,221,932	9	£246,881.33
VocTech Seed	£682,823	15	£45,521.53
MSF (Manufacturing Skills Fund)	£665,277	5	£133,055.40
2018	£4,454,944	33	£134,998.30
VocTech Impact	£3,470,200	13	£266,938.46
VocTech Seed	£984,744	20	£49,237.20
2019	£4,117,631	31	£132,826.81
VocTech Impact	£2,227,916	9	£247,546.22
VocTech Specialist	£1,309,798	10	£130,979.80
VocTech Seed	£579,917	12	£48,326.42
Total	£13,950,015	117	£119,230.90
Total VocTech Seed	£2,996,956	52	£46,827.44
Total VocTech Impact	£8,165,048	32	£255,157.75
Total Others	£2,788,011	21	£119,230.90

Source: Ufi data 2022

Target audience

The breakdown below indicates that Ufi grant funding reached a broad spectrum of users. The funding's reach included niche or harder to reach audiences that are traditionally underfunded in terms of learning and skills development and/or those living under challenging circumstances, where support needs can be high and complex (such as care leavers, prisoners and homeless people).

Figure 3.1: Number of projects by beneficiary type (multicoded)



Source: YCL analysis of Ufi project records, 2022. Base = 117 projects.

Other categories included:

- Those in need of numeracy / literacy support (5).
- Learners in prison / prison leavers (4).
- ESOL (3).
- People with a disability (2).
- Career-change / upskilling (2).

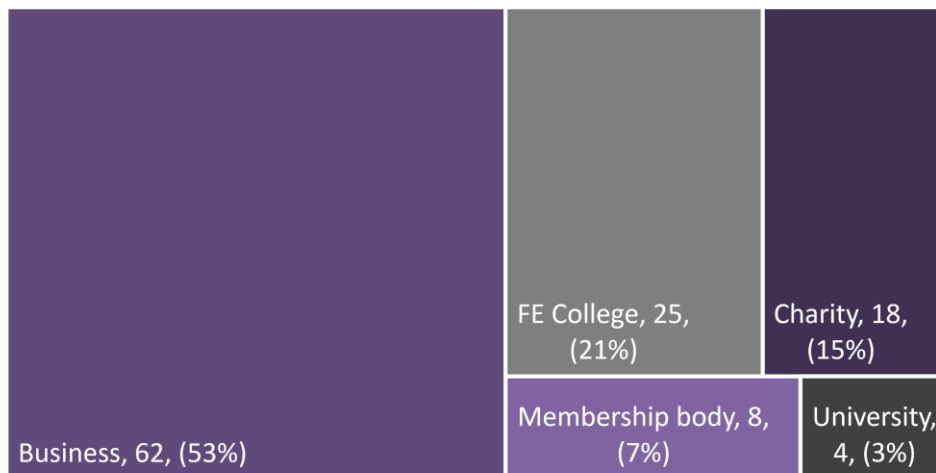
Other areas targeted by single projects included: ex-service personnel, migrants, people with a visual impairment, people with disabilities, people with learning disabilities, homeless people, refugees and asylum seekers, those at risk of redundancy, those with speech and language needs and care leavers.

Organisation type

The projects were delivered by four main types of organisation:

- Just over half (62) were delivered by commercial organisations (ranging from small start-ups to large multinational businesses).
- A fifth (25) were further education (FE) institutions and 4 were higher education (HE) institutions.
- Just over 1 in seven (18) were charities.
- There were eight membership bodies.

Figure 3.2: Projects by organisation type

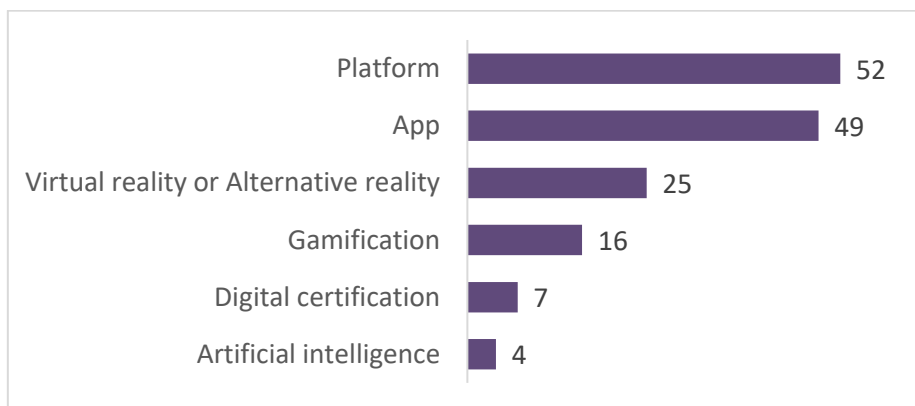


Source: YCL analysis of Ufi project records, 2022. Base = 117 projects.

Technology type

Most projects involved a web-based platform. Many also had apps or, in some cases, only had apps. Around a fifth of all projects focused on virtual or alternative reality, with slightly fewer using aspects of gamification.

Figure 3.3: Number of projects by technology type (multicoded)



Source: YCL analysis of Ufi project records, 2022. Base = 117 projects.

Other categories included: crowd funding, voice-based technology, wearables, handheld devices and learning pods.

4 STATUS AND FUTURE PLANS OF PROJECTS FOLLOWING FUNDING

Of the 117 projects covered within the 2015-2019 funding strategy, YCL gained feedback directly from 71 across the two evaluation studies. This was either through survey responses or one-to-one discussions, and in several cases, both. From this feedback, YCL coded the projects' continuation status into the following categories, based on the most recent interaction with project contacts:

Table 4.1: Continuation status projects consulted directly across the 2019 and 2022 evaluations

Status	Projects	Organisations
Continued: Successful launch and/or market expansion	38	29
Continued: Seeking a route to market	5	4
Continued: Design evolved / still being developed	7	5
Continued: Limited expansion and/or not confident with finding a route to market / dormant	10	8
Discontinued after funding	2	2
Status unclear or unknown	9	9
Total	71	57
Total continuing	60	46

Source: YCL analysis, 2022

The categories are expanded on below and described in more detail in Appendix D.

- **Continued: Successful launch and/or market expansion.** 38 projects delivered by 29 organisations have become a commercial success, achieved scale and/or market expansion through successful launch and engagement with users.
- **Continued: Seeking a route to market.** Five projects delivered by four organisations have developed a viable product that they were in the process of taking out to market at the time of the consultation.
- **Continued: Design evolved / still being developed.** Seven projects delivered by five organisations were, at the time of consultation, still in development and/or testing or progressing and exploring design, functionality or formats.
- **Continued: Limited expansion, dormant and/or not confident with finding a route to market.** Ten projects delivered by eight organisations found it challenging to scale products and secure interest from the market. In most cases, a viable product had been launched but a route to market had yet to be successfully established.
- **Discontinued after funding and status unknown.** Two projects did not continue beyond the funding. In one case, the project manager felt that they should have more rigorously tested the feasibility of the project to ensure availability of resource and time. In the other case, the project did not continue due to a lack of staff resource and senior buy-in.

- **Limited information.** There were 28 projects that took part in either the 2019 or 2022 evaluation but from the information available, it has not been possible to ascertain their current status. Either no evidence has been found of their continuation since 2019 or project contacts stated that the future of the project was uncertain. A list of these projects can be found in Appendix B.

Status of non-evaluated projects

For those 46 projects not consulted directly during the 2019 and 2022 evaluations, YCL undertook a light-touch desk research exercise to explore any existing evidence that indicated whether they had continued. Some degree of online presence (for examples, websites, available apps or recent trade press) was found for 24 projects, with the status of 20 being unknown. Two projects were discontinued at the end of the funding. Details of these projects can be found in Appendix C.

One particular success story is that of Multiverse (known as Whitehat at the time of grant funding), the impacts of which are outlined in the case study overleaf.

Multiverse



The Ufi VocTech Impact 2017 grant funding helped support the creation of a platform using machine learning to intelligently match apprentices with high-quality opportunities, allowing them to create a digital fingerprint and facilitate networking.

At the end of the funding period, the project team felt Ufi's funding had already had a great impact in helping the platform scale up. As a result of the platform's development, young people in Greater London could apply for apprenticeships on smartphones and online, using a sign-up process that showcased their skills and potential.

Further, it helped the team to introduce smart matching to the platform, collecting data at scale and improving the quality of the match made between apprentice and employer, aiming to increase retention rates and provide the employer with greater confidence when hiring school leavers.

Since working with Ufi, the organisation has reached a number of impactful milestones including:

- Breaking the record for the UK's largest EdTech venture round in 2021, with investors including General Catalyst, Google Ventures, Index Ventures, Audacious Ventures, Latitude and SemperVirens.
- Launching in the US in 2021.
- May 2022: Aiming to train more than 5,000 apprentices at SMEs and charities over the next twelve months in skills such as software engineering and data analytics.
- June 2022: By closing \$220m of Series D³ funding, Multiverse was valued at \$1.7 billion, doubling from the previous eight months and becoming the UK's first EdTech unicorn.
- August 2022: Multiverse announced it has been granted degree awarding powers - the first apprenticeship provider to do so. The first apprenticeships will enrol on Multiverse Degrees in September 2022.
- The company has grown nine times in size since 2020 and is now training professional apprentices with over 500 organisations globally.

³ Series D funding is the fourth stage of fundraising that a business completes after the seed stage. The initial round of funding after the seed stage is Series A. The second is the Series B and then the third is Series C.

5 OUTCOMES AND IMPACTS

Findings from projects that participated in the 2022 evaluation strengthened those gathered during the interim evaluation in terms of organisational, learner and wider digital vocational outcome and impact themes. The following sections explore examples of these outcomes and impacts.

Organisational impact

Ufi grant funding clearly has positive and lasting impact on funded organisations. Most grantees believed that the experience of working with Ufi had a sustained impact on the development of the funded team or their organisation. This included evolving their working practices, increasing digital technology skills and/or usage or opening doors to new markets and partners. Key impacts largely fell into the following areas:

- Company growth, revenue generation or new business models.
- Greater digitisation within the organisation and the adoption of or future plans to increase use of technical solutions.
- Embedding new knowledge and/or working practices.
- Formation of partnerships or collaboration with other Ufi funded projects.
- Raising the profile of the company.

Company growth, access to new clients/markets, revenue generation or new business models

Several organisations have been able to, and needed to, employ additional staff following Ufi grant funding. iDEA, Code Your Future, Careers Matters and National Numeracy have all grown in numbers with some also working with freelance contributors.

Code Your Future - Guided Coding Journey (VocTech Seed 2018)



The project produced a dedicated digital platform for applicants to the Code Your Future course. The platform guides applicants through initial coding tutorials to introduce them to the basics of coding.

The platform has gone from strength to strength since securing Ufi grant funding with its users receiving valuable learning outcomes. All those who apply to the programme are taken through the platform and are able to review their progress at different stages. Data is also gathered by the Code Your Future administration team to enable them to assess and support further progress. The platform has improved the efficiency of the application process and the assessment method.

The Ufi grant “created a spark of growth” within the organisation and due to the success of the platform, they now have a dedicated team for product development.

They still use the web-based platform which is continually developed to improve functionality and features when necessary. In its first year, the platform supported 500 users and since the project finished around 2,000 new coders have used the platform each year.

Several organisations have changed the structure of their business, or the product they developed has become much more central to it. These have included:

- The Citizen Literacy team: finding the development of the Citizen Literacy App and Course at the desired pace challenging within the FE environment, the team formed a spin-off social enterprise to continue the work.
- Applio started out as a consultancy business but are evolving into app and learning design. Their aim is to have an app that can be used by tutors or trainers to design game-based learning themselves, a goal supported by the Ufi grant.
- Contented Brothers felt that working with Ufi “really changed the way we present the agency”. They have since been able to evidence their belief in the value of VR as a tool and show that they have invested in the technology, enabling them to “stand out” and pitch with impact to clients.
- The NYA Learning Hub has become a central platform to the work of the National Youth Agency. Employees are regularly asked to consider how it can be used to support activities and projects they are working on.

Greater digitisation within the organisation and the adoption or future plans to increase use of technical solutions.

Ufi grant funding can encourage cultural and attitudinal changes within organisations in terms of improving digital skills and encouraging a willingness to embrace and adopt technical learning solutions. Grantees are often specialists in specific sectors and do not necessarily possess technical skills and knowledge. Working with Ufi on projects involving tech development was seen as extremely valuable in improving the technical skills of the project team and wider organisation. Further, projects were often valued for “winning hearts and minds” in sectors or working environments that have not traditionally been advanced in using vocational technology.

Boston College and LTE’s technical experience and organisational confidence grew throughout the Ufi grant funding period, and both are exploring, establishing and aiming to widen the use of blended and digital learning solutions across their institutions and networks.

GTA, NYA and PACEY also believe they have developed organisationally from a technical perspective, with the staff developing IT and digital knowledge and awareness. Digital Unite’s Aspire Champions, having increased their own confidence in using digital technologies, are now better equipped to support people with learning disabilities to enhance their digital and essential skills.

Digital Unite – DCN Aspire (VocTech Specialist 2019)



Digital Unite’s aim was to use a digital platform to create online training that enables people with learning disabilities to develop their skills and become a volunteering ‘Aspire Champion’.

Digital Unite feels the product launched is delivering genuine impact by supporting learners to enhance their essential skills for life and work. To date the platform has supported over 300 learners. Since the end of the Ufi grant funding period, the team has redesigned the Aspire platform based on user feedback to increase its accessibility. This feedback was also used to guide the development of Digital Unite's new learning platform. Relationships with existing organisations have helped inform Aspire's membership strategy. There are plans to relaunch the membership opportunity as part of a wider Champion programme, or one dedicated to people who are learning disabled, once learning has been migrated to the new Learning Management System.

Embedding new knowledge and/or working practices

In several cases, Ufi’s approach to project delivery as well its emphasis on the importance of user-focused development and gathering evidence to support decisions, encouraged projects to adopt new working practices and embed more efficient, effective processes and models as standard. Examples include:

- Acadmi: The Ufi project was felt to be an “invaluable delve into the construction industry”. By the end of the Ufi grant funding period, the team understood some of the training needs of the industry and the type of content that was valued by employers and employees. This has helped them develop a stronger presence within the construction sector.
- MYBE Awards: Unexpected cyber security challenges were overcome by improving proactivity and awareness of growing threats, ensuring cyber security was robust and embedding technical maintenance expertise in the team.
- As a result of Ufi grant funding, National Numeracy matured in terms of their reporting processes, recognising the power of data to drive decision making. National Numeracy are able to track their registrants, gathering data on engagement and usage patterns, and attitudinal and behavioural changes. This is then used to inform their working strategies.

National Numeracy - Digital Solutions to Improving Numeracy in the Workplace (VocTech Seed 2017, VocTech Impact 2017)



National Numeracy value the partnership they have with Ufi and believe that their funding has been paramount in supporting it to reach the scale it has. In all three funded projects, National Numeracy succeeded in their project goals:

- The Star Dash Studio app, which is still active, enabled adults to access a tailored selection of curated online learning resources and to measure their numeracy improvement. It is recognised as one of the most effective numeracy apps.
 - Digital activities for adults with the lowest numeracy understanding were created as part of the “Firm Foundations” project. This continues to be developed through a range of effective usage environments.
 - National Numeracy Challenge was successfully scaled up.
 - The high-profile National Numeracy Day annual campaign continues and in 2022, impact included: **86,035** people taking action on the National Numeracy Challenge (a 51% increase on 2021), **353,442** views of short campaign videos (an 18-fold increase of video views on 2021), and **16,854** downloads of resources (a 70% increase on 2021).
-
- Solutions 42 and Blueflame Digital appreciated Ufi’s “scientific” approach to the funding application and progress reporting. The experience of working with Ufi in this way was felt to provide invaluable learnings on the type of information and technical language required for tech development projects and bidding for similar funds.
 - For WAMITAB, the process of going through their Discovery Phase revolutionised the way they work. Understanding user, employer and partner needs has now become central to their strategies. This has led to them to develop better quality tools, resources and qualifications. They have initiated a ‘Discovery Day’ where they spend time getting to know the employers they work with, their needs and training opportunities. They have also developed a number of standards, including their ‘Operational and Technical Standard’ and ‘Operational Excellence’ qualification using evidence-based decision making.

Formation of partnerships or collaboration with other Ufi funded projects.

A key driver behind organisational progress and future opportunities has been the partnerships formed during the funding period and project development. Some said they had struggled to engage with identified stakeholders such as government departments and large organisations including the Department for Education, the Home Office, HM Prison Service and parts of the NHS. Examples of successful partnerships include:

- The value of engaging with a wider group of partners to support their work was considered to be a key driver of success for Bolton College's development of Ada. Partners added to their national standing and the relationships have opened up other opportunities for the institution.
- First Step Trust worked with multiple local and national employers. Strong, sustained relationships were developed with Bridgestone who supported marketing, Halfords who provided training materials, the IMI registering body and Kwik Fit.
- GTA established a partnership with University of Sheffield's Advanced Manufacturing Research Centre to develop the software elements of their project. A key outcome from this was a more advanced product than had been anticipated. This resulted in the development and use of new technology (Surface function) that was viewed favourably by users during impact research. The GTA felt the partnership worked well as there was a sharing of values and ethics while ensuring they were constantly challenged in their thinking about what was possible.
- UCL felt that the critical success factor of the initial phase of the project had been consistent communication and liaison with known individuals in and beyond the project team. This has contributed to the success of the network since its launch in October 2020.

GTA England – Apprentices' Mate (VocTech Seed 2017, VocTech Impact 2018)



The Engineering Apprentices' Mate is a point and play AR learning experience for engineering apprentices. It uses virtual machinery or equipment to provide the apprentice with individual learning, support and assessment activities.

With a VocTech Impact grant, the platform was tested with 94 users and valuable lessons were learnt regarding usage frequency, functionality and look and feel. The platform is currently undergoing its second iteration of development with the aim of rolling out to the GTA network at the end of 2022 with the potential to reach 12,500 employees.

Efforts are underway to commercialise the product, although this process had stalled slightly at the time of the 2022 interview. GTA are currently in conversation with another Ufi funded project and other partners around the ways in which the programme's functionality may be applied in other environments and/or sectors.

Raising the profile of the organisation

Several projects believed that their connection with Ufi was paramount in validating the value of their work and in helping boost recognition of their organisation. Often this has been helpful in initiating discussions, “getting people round the table” and securing additional funding and contracts later down the line.

Play Lingo, Flash Academy and Career Matters all mentioned that Ufi’s support was particularly valuable from the perspective of small, independent organisations where it can take a lot of time and effort to build credibility. Career Matters in particular felt that working with Ufi and their backing of the THRIVE platform was significant in opening doors to influential public sector stakeholders and policy makers. Bolton College felt that working with Ufi helped improve its reputation and paved the way for the adoption of the Ada platform in other FE colleges.

Learning Labs - FlashAcademy Workplace (VocTech Seed 2017)



The aim for FlashAcademy English was to provide a tool to support accelerated English Language acquisition from any device. Since the end of the funding period, the product has experienced interest from colleges to support students whose first language is not English, including asylum seekers.

Within the FE sector, the product has been linked to the ESOL curriculum. There has also been some interest from local authorities wanting to support asylum seekers’ early access to English skills. In 2021, the company won its first college commission and a local authority deal followed soon afterwards. This provided a springboard for pitching for further commissions. To date, around 15 Adult-ESOL college contracts have been secured with FE colleges and local authorities. Exploratory work with colleges open to being commercial bridges to workplaces is ongoing.

Learning Labs is currently involved with the Ufi Ventures Team and has had further investment from several individual investors. The platform has been accessed by over 250,000 learners.

Impact on users, learners and employers

There is a general agreement that Ufi helped support the development of innovative learning solutions that have the potential to reach diverse groups of learners in a myriad of environments and employment settings. Across the funding strategy, grants have been awarded to projects supporting learners all along the employment spectrum, from the point of entry to those more advanced in their careers.

Reaching individuals that may not have access mainstream education and/or are furthest from the job market

User feedback gathered during the testing phases and/or since roll out suggests that learners often appreciate the innovative, accessible and engaging ways learning is delivered through Ufi funded solutions:

- The motivation behind First Step Trust's Smart Pathways product was to harness VR to develop an inclusive experience for those with additional needs and to provide those leaving prison or secure units with tangible, marketable skills that would enable them to secure employment. Following the training programme, many have gone on to work in garages or as mechanics.

First Step Trust - SMaRT Pathways (VocTech Seed 2019)



First Step Trust developed a proof of concept for a virtual garage that will enable those with limited literacy to demonstrate their competence in vehicle maintenance skills without the barrier of written work or assessment.

At the end of the funding, First Step Trust had produced a garage workshop VR learning environment and was seeking to roll it out to learners in challenging environments, including prisons and mental health units. The project is currently receiving funding through Ufi's 2021 Challenge Fund and, since the Ufi VocTech Seed fund, has secured further funding and contracts with statutory organisations.

A workbook to complement the VR learning is currently being developed and they have since added two additional environments, a kitchen (to learn Level 2 food hygiene) and a construction site. Also in development is a 'Train the Trainer' programme from which they have people with lived experience (mental health/limited educational experience) help set up/preload the VR and deliver the programme in specific environments. To date, the training has benefitted around 400 learners.

- A key "lightbulb moment" for Contented Brothers was to focus the platform on those that had not attended university to help develop employability skills. Ufi suggested that the target audience could be widened, and the training tool used for anyone without experience of professional environments. The organisation is confident that this platform has wide applicability to support healthy relationships between employers and individuals entering the job market.

- In addition to training refugees and those on low incomes, Code Your Futures also works with partners to place them in work, creating an effective learner-employer pipeline. Further, the organisation hires graduates with high potential but limited practical experience, enabling the organisation to develop the platform further while providing individuals with the necessary experience required to advance their careers. The organisation has had a steady stream of applicants since the end of Ufi grant funding and is now training around 2,000 individuals a year.
- The National Youth Agency believes their key success has been to create a platform that removes the geographical, financial and time barriers for learners, granting access to wider audiences.
- Recognising that feelings of disconnection are common amongst their employees and volunteers, the Marine Society and Sea Cadet's platform is designed to provide a communications network whilst also providing CPD and training opportunities.
- Citizen Literacy, Flash Academy and Klik2Learn have all been experiencing growing interest and demand for their platforms from colleges, local authorities and charities requiring ESOL solutions to support Ukrainian asylum seekers.
- Following the strength of the National Numeracy Challenge, two further campaigns – “Checktember” and “Number Confidence Week” – have been launched. Through their ongoing work, National Numeracy have learnt that numeracy barriers are often driven by a lack of learner confidence than a lack of capability. Their current work is therefore focused on enriching the Challenge to provide a learner experience that enhances confidence.
- iDEA is working with community centres and Jobcentre Plus to explore the use of the iDEA platform by those who are low-skilled or have no prior experience of digital technology. They are also working with other charitable organisations to help tackle IT and digital poverty to increase opportunities for young people.

Development of cutting-edge simulated environments and tools delivering accessible learning solutions

Several projects have been successful in creating solutions that allow learners to practice with virtual materials, enabling them to grow in confidence and reach an appropriate level of competency in a safe environment. As well as supporting learners, this has additional cost-saving benefits for employers.

- Bridgwater and Taunton College students can learn on an off-site nuclear rig, simulating ‘hazardous’ situations without risking their health and safety. The PRACTICE rig currently trains around 300 students a year and is also available to industry partners for employee training.

Bridgwater and Taunton College – PRACTICE (VocTech Impact 2017)



The Practical Reactor Activity Centre – Thermodynamics, Instrumentation, Control and Electrics (PRACTICE) involved building a physical replica of a nuclear station which spanned three floors and included additional VR simulation aspects. The objective was to provide an environment for students to start learning in the VR world before entering the physical space.

As an Institute of Technology, Bridgwater and Taunton received additional funding from other sources for Phase 2 of the project, enabling an upgrade of the VR. They have started to move into AR, expanding the physical rig and embedding it into the curriculum and assessment.

The college currently has 300 students enrolled on the course using the VR and rig. They also accommodate adults and graduates on short courses, including those from industry, for example, EDF employees. They expect a rise in learners in the near future as Hinckley C reaches the point of laying pipes. It is anticipated that EDF and other companies will send staff for commissioning training. They are also starting to pick up opportunities linked to decommissioning work.

- Through Contented Brother's Skilling Me Softly product, those with little experience of a working environment are able to gain a VR experience of workplace situations and build confidence prior to starting a new job. The aim is to reduce the anxiety and potential tension in employer-employee communications.
- The National Composite Centre's product enables learners to understand how composites work without using and touching them. This is traditionally hard to teach without giving somebody a sample. The product benefits the user as it removes any concerns of potentially wasting expensive material and provides a cost benefit for employers and instructors.
- Now in its second iteration of development, GTA the Apprentice's Mate app helps learners interact and learn how to use machinery independently, supporting individual learning and progress and improving training efficiency. The AR programme is the result of seven years of development that began with the idea of QR codes and moved to exploring the possibilities of AR technology. *"It's been an amazing journey. It started with pictures on the wall and has led to the development of leading-edge technology."*

Number of learners engaged

Estimating the total number of learners engaged across all 117 projects involved in the 2015-2019 funding period is challenging. Based on projects where data was available, an estimate of at least **2,605,400** learners was calculated.

This estimate is based on data gathered during the project consultations, desk research and project level documentation. There were 39 projects where information was provided on numbers of users during or following the project's funding. These data covered various learner types including apprentices, trainees, students, general public

and employer beneficiaries. They also included individuals who downloaded an app or registered on a website and, in some cases, included those involved in the user testing. Caution should be taken when interpreting these figures:

- No data was provided for 78 projects.
- Figures were based on a mix of estimates and recent project data and are not necessarily representative of current usage.
- It was not possible, nor within the scope of this evaluation, to determine the level at which users interacted with products and the outcomes or impacts occurring as a result. As such, numbers will include a vast spectrum of user engagement, ranging from light touch to extensive (e.g., those who have tested the products or downloaded an app up, to those who have experienced some tangible employment or learning outcomes and real change as a result of their interaction).
- The range of numbers reached across projects is vast (from 13 to 1,400,000) with the highest figure being a substantial outlier (the second highest figure is 450,000).⁴

iDEA - Developing the Gold Pilot (VocTech Impact 2018)



iDEA uses a blended learning approach that aspires to be a digital and enterprise equivalent of The Duke of Edinburgh Award. Participants take on a series of challenges to earn points which aggregate towards their Inspiring Digital Enterprise Awards. The iDEA badges provide flexible learning, available to anyone free of charge, when and where they want to learn. The Ufi project focused on developing the Gold Award.

At the end of the funding period, iDEA created and launched the Gold Award with a small selection of gold badges. By autumn 2022, there were 10,000 gold badges completed. The development of the Gold Award level required the recruitment of additional corporate users as an important route to new learners accessing and utilising the programme.

⁴ Manufacturing Technology Centre - Online Training Needs Analysis System (13), National Numeracy - Digital Solutions to Improving Numeracy in the Workplace (450,000), iDEA - Developing the Gold Pilot (1,400,000)

Digital sector impact

Understanding and gathering insight into learner barriers and pathways

Projects recognise and appreciate Ufi's focus on designing solutions to meet a specific need. Likewise, the requirements to ensure that products are designed with users at the centre and to gather evidence demonstrating that this is the case. As such, several projects discussed the value of the data gathered during testing phases, not only in terms of informing product development but also enhancing their knowledge of learner attitudes and behaviours and helping with learner retention strategies.

- MYBE Awards collected significant data on people furthest from the labour market. They are confident that the data can support the design of vocational learning programmes that are attractive and accessible to marginalised people.
- Throughout the development of CEY Smart, PACEY gathered insight into effective ways of broadening digital engagement with their audiences which they will continue to use to inform future work.
- Six care home organisations, covering 650 individual users, were involved in the pilot phase of Cuppa. A large amount of data was gathered about how users like to learn.
- Citizen Literacy credit some of their project accelerations and successes to evidence-based decision making and a structured approach to producing a user orientated solution to a persistent and often hidden problem. To guide working principles and support team cohesion, the team produced a White Paper which they felt helped "supercharge" the generation of ideas and effective delivery.

MYBE Awards - Digital change makers (VocTech Impact 2019)



MYBE Awards developed and trialled a prototype platform for digital learning to enable prisoners, ex-offenders and associated others affected by criminal justice to re-enter the workforce, build futures and reduce reoffending in a sustainable way.

Whilst testing the learner platform technology with a developed online qualification, they received over 660,000 expressions of interest. This led to 142,600 people engaging, from which 2,648 enrolled on a learner journey between April and December 2021. The project finished with IP possibilities, significant affirmation of what works with people furthest from the labour market and a sustainability strategy. In addition, the project has stimulated interest from several government departments including the Home Office, the Ministry of Justice/Probation Service, the Department for Work and Pensions and the Cabinet Office.

The predominance of mobile technology used in preference to web-based technologies raised significant implications for the engagement, delivery of learning and retention of underserved learner groups. As a result, the team re-developed marketing and technology access to be mainly through mobile technology devices. The team have found that more participants access their services through mobiles and Microsoft Teams than their learner platform. They have experienced significant demand for their learning and progression programmes but feel they are not able compete with organisations offering free programmes.

The team feel that disrupting the marketplace seems the only viable option but that this type of strategy may not enable significant penetration due to the wide use of Adult Education Budgets, to which they have limited access.

Wide applicability and cross-sector appeal

Several organisations felt that Ufi funding was helping to support the development of products and technology that can be applied and mobilised in a variety of settings, with various audiences, across different sectors. This wide applicability of learning solutions was perceived to drive products towards achieving scale and has the potential to encourage a step-change in the delivery of vocational learning.

Several projects have already begun to expand into additional areas, sectors and/or audiences, or are exploring opportunities for doing so.

- The Career Matters THRIVE platform has universal applicability across sectors and services, and there is potential to diversify it further to support groups beyond the initial target audiences. Focus has now broadened to also include employer support and a recruitment platform is currently being created.
- Since the end of their VocTech Seed funding, First Step Trust have expanded their training to two additional environments and Contented Brothers are developing their product further to ensure it can be tailored to different sectors. Although nothing has been agreed as yet, GTA have been in discussion with a number of organisations in different sectors due to the wide applicability of the app's point

and play concept, a learning approach which could potentially be adapted for a number of industries.

- A key success of AmplifyFE has included the establishment of a 'community of practice'. Launched in early October 2020, AmplifyFE has already grown into a network which connects and amplifies communities of practice for digital learning, teaching and assessment in vocational education, reaching out to hundreds of professionals. Undertaking the first Community Sector Audit alongside the launch of AmplifyFE has provided new insights into how professional practice is supported in VocTech.
- Several of the products developed to help support literacy and numeracy skills can be tailored specifically to learners' sectors and environments to enhance relevancy. These include Flash Academy, National Numeracy and Citizen Literacy.

City of Glasgow College - Citizen Literacy App (VocTech Impact 2019)



The project developed a no cost, advert-free, web-based programme that supports adults who are beginning to learn to read and write. It can be used for autonomous online learning or to support a classroom-based face-to-face course of instruction.

Following the funding, the project team formed a spinout Community Interest Company to continue to develop and progress the learner app and supporting course material. The work funded by Ufi paved the way for additional funding from Nesta. Phase One soft launch is now complete, and the team are working towards Phase Two roll out, aiming for a fully commercial service by early 2023.

The adult literacy course is now up and running, supporting tutors and their learners, featuring printed and digital learning resources, including the free learner app. Digital and print tutor tools, training and support are available through a subscription, accompanied by paid-for tutor and learner workbooks and free, downloadable resources. The free learner app supports the face-to-face course with 30 lessons containing approximately 600 activities for independent learning. The programme will be promoted through a global marketing initiative. The team's work has gained international interest from practitioners working in Australia and the United States, plus they are in discussions with several organisations in the UK.

Demonstrating the power of new technologies and solutions generating stakeholder interest

A key benefit of Ufi grant funding for a number of organisations is the space afforded to experiment with new technologies, often resulting the development of cutting-edge technology and industry 'firsts'. With this, projects have sometimes been able to drive positive attitudes towards digital learning solutions, particularly valuable in sectors that are less technologically abled.

- Applio created a new paradigm for games-based learning, moving towards an approach where tutors can design a tailored game for their learners. Their confidence in this development was such that they redesigned their business model to anchor it.
- Through Audactive, Pembrokeshire College has produced a new learning technology that has incorporated two-way voice-based interactions. The indirect consequence of this was to raise the awareness of the value of voice-based interactions in learning technology in the sector.
- Ada (Bolton College) has the potential to reinvent administration and data interrogation systems in Further Education and other sectors where legacy systems are still very manual.
- The PRACTICE nuclear rig is the first of its kind, preparing individuals to work on nuclear sites, both in commissioning and decommissioning straight from study. Whereas construction related VR has been used in similar ways before, it is thought that it has not been deployed at this scale to the same extent.
- Career Matters produced and launched the first digital platform of its type for audiences in sectors and spaces where there is a high demand for support.
- Play Lingo, Citizen Literacy, Klik2Learn and Flash Academy have all been involved in developing new and innovative approaches to teaching adult literacy and ESOL, even for those with no pre-existing English language skills.

Bolton College – Ada (VocTech Seed 2018)



Ada chatbot, developed as iOS and Android apps, enables students to access college information and services without having to login to traditional graphical user interfaces.

The product is up and running with the user base growing year on year. It can currently be accessed by Bolton's 11,000 students and 600 staff members. Further investment from both commercial and non-commercial sources has been secured since the end of Ufi grant funding. The college has engaged with a wide group of influential partners (for example, Jisc) which has opened up additional opportunities for the institution. Trials for the chatbot were ongoing in several colleges across the UK throughout 2022 (Ayrshire, Blackpool and The Fylde, Sandwell, and Yeovil colleges).

6 IMPACT OF THE COVID PANDEMIC

Ufi is recognised by projects for its experimental, test and trial approach to grant funded project delivery and product development. Projects reported having a rich learning experience and even where challenges were encountered, they were generally viewed as valuable lessons along the funding journey.

In mid-March 2020, the country went into lockdown as a result of the COVID-19 pandemic. This affected many of the 2019 funded projects who commonly experienced delays to project delivery. Ufi's project account managers were commended for their flexibility, understanding and pragmatism during this time.

Issues with user testing and impact on partners

The main challenge experienced by most projects throughout 2020 was their inability to access users to test products and strengthen their evidence base. Compounding this issue was the de-prioritisation of training across a number of sectors, the closure of organisations and/or staff being placed on furlough.

- The NCC was unable to test in the college as intended due to restrictions. Rather, the training was undertaken virtually, and the e-learning package was sent to the learners prior to the session. The project also faced an additional setback when the e-learning consultant company they were working with collapsed, requiring them to find new consultants.
- OU's prospective users/testers were in a specialist disability college which had severe difficulties teaching through COVID. Teachers were recruited for testing, but this was a slow process due to their lack of time.
- COVID interrupted baselining for the Meganexus project, resulting in them not having a consistent starting point to measure from. In order to reach their target group, Meganexus' adaptations included securing an agreement from the Prison Service for prison officers to print out learning modules and to slide these under cell doors.
- Acadmi had difficulties finding testers for the product. As a result, they recruited two additional companies to complete virtual testing sessions.
- The health and social care sector was in crisis and so gathering feedback from cleaning practitioners from care homes became challenging for Solution 42. It was difficult to get engagement from the number of participants required to statistically demonstrate the power of the data capture behind the front end.
- Applio experienced instability with some of its partners, forcing some changes in domain focus.

Paused delivery / lack of sector interest in training

Several projects were required to stop product development or training delivery and/or were unable to engage or secure interest with target markets. In addition, due to contamination concerns, solutions requiring the sharing of equipment were often paused.

- The dental industry was inactive for several months and the priority for training amongst the sector diminished, impacting the testing and development of Blueflame Digital's Chomp training. In addition, with the impact of Brexit taking effect and the pause in the industry, many dental nurses left their roles during the pandemic, creating a shortage. While this could become an opportunity for a starter training app, demand was ultimately low and interest in the product dwindled.
- The PRACTICE rig was shut down and they were cautious of using the VR headsets due to cleaning processes.
- The development of Acadmi and Contented Brothers were delayed as they were unable to film content and scenarios.
- Boston College's project lost momentum due to internal staffing issues and other businesses in the sector struggling with COVID challenges.

Opportunities presented during the pandemic

Despite the challenges faced by many of the funded projects, the conditions of the pandemic created an increased need for remote, distanced learning solutions and technology that promoted independent learning.

These were extremely challenging times for the nation in general and within that those in educational and vocational learning settings working to support and develop individuals. These challenges often required innovative and accessible solutions and several projects were well placed to address this need, experiencing a growth in demand for their products and services, with some pivoting their focus accordingly. Furthermore, several noted that there had been an increase in awareness of, and appreciation for, VocTech solutions at a general level across their specific target sectors and the country more generally. Others experienced an acceleration in their own organisations' digitisation.

- iDEA experienced a significant growth in user demand for the platform. Though very challenging, the COVID-19 crisis enabled iDEA to accelerate their technical development to deal with the upsurge in numbers. This meant that they had to upgrade their servers to handle the increased demand, which had a considerable cost.
- Flash Academy experienced a rise in interest and demand from schools due to the increase in virtual learning.
- Digital Unite changed their focus from distinct employability skills for a specific role or sector, to the much more urgent and real need (due to COVID) for generic digital skills for life and work.

- Because of the need that arose from COVID, the National Youth Agency's first course focussed on using Zoom to ensure that Aspire Champions gained essential soft skills and improved their digital capability.
- The conditions caused by the pandemic accelerated Career Matters' move towards remote working. Initially it took time for their wider non-digital stakeholders to move online, but the developments have helped propel the organisation forward technologically. In addition, the team explored and initiated innovative ways of connecting with the hardest to reach of their target audiences e.g., learners in prisons.
- PACEY found that usage of their training increased. They responded to the pandemic, creating content aimed at helping Early Years practitioners to cope with the early months of the crisis.
- The COPS project created a training video for blue light services focusing on the correct way to wearing and remove Personal Protective Equipment (PPE). They also saw an uptake in users and an increased willingness to learn via VR post-COVID.

7 WORKING WITH UFI AND GRANTEE PERSPECTIVES ON ITS GRANT FUNDING STRATEGY

Overall views towards Ufi, its approach to grant funding, project management and delivery are extremely positive. Recipients of funding praised the uniqueness of Ufi, its commitment to VocTech and its willingness to take risks and encourage experimentation. They also praised the range of grants offered at different stages along the technological development spectrum.

Projects reported having good relationships with their Ufi project account managers who were described as being open, honest, flexible and approachable. In addition, their desire to challenge and support projects to push themselves to achieve the best chance of success within the parameters of the delivery period and budget was also celebrated.

“Working with Ufi has taught us that funders can be flexible, understanding, supportive and helpful within a grant giving context where trust between funder and grantee can allow projects to fly, while still being accountable, cost effective and produce added value. We have worked with numerous funders for over 30 years and there are many others who might benefit from the Ufi model.”

Ufi USP

The following descriptions of Ufi and its funding strategy were commonly used to explain the ways in which Ufi differentiates from other funders and how it is meeting its mission and funding strategy aims.

Focus on VocTech: Ufi is seen to be uniquely focused on the value of technology in supporting education, skills development and lifelong learning, whereas other similar funders are said to have more generic strategies.

European Innovation – TARGET (VocTech Seed 2015)



The project was the first commercial trial of wearable technology using Movario or HoloLens Glasses with dual AR. This allows key safety and maintenance information to be transcribed in real time to support training.

European Innovation’s 2022 survey response outlined that the developed product was commercially successful and had become mainstreamed. Under Ufi grant funding, the project benefitted from new cross-sector opportunities which helped establish partnerships and generate new revenue. It is unlikely that the project would have gone ahead at the time without Ufi grant funding. Ufi's project management approach and access to external expertise was considered to have contributed positively to the development of the product and the resulting outcomes.

Innovative, brave and encouraging experimentation: Ufi is generally praised for its willingness to fund projects in the very early stages of experimentation and for its test and trial approach to reach innovative solutions. Grantees reported feeling confident working with Ufi and were bolstered by the general sentiment embedded in its approach that, “There are no mistakes. Only lessons.”

“Ufi absorb the risk of uncertain projects which would not be funded anywhere else. The college is good at getting funding elsewhere but there is no chance we would have been funded for such a risky and uncertain project as most are very prescriptive with their funding.”

Accelerator: For most projects, funding has been a major catalyst in the development of their products and a significant part of their journey. They would not have gone ahead without the Ufi grant or, where funding may have been available elsewhere, it would have changed the shape or approach to the end project or goal.

Pembrokeshire College - Cognify/Audactive (VocTech Seed 2018 and VocTech Impact 2019)



The key success of the project has been to produce a new learning technology that incorporated two-way voice-based interactions. An indirect consequence of this has been to raise the awareness of the value of voice-based interactions in learning technology across the sector.

The team has recently produced a Learning Tools Interoperability (LTI) plugin with plans to take it to market. The next step for the project is to meet with market leading Virtual Learning Environments to encourage them to add Audactive to their portfolios of third-party products.

Technical expertise and market knowledge: Grantees were positive about the level of technical support, guidance and advice from either Ufi project account managers themselves or the connections they helped them make. Several reported an improvement in their own technical skills and knowledge as a result. Furthermore, Ufi project account managers often provided valuable advice about attitudes, behaviours and needs of learners and target audiences which in some cases resulted in a refocus of the project or it changing direction.

“Ufi has a good understanding of how to develop technical products, I don’t feel there any many funders that have their technical expertise”

Connector, networker, influencer: There was a definite view that Ufi fosters a sense of community amongst its funded projects. Even though there is evidence of only a few funded projects formally collaborating, it was generally felt that informal connections and contacts made with each other were useful and motivating. If faced with a particular project challenge, project managers would often signpost to other projects or wider parts of the community. Networking, workshops and showcase events were perceived by grantees to have provided good exposure to wider audiences and ideas. Projects felt Ufi’s

connections and reputation were often vital in helping grantees shape engagement with stakeholders.

“Having extra people as part of a community was invaluable and helpful to our project”.

Collaborator, partner, friendly funder: There was a general consensus that Ufi’s funding and approach “feels different”, predominately because they were working in a true partnership with organisations. Throughout the funding journey, there is perceived to be a focus on developing the grantee and their organisation as well as the product. Grantees said that Ufi staff were thoroughly invested in ensuring its funded projects succeed and as a result, will work hard to find solutions to challenges and provide as much additional support as possible. Ufi project account managers’ tailored, flexible and honest approach was particularly appreciated during the pandemic when projects experienced a myriad of challenges, often resulting in significant delays.

Acadmi - Intelligent mobile training for construction (VocTech Seed 2018)



Acadmi’s B2B Training App provides companies working within the construction industry with their own branded platform to deliver highly engaging, interactive and mobile-first content to their workforce. Acadmi leverages unique video technology within a bespoke, personalised experience to improve employees’ engagement in training and their ability to apply learning within the workplace.

Three courses were developed during the Ufi grant funding period. Acadmi was accepted onto Europe’s largest accelerator programmes within construction (SPRING), which allowed them to explore AR and VR construction training and expand their library. This is likely to be skills-based training as opposed to compliance training under the Ufi grant funding. The team realised there was potential to deliver additional technologies on the platform, e.g., medical reports and the reporting of incidents, and they created this reporting feature. The team are planning to release some VR/AR content/modules by the beginning of 2023. Acadmi has found lack of accreditation to be a barrier to securing interest from companies. They are currently working towards accreditation and are hoping this will be achieved in 2023.

Additional, wraparound support: Projects often received a business and/or design coach and felt that Ufi was interested in getting projects to constantly think about how to enrich the value of their products. Enrichment support, and the way it is provided, is seen as an extremely valuable and unique aspect of Ufi grant funding and further highlights Ufi’s desire to support projects to succeed and achieve impact. Examples were provided of enrichment increasing organisational knowledge around copyright and patenting, marketing approaches and preparing for investment.

“Take advantage of the help and support from Ufi when you’re applying for Ufi funding, engage in as many Ufi events as possible, such as their webinar events.”

“The extra support is invaluable. Don’t say no to any of the support on offer from Ufi. How to pitch for example.”

“The wraparound curricular events are incredibly helpful, particularly the face-to-face ones. I met other projects which was really motivating.”

Focus on evidencing need and well-structured approach to project management: Where views were mixed in relation to Ufi’s project management approach, they largely related to the project planning process. In some cases, projects perceived that working with Ufi on the project plan at the outset was onerous, with the amount of work required disproportionate to the size of the grant. Further, some found predicting outcomes and targets challenging. They felt the structured nature was at odds with the flexibility required when developing software products. However, on balance, projects generally felt that the work up-front getting the project plan right was extremely valuable in keeping the project on track.

“At the start it’s quite a lot of work but it helps get your thinking straight and focus on “How are we going to sustain this?”. It might not be the most fun, people have a great idea and want to get cracking, but it provides focus and slows things down, which is necessary and very valuable. And also makes you think about your responsibility to use the money wisely.”

“Ufi VocTech Trust are an incredible organisation who seek to support new and innovative ideas. Many of the projects they fund have a spark of an idea but very little support to take it forward.”

“Without the support of Ufi VocTech Trust we would have significantly struggled to take our vision forward. The lessons during the process of idea development to impact have been a sharp learning curve. But we have learnt that to achieve the vision requires focus, analytical thinking and a network of support/an ecosystem of collaboration.”

Ufi mission and vision

Generally, it was perceived that Ufi's ethos, approach to funding and delivery, its technical expertise and industry connections put it in a unique position. They enable Ufi to champion VocTech and drive a step change towards technology being increasingly embraced and adopted in the workplace.

However, for some projects, there was a misunderstanding around Ufi's priorities. For example, some FE sector grantees conflated Ufi's ambition for sustainability and scaling with perceptions of commercialisation. FE sector respondents felt private sector companies or tech start-ups were more able to commercialise developments and that this did not align well with the aims of the FE sector. The challenge for Ufi is to convince them that they do not have to commercialise what they do to be sustainable and to achieve scale.

For several grantees, the end goal was to enhance the quality of education provided to their students through the use of innovative technology. Although this is also perceived to be a key aim of Ufi, it was felt this could sometimes be overshadowed by the push towards commercial viability which can then shift the focus onto products, rather than the end users.

In addition, a minority of projects expressed a degree of surprise that large companies are able to access the Ufi grants as they were perceived to have adequate research and development budgets and resources. They felt that funding pots should primarily be reserved for start-ups, micro-businesses and SMEs.

Nevertheless, others felt that Ufi's funding strategy is appropriate to helping the organisation achieve its aims of catalysing change. The open nature of the funding could be argued to support market need and in order to drive a fundamental shift, organisations operating in different areas of the landscape are required to pull in the same direction, towards similar goals.

8 LESSONS LEARNT AND BEST PRACTICE

Throughout the 2019 and 2022 evaluations, projects have been asked to reflect on the key lessons learnt during their journeys through Ufi grant funding, what they consider to be best practice when developing VocTech products and what advice they would give to future recipients of funding. The following chapter outlines a summary of the feedback that projects provided on these topics.

Project design

Start with the problem, rather than the solution: Identify a clear need, ensure this is well-researched and articulated and that the desired change, outcomes and impacts are clearly outlined. Several projects recommended producing a Theory of Change and Logic Model, especially for Impact projects.

“Don’t think ‘this is a good idea, why does nobody understand it?’. It’s your job to be able to sell and explain your idea so that people understand its uses and its benefits.”

“When you think you have a good idea, it can be hard to restrain yourself. People just want to get going. But it’s important to remember and reflect - what is the issue and what does change look like?”

Know your market: User attitudes, behaviours and need should be at the heart of the solution. Products developed with a full understanding of how they will be used in daily life/work are more likely to succeed in securing engagement, interest and investment. Several projects stated that assumptions about user capacity, capabilities and, importantly, perceived barriers to learning, can often be misguided. It is best practice to directly consult target audiences prior to defining project objectives to ensure the right barriers are being addressed.

“We realised there was a need for bespoke applications specifically tailored to those furthest from learning and the labour market, rather than just adapting them from available applications designed for mainstream use.”

“The Discovery Phase was invaluable in establishing need and in testing our assumptions. We thought the need would be around literacy and numeracy barriers. In fact, we needed to focus more on the issue of lack of confidence in learning environments – we changed our approach and introduced gamification e-learning.”

Skills for Logistics Ltd – FLOW (VocTech Specialist 2019)



FLOW is an online talent growth platform for the transport and logistics sector that provides micro-qualifications, learning tools and a collaborative networking space for employers, training providers and learners. The aim was to create a marketplace of quality assured training and a platform that allows learners to access vocational provision readily and easily.

The project experienced a number of successes during its development phase that may lead to the opening of new markets in the future:

- Recognition from GXO Logistics that FLOW was an improvement on their in-house talent management system.
- FLOW was promoted to DHL, a logistics company, as a way of reducing the time required for their induction training, without sacrificing quality.
- FLOW introduced a blended learning approach to the Certificate of Professional Competence (CPC) required every five years by HGV drivers, which was endorsed by the government.

Since the Ufi grant funding period ended, delivery of the CPC has continued and DHL and GXO continue to show interest in FLOW's driver induction training. Skills for Logistics are also currently working with the FE sector to register students on FLOW to bridge the gap between students and industry.

During the funding period, FLOW engaged 561 users: 507 learners, 27 employers, 17 training providers and 10 administration employees. To date they have reached over 1,500 learners and are predicted to reach 10,000 learners when FE colleges use FLOW to register their students in 2023.

Consider the level of internal and senior buy-in: Senior team buy-in is essential to ensure delivery is committed, structured and streamlined, and that issues can be mitigated. Time required to form strong relationships with senior teams should be built into the planning stages. It may be the case that extra non-financial support from Ufi is required.

Involve partners at the earliest stage possible and encourage them to contribute to the project planning and management documentation: Several projects experienced common project management issues and lack of delivery partner responsiveness. These could have been mitigated if commitment had been secured and documented at project initiation stage and/or steering groups established during the early stages. Roles, responsibilities, time commitments and communication lines should be officially agreed and documented with delivery partners at the outset.

Identify the skillset of the people that you need, ensure you have the right mix of skills and experience and consider the need for training: Developing VocTech products for market requires a variety of technical, analytical, business, strategic, communication and project management skills. These should be considered when forming project teams and engaging with partners. Technical partners may not have the same sector specific knowledge as project managers and vice versa. Time and training may be required to ensure understanding, cohesion, effective working partnerships and smooth delivery.

Engaging with stakeholder and/or user groups

Early engagement is paramount: A key lesson identified by grantees was the importance of either mobilising support from existing networks early on or building in enough planning time to form relationships with relevant groups and ensuring that engagement continues throughout the project. This was particularly evident when onboarding harder to reach users, industry partners and challenging sectors (such as Health and Social Care). Participating clients and stakeholders need to be engaged at the earliest opportunity and ongoing commitment needs to be formalised at key milestones.

Desq - Signs of Life (VocTech Seed 2018)



Signs of Life is a training resource that provides healthcare professionals with a simulated environment in which they can practice caring for a deteriorating patient. Played out in a hospital ward or care home, patients/residents are observed, and decisions made on interventions required.

Feedback on the 'Signs of Life' game from Health Education England and practitioners confirmed it was effective. The app is currently available as an e-learning resources on Health Education England's online platform 'e-learning for Healthcare Hub' but it has proved challenging to secure buy-in elsewhere.

The project manager felt in hindsight that it would have been better to work with a Healthcare Trust, healthcare organisation or a larger number of medical professionals to help with content production, to scale the product and get it to market. Engaging the healthcare sector was extremely challenging. Despite efforts to secure interest from local healthcare trusts, charities and learning and skills organisations such as Skills for Care, engagement and usage has remained low.

Physical demonstrations of prototypes / technology can help secure engagement:

Several projects highlighted that demonstrations of products in real settings were valuable in engaging the internal workforce and partners. Physical demonstrations to training partners helped gather enthusiasm and momentum for the product and encouraged contributions to the design of content.

Do not underestimate the importance of good quality user-testing and the numbers required: Key to many projects' success was extensive user-testing with stakeholders and learners to inform the iterative development of the product. It was felt this should happen at all stages of product development and not be limited to beginning and end stages. This helps to ensure that products reach optimum and appropriate design,

functionality, access levels and content quality. The most important issue was that projects should be relevant and be used in real-life settings.

Some projects and Ufi project account managers outlined the importance of structured user-testing using well-designed research tools that elicit appropriate feedback and insight. In addition, robust insight data with users was seen as valuable evidence to support value propositions and strengthen arguments for investment. Specifically, testing should be undertaken with a substantial number of varied users.

“Have a focus group that you can bounce back and forth between (a consultative relationship) as this helps shape a better product.”

Time and energy are required to support users through change: Introducing new technological learning solutions, particularly in sectors that are not traditionally digitally adept, can require culture change and the need to shift attitudes and behaviours. A key lesson taken from projects was the importance of being able to communicate what the positive change solutions were aiming to deliver to users and stakeholders, particularly in challenging sectors. Having clear change management plans and mechanisms in place to support the adoption of technology and updating processes were felt to be helpful for those projects developing tech for their internal workforce and where pushback was anticipated. In order for solutions to be embraced, time is required to lay the foundations for change, promote the benefits to users and get organisational buy-in throughout to ensure employees feel invested in new developments and not “done to”.

Marine Society and Sea Cadets (MSSC) – Waypoint (VocTech Impact 2018)



The MSSC designed a bespoke digital platform to enhance communication within the cadet community. It supports Sea Cadets and is also accessed by Sea Cadet volunteers and cadet next of kin.

In addition to news feeds, notifications about events and access to digital magazines, cadets can also access courses (some paid for) and careers information, advice and guidance. Originally, it was only intended for volunteers and cadets, but was expanded to parents and carers who are provided with logins, predominately for the purpose of paying for courses.

The platform was developed for use by the Sea Cadets. However, the Air Cadets and army have subsequently been inspired to develop their own version.

Project delivery

VocTech development is resource intensive: Several projects stated that they had underestimated the planning time, cost, resources and technicalities of designing a digital solution within the allocated timeframe and budget. Therefore, future grantees should be prepared for the intensity involved. Projects are often operating in innovative spaces with cutting-edge technology and time is required to experiment. For some grantees, it was only once projects were underway that the amount of development that was required to realise the product's full potential was clear. A degree of experimentation was required with different types of software and to explore how and where products and platforms could be integrated and merged with existing systems. Some projects were involved in developing ground-breaking technology and it was important that additional time was built in to deal with and resolve complex, unique issues.

Flexibility and the ability to be agile are key: Whereas project objectives frequently remained unchanged, it was common for projects to need to shift approaches throughout delivery to achieve them, particularly when moving in uncharted waters. Projects often required a change in direction, redeploying staff and resources and reprioritising tasks critical to delivery. This was more challenging in larger and/or less agile organisations or where the team were not solely dedicated to delivering the Ufi funded project.

End product

Good quality user-experience is essential in encouraging engagement with content: A number of projects described the importance of good quality, well-functioning interfaces and programmes when engaging learners. Several felt that users expect digital vocational learning solutions to match the quality of the products they use in other areas of their lives. Poor functionality and design had the potential to disengage learners, particularly amongst younger audiences.

Do not underestimate the amount of content required to ensure a quality user experience and consider the relationships between the content and the product's potential for sustainability: Several organisations stated they had misjudged the time and resource required to deliver good quality, engaging content, in some cases leading to delays. However, some mentioned that a key benefit of the funding was enhancing organisational knowledge on authoring. Some realised that bringing content and authoring expertise in-house enhanced their product's sustainability potential. By becoming self-reliant in maintaining the product (rather than relying on external developers), organisations can ensure products do not become outdated and can be tailored for different scenarios, audiences and sectors, thereby broadening their applicability and appeal.

"Maintaining and refreshing the platform takes time and resource. I can see our content and functionality quickly becoming outdated, especially because of the speed at which tech develops and new things come onto the market. I suspect it has a shelf-life of about 5 years."

PACEY – EY Smart, now CEY Smart (VocTech Impact 2018)



CEY Smart is a web app with bite sized CPD modules for childcare practitioners. The training platform focuses on changes in regulation, knowledge of which is mandatory for practitioners.

PACEY's CEY Smart CPD training app allows PACEY members access to over 45 bite sized courses across nine themes. Feedback gathered from members is that the training is empowering and offers practical, usable tools that can enhance their practice immediately. Since March 2020, 22,000 practitioners have signed up to the platform and CEY Smart has over 12,750 active users. Almost 2,000 users have joined the dedicated EY Smart Facebook group, which hosts regular Facebook live events with experts in the sector. The breadth of user types has expanded, giving PACEY further reach into the nursery sector.

Working with sector partners from the outset gives the project credibility and can help develop market pathways: This was particularly the case in more challenging sectors, where users are harder to reach and where projects struggled to establish a route to market. It was recognised that onboarding partners can be difficult on the basis of an idea rather than a tangible product, and for stakeholders to understand or visualise the value of a solution that is in development. In order to convince them to invest support, time and resource, it was felt these early discussions should focus on the need, intended change and resulting benefit, rather than the technological solution.

Talkout VR – COPS Virtual Reality Simulation (VocTech Seed 2019)



The Computer Operated Police Simulator (COPS) product was designed to support the police with a new form of vocational training through a platform to train first response officers. The project created VR bitesize learning in various training modules linked to the national curriculum such as “Stop and search”, “Crime scene investigation”, “De-escalation” and “Domestic violence”.

The team are working with various different police forces on VR training and mobile training. They are also in talks with four other police forces. The product has been licenced to the University of Law, opening up the market to future police studying for their degree. New modules can be created within a week and the training programmes are constantly being developed to fit with the curriculum and legislation.

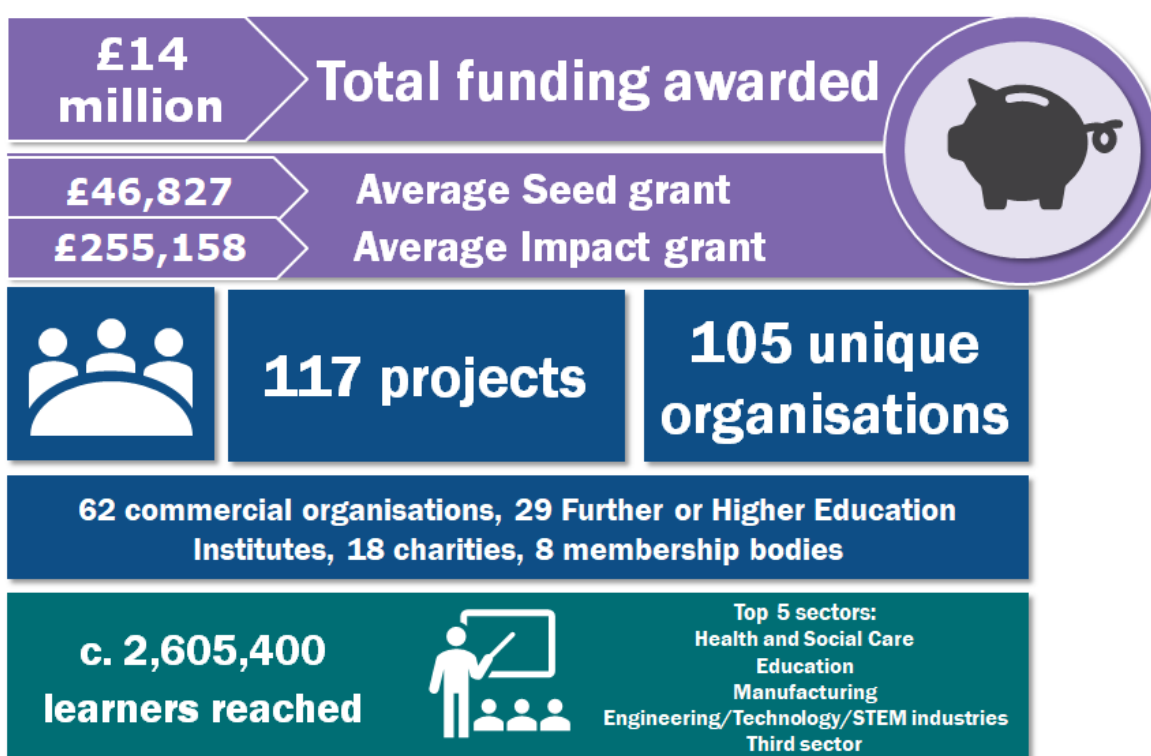
Throughout the funding and since, the team partnered with over 30 organisations and are hoping to work with more universities and police forces in the future. To date, around 4,000 users have experienced the training.

9 SUMMARY AND CONCLUSIONS

The Ufi grant funding strategy evolved throughout the period 2015-2019. The general consensus amongst projects and Ufi project account managers is that its aims, objectives and approach were consolidated, paving the way for a robust, informed, well-defined and achievable strategy for the next funding period. Ufi is felt to be in a unique position to deliver its mission of championing VocTech and catalysing change towards greater adoption of technology to improve skills for work.

The figure below summarises the headline figures and achievements of the 2015-2019 funding strategy.

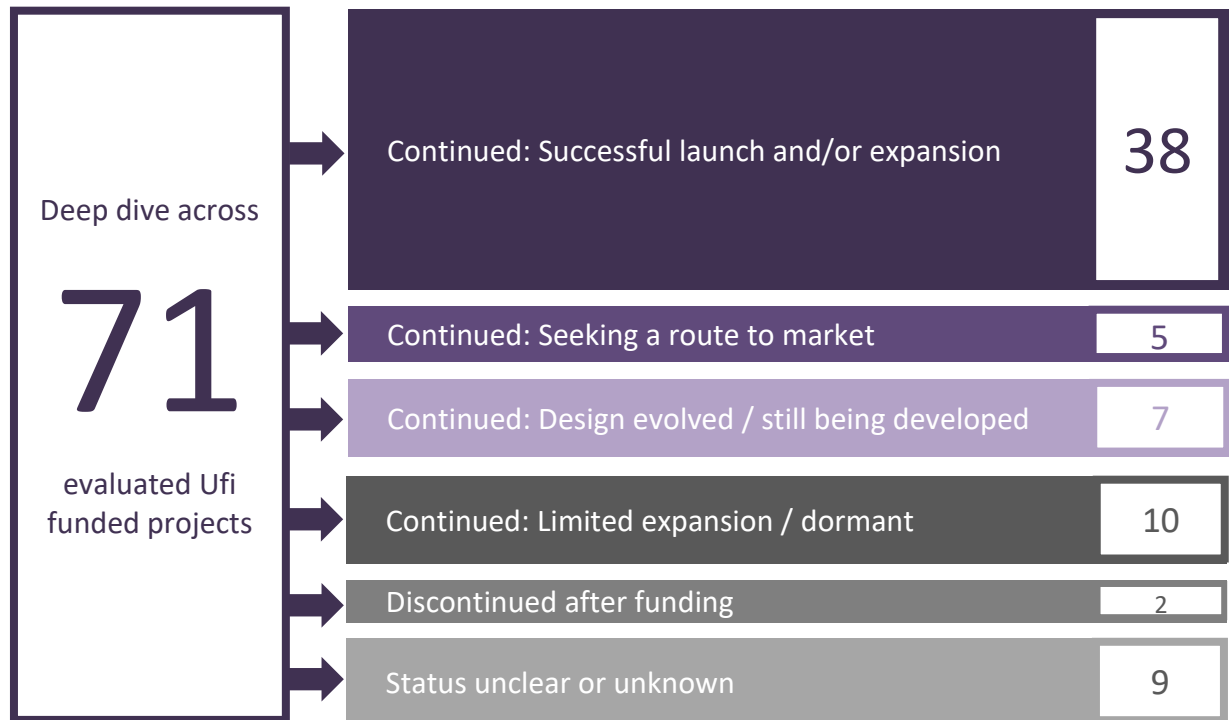
Figure 9.1: 2015-2019 funding overview



5

There is information to indicate that 74 of the 117 projects (63%) have been continued. Across the 71 projects directly consulted for the evaluation, YCL found evidence that 50 (70%) were confidently continuing, had expanding and/or established routes to market or were being developed further with a view to continuing into the foreseeable future.

Figure 9.2: Summary of continuation status of projects participating in the 2019 and/or 2022 evaluations



Evidence gathered across the two evaluations suggests that the suite of projects funded under Learning Without Walls throughout 2015-2019 have delivered outcomes and impacts that address the five key objectives of the funding strategy. The vast majority of projects demonstrated a commitment to **supporting and promoting lifelong learning** and **driving access to learning and vocational skills** to wide-ranging, often niche, audiences. The funding has stimulated a **community of developers and learning providers** to produce a wide variety of products and innovations. Through its funding, raising the profile of its grantees and their organisations, networking opportunities, key events such as the annual showcase and encouraging collaboration, **Ufi promotes the value of digital technologies to aid and support vocational learning**. The commercial success of various projects demonstrates VocTech’s potential as a **credible investment market** and the development of new, innovative learning solutions and technologies has the potential to influence and **change the ways in which providers and learners engage with each other**.

Subsequently, the Learning Without Walls 2015-2019 funding strategy has supported Ufi's mission in the following ways:

- **Championing the power of technology to improve skills for work and deliver better outcomes for all:** Ufi is perceived to be uniquely placed to promote the value of VocTech and build an active VocTech community of educators, developers, designers, employers and policy makers. It has demonstrated this through its approach to project delivery, encouraging collaboration and supporting networking.
- **Acting as a funding partner and essential friend to innovators in skills development, looking to help people progress in the workplace:** Feedback largely indicates that projects truly feel they are working in partnership with Ufi, that the organisation clearly demonstrates that they want them to succeed and is willing to support them in every way to help them meet their goals. Ufi's approach to project delivery and support from Ufi is highly valued and many projects have continued in different ways, utilising the learning and technological advances that have been supported by Ufi.
- **Acting as a catalyst to cause a fundamental shift in how individuals, employers and UK society view, embrace and benefit from vocational skills development through digital innovation:** There is clear evidence that change has been stimulated in a number of ways and at different levels, contributing to shifting perceptions in how technology can be harnessed to support workplace skills development.

The 2015-2019 funding strategy has had an impact across funded organisations, users and across the wider VocTech sector. Particular successes and outcomes can be summarised as follows:

Enhanced learning and outcomes for a wide range of beneficiaries / Benefits are equitably spread to a wide range of learners and organisations: The products developed under Ufi targeted a wide variety of users across a multitude of sectors and learning environments, including entry level learners and those furthest from the job market. Solutions were developed for vocational learners, including niche audiences in challenging circumstances, often with complex support needs, e.g., those with few or no literacy skills, those with ESOL needs, learners in prison, care leavers and disabled learners.

Company growth: One of the key benefits of funding for several projects has been the development of their organisations in terms of growth, the adoption of new practices, increased revenue and access to new markets. Several have employed new staff with others changing their business models to centralise the developed product and make it more of a focus to their operations.

VocTech solutions have buy-in and are embedded by wider networks of users and organisations / Greater awareness of the potential for vocational learning solutions: Ufi grant funding has evoked behavioural and attitudinal change in organisations and across their networks. It has often either been fundamental in encouraging attitudinal change within organisations towards technology in general or technical learning solutions

specifically. For those experimenting in new areas, particularly in cases where funding such activities was not an organisational priority, several indicated that the grant enabled them to test out innovative solutions and ways of working that might not otherwise have been possible. There was a degree of confidence that the learning gained from the project and best practice examples will help drive future developments.

Ufi projects continue to network and work together after the funded period / An active community of VocTech stakeholders is built: It was generally felt that Ufi is clear in its objective of wanting to create a digital vocational community as a foundation to drive whole-scale change in the sector. There was some evidence of formal collaboration between projects beyond the funding period, but this was relatively rare. Nevertheless, projects did generally feel that they were part of a community of collaborators and felt there was the opportunity to reach out to seek advice and/or have informal discussion with other projects, supported and encouraged by Ufi project account managers. Networking and workshoping events were viewed as extremely beneficial. Many projects are keen to stay a part of the Ufi community after funding and continue to provide knowledge and support to other projects where they could.

A number of grantees and project managers argued that it is the responsibility of individual projects to establish connections and steer collaborative working organically, rather than relying on being told how this should happen, particularly after funding was finished.

Products are sustained by organisations after the funded period: The evaluation found that the majority of products were continuing in some form following the end of the funding period. Continuation status varied from those that had successfully launched and become a commercial success to those still in development and fine tuning the technology.

Additional public and private investment is leveraged: A number of projects said the profile of their organisation had been raised as a result of the Ufi funding and that they were now better placed to secure additional investment from other sources. For several VocTech Seed projects, the Ufi grant acted as springboard, enabling an idea to be developed into a tangible product, the benefits of which could be demonstrated to leverage further investment. Projects went on to secure funding from other grant organisations such as Nesta, Innovate UK and other government departments. In addition, a number of products have been created that have become commercial successes in their own right with others still being developed but with a clear route to market.

Existing learning approaches are advanced: User feedback gathered generally suggests that learners often appreciated the innovative ways learning was delivered through products developed with Ufi grant funding and this supported engagement with the content. Products often benefitted learners through the just-in-time nature of the learning approach, providing accessible support at relevant times. Several “first of its kind” products have been developed through Ufi grant funding with some being successful in creating solutions that enable users to learn in virtual environments. A key benefit of Ufi grant funding for a number of organisations is the space afforded to

experiment with new technologies, take risks and venture into the unknown and explore, often resulting the development of cutting-edge technology and innovative solutions.

Wider adoption of high-quality digital tools as part of professional practice within the vocational education and training community: Ufi has the potential to create a step-change in the delivery of vocational learning. Key to the organisation's impact is in the funding of projects developing products and technology that can be applied and mobilised in a variety of settings, with various audiences, across different sectors. Projects have demonstrated that they had the capacity to drive positive attitudes towards adopting digital learning solutions and there was evidence of several concepts being embraced by industry and higher education institutions.

APPENDIX A: PROJECTS DIRECTLY CONSULTED FOR 2019 AND/OR 2022 EVALUATIONS

Funding cohort	Project	2019		2022	
		Survey	1-2-1	Survey	1-2-1
Ad Hoc/Other	UCL - Blended Learning Essentials Phase 1		1	1	1
VocTech Impact 2017	National Numeracy - Mobile Maths/Star Dash Studios				1
VocTech Seed 2015	Sussex Downs College - Digital Vocational Badges	1	1		
VocTech Seed 2015	Interactive Scientific (iSci) - Nano Simbox	1	1		
VocTech Seed 2015	European Innovation - TARGET	1	1	1	
VocTech Springboard 2015	Sara Dunn Associates - Cuppa	1	1	1	1
Ad Hoc/Other	UCL - Blended Learning Essentials Phase 2		1		1
VocTech Seed 2016	Collab Group - Apprentice Collaboration Platform	1			
VocTech Seed 2016	Pontydysgu - Construction Toolbox				1
VocTech Seed 2016	Fusion 48 - FrailtySIM	1	1		
VocTech Seed 2016	RBLI - Game of Zones		1		
VocTech Seed 2016	Jaguar Land Rover - Robot Trainer: AR/VR		1		
VocTech Seed 2016	PlayLingo - Wordable (known as 'Buzzlingo' in 2016)	1	1	1	
VocTech Seed 2015	Sara Dunn Associates - Cuppa (Springboard)	1	1	1	1
MSF 2017	Grimsby Institute for F&HE - Flavours of Reality		1		
MSF 2017	National Composites Centre - LayupRite	1	1		
MSF 2017	Manufacturing Technology Centre - Online Training Needs Analysis System	1			
VocTech Impact 2017	Sara Dunn Associates Ltd - Cuppa	1		1	1
VocTech Impact 2017	National Numeracy - Digital Solutions to Improving Numeracy in the Workplace	1	1	1	1
VocTech Impact 2017	Bridgwater and Taunton College - PRACTICE		1		1
VocTech Impact 2017	Sussex Downs College - The Digital Guild	1	1		
VocTech Seed 2017	Learning Labs - FlashAcademy Workplace	1			1
VocTech Seed 2017	eCom Scotland - Digging into the past with VR		1		
VocTech Seed 2017	Agylia - Mobile Training & Support	1			
VocTech Seed 2017	MyKnowledgeMap - Evidence4Life			1	
VocTech Seed 2017	GTA England - Engineering apprentices (employers) mate	1	1	1	1
VocTech Seed 2017	National Numeracy - Firm foundations digital				1
VocTech Seed 2017	Pembrokeshire College - Interactive video workbook -		1	1	
VocTech Seed 2017	ScriptCity - Coreliu	1	1	1	
VocTech Seed 2017	Bradford College - Titration Station			1	

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VocTech Seed 2017	Relate - Developing text-based therapeutic & supportive skills		1		
VocTech Seed 2017	Founders4Schools - Improving employability of young women through Workfinder	1			
VocTech Impact 2017	Open University - Open networking lab				
VocTech Seed 2018	Bolton College - Ada	1		1	
VocTech Seed 2018	Code Your Future - Guided Coding Journey	1		1	1
VocTech Seed 2018	Pembrokeshire College/WellSource - LoGo - Cognify	1		1	
VocTech Seed 2018	Wizenoze - Web for Classrooms	1			
VocTech Seed 2018	Acadmi - Intelligent mobile training for construction				1
VocTech Seed 2018	Klik2Learn - Journey 2 Basic Skills				1
VocTech Seed 2018	Blueflame Digital - Chomp dental training games				1
VocTech Seed 2018	Desq - Signs of Life			1	1
VocTech Seed 2018	Groop - Employability skills development			1	
VocTech Impact 2018	Playlingo - Readable	1	1	1	
VocTech Impact 2018	Agylia – Agyliacare	1			
VocTech Impact 2018	GTA England - Apprentices Mate		1	1	1
VocTech Impact 2018	PACEY - EY Smart				1
VocTech Impact 2018	ecomScotland - Assessing Reality		1		
VocTech Impact 2018	Fluence - Passive Accreditation in prisons				1
VocTech Impact 2018	Learning Labs - Flash Academy Workplace	1			1
VocTech Impact 2018	iDEA - Developing the Gold Pilot				1
VocTech Impact 2018	Applio - Vocational Game-based Learning				1
VocTech Impact 2018	MSSC – Waypoint				1
VocTech Seed 2019	Talkout VR COPS - Virtual Reality Simulation				1
VocTech Seed 2019	Solution 42 - Spotless			1	1
VocTech Seed 2019	Ambios - Wild Skills			1	1
VocTech Seed 2019	Open University - Open Networking Lab			1	1
VocTech Seed 2019	City of Glasgow College -Citizen Literacy App				1
VocTech Seed 2019	LTE Group Manchester College - Gamification in construction				1
VocTech Seed 2019	National Youth Agency - NYA Learning Hub			1	
VocTech Impact 2019	MyBEAWards - Digital change makers				1
VocTech Impact 2019	NCC - Augmented learning				1
VocTech Specialist 2019	WAMITAB - WastEd: the digital learning community for sectors leading environmental change				1
VocTech Specialist 2019	Career Matters - THRIVE			1	1
VocTech Specialist 2019	First Step Trust - SMaRT Pathways				1
VocTech Specialist 2019	Contented Brothers - Skilling Me Softly				1
VocTech Specialist 2019	Digital Unite - DCN Aspire			1	
VocTech Specialist 2019	Skills for Logistics Ltd - FLOW				1
VocTech Specialist 2019	Boston College - Blended Team Leading in Agritech				1

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VocTech Impact 2019	National Numeracy - National Numeracy App				1
VocTech Impact 2019	Meganexus - Nucleus InCell				1
VocTech Impact 2019	Pembrokeshire College - Cognify/Audactive	1	1	1	1

APPENDIX B: PROJECTS CONTRIBUTING TO THE EVALUATIONS WITH UNKNOWN STATUS

- Sussex Downs College - Digital Vocational Badges and Digital Guild (VocTech Seed 2015 and VocTech Impact 2017).
- RBLI - Game of Zones (VocTech Seed 2016).
- Jaguar Land Rover - Robot Trainer: AR/VR (VocTech Seed 2016).
- Grimsby Institute for Further and Higher Education - Flavours of Reality (Manufacturing Skills Fund 2017).
- Manufacturing Technology Centre - Online Training Needs Analysis System (Manufacturing Skills Fund 2017).
- Pembrokeshire College - Interactive video workbook (VocTech Seed 2017).
- ScriptCity - Coreliu (VocTech Seed 2017).
- Groop - Employability skills development (VocTech Seed 2018).

APPENDIX C: STATUS OF NON-EVALUATED PROJECTS

Evidence found of continuation	Status unknown
<i>VocTech Seed / Springboard</i>	<i>VocTech Seed / Springboard</i>
Giveback UK - The Charity Series (2015)	Learn TPM Ltd – CommSim (2015)
Relate - Counselling Skills for Non-counsellors (2017)	Vital Partnerships - Elli-centric (2015)
Blippar - Training in AR (2017)	Bedford College - Gradetracker and ePLP (2015)
Filtered - Frontline workers vocational learning in public services (2017)	Myerscough College - Interactive Videos for horticulture (2015)
How Do I - How Do I (2018)	Fluence World Ltd - The Priorities Project (2015)
Learnium - Better skills better jobs (2018)	We are Snook – Badgemaker (2015)
eLearning Studios - Customer Care training in VR (2018)	Makerclub - Electronics for Everyone (2016)
retailTRUST- Digital Retail Futures (2018)	GMCC - Qualify for Success (2016)
Nissan - Digital SPACE (2018)	Digital Assess - Skills Blockchain (2016)
Iris Speaks – SparkleVR (2018)	NW Regional College - Augmented Health Care Tools (2017)
West College Scotland – Carevolution (2018)	Learning Science - Contextual Maths (2018)
Self-Injury Support – Emotive (2018)	BLTK Consulting - Tripping the Thames (2018)
South Devon College - Infinity Generator (2019)	City of Glasgow College - Blockchain for skills (2018)
Fashion Enter - Tech for learning for Fashion (2019)	South West College - Mechanic Match up (2019)
<i>VocTech Impact / Specialist</i>	HLN Shropshire College - Animal Care & Welfare training (2019)
RSA - RSA/Digital Me: Cities of Learning (2017)	Blackburn College - Tech for Textiles (2019)
Whitehat - Careerhacker (now Multiverse) (2017)	
NSAR - Skills Live (2017)	<i>MSF 2017</i>
Kinderly - VocTech for Early Years Childcare Professionals (2017)	AELP - Using Technology to embed learning in remote settings (2017)
BEAM - Scaling with the Crowd (2018)	Coleg Sir Gar - IoT Pods for Workplace Training (2017)
RSA - Cities of Learning (2018)	
Princes Trust - Prince's Trust Online (2018)	<i>VocTech Impact</i>
West College Scotland - The Critical Engineer (2019)	VTI19 AELP - Embedding remote learning (2019)
Socrates Software - Way To Work (2019)	VTSp19 Socrates Software - Way To Work (2019)
Barking & Dagenham College - Future DomCare (2019)	

APPENDIX D: PROJECT CASE STUDIES

Continued: Successful launch and/or market expansion

The following 38 projects delivered by 29 organisations are those that have become a commercial success, achieved scale and/or market expansion through successful launch and engagement with users.

UCL - Blended Learning Essentials Phase 1 and 2 (Ad hoc 2015 and 2016)

The project aimed to provide open online CPD MOOC (Massive Open Online Course) for vocational teachers called 'Blended Learning Essentials' (BLE) which aimed to change the way adult education is delivered in the UK. The course is still available on the Future Learn website, with the objective of teaching learners how to promote effective practice and pedagogy in blended learning. Since Ufi grant funding, the format has "evolved significantly" to generate revenue through the introduction of micro-credential, stackable, paid-for courses. The number of short courses (2-6 weeks) have expanded and the potential for other products, such as modular courses for professional audiences continue to be explored.

Key successes have included the establishment of a successful 'community of practice' Launched in early October 2020, AmplifyFE has already grown into a network which connects and amplifies communities of practice for digital learning, teaching and assessment in vocational education, reaching out to hundreds of professionals in vocational education. In addition to the launch of AmplifyFE was the first Community Sector Audit which has provided new insights into how professional practice is supported in VocTech.

European Innovation – TARGET (VocTech Seed 2015)

The project was the first commercial trial of wearable technology using Movario or Hololens Glasses with dual Augmented Reality to transcribe key safety and maintenance information in real time to support training.

European Innovation's 2022 survey response outlined that the developed product was commercially successful and had become mainstreamed. Under Ufi grant funding, the project benefitted from new cross-sector opportunities which helped establish partnerships and later, generate new revenue. It is unlikely that the project would have gone ahead at the time without Ufi grant funding. Ufi's project management approach and access to external expertise was considered to have contributed positively to the development of the product and the resulting outcomes.

Pontydysgu - Construction Toolbox (VocTech Seed 2016)

The project's initial aim was to create a mobile learning platform to be used by individuals in the construction sector. It planned to capture and record formal and work-based learning in a variety of multimedia formats. Despite initial difficulties garnering contact with FE colleges for testing and development, the project was successful in creating a platform, incorporating geotagging and QR codes to geo-tag and provide context for formal and informal learning. This included the release of the application available for both Android and Apple products.

Towards the end of the funding period, it was established that the core software could be adapted into different learning areas. Namely, the presentation of digital posters through the use of the QR code scanning feature.

Since the funding period, the app has been renamed as the Learning Toolbox, where the software has expanded across Europe and into several other markets beyond construction, including healthcare. It is also now marketed as an ePoster platform allowing for individuals to easily share their work and build connections.

National Numeracy - Digital Solutions to Improving Numeracy in the Workplace (VocTech Seed 2017, VocTech Impact 2017)

National Numeracy value the partnership they have with Ufi and believe that their funding has been paramount in supporting it to reach the scale it has. In all three funded projects, National Numeracy succeeded in their project goals:

The Star Dash Studio app, which is still active, enabled adults to access a tailored selection of curated online learning resources and to measure their numeracy improvement. It is recognised as one of the most effective numeracy apps.

The digital activities, for adults with the lowest numeracy understanding, were created as part of the "Firm Foundations" project. This continues to be developed through a range of effective usage environments.

National Numeracy Challenge was successfully scaled up.

The high-profile National Numeracy Day annual campaign continues and in 2022, impact included: **86,035** people taking action on the National Numeracy Challenge (a 51% increase on 2021), **353,442** views of short campaign videos (an 18-fold increase of video views on 2021), and **16,854** downloads of resources (a 70% increase on 2021).

Bridgwater and Taunton College – PRACTICE (VocTech Impact 2017)

The Practical Reactor Activity Centre – Thermodynamics, Instrumentation, Control and Electrics (PRACTICE) involved building a physical replica of a nuclear station which spanned three floors and included additional VR simulation aspects. The objective was to provide an environment for students to start learning in the VR world before entering the physical space.

As an Institute of Technology Bridgwater and Taunton received additional funding from other sources for Phase 2 of the project enabling an upgrade of the VR. They have started to move into AR expanding the physical rig and embedding it into the curriculum and assessment.

The college currently has 300 students enrolled on the course using the VR and rig. They also accommodate adults and graduates on short courses, including those from industry, for example, EDF employees. They expect a rise in learners in the near future as Hinckley C reaches the point of laying pipes. It is anticipated that EDF and other companies will send staff for commissioning training. They are also starting to pick up opportunities linked to decommissioning work.

Learning Labs - FlashAcademy Workplace (VocTech Seed 2017)

The aim for FlashAcademy English was to provide a tool to support accelerated English Language acquisition from any device. Since the end of the funding period, the product has experienced interest from colleges to support students whose first language is not English, including asylum seekers.

Within the FE sector, the product has been linked to the ESOL curriculum. There has also been some interest from local authorities wanting to support asylum seekers' early access to English skills. In 2021, the company won its first college commission and a Local Authority deal followed soon afterwards. This provided a springboard for pitching for further commissions. To date, around 15 Adult-ESOL college contracts have been secured with FE colleges and local authorities. Exploratory work with colleges open to being commercial bridges to workplaces is ongoing.

Learning Labs is currently involved with the Ufi Ventures Team and has had further investment from several individual investors. The platform has been accessed by over 250,000 learners.

Code Your Future - Guided Coding Journey (VocTech Seed 2018)

The project produced a dedicated digital platform for applicants to the Code Your Future course. The platform guides applicants through initial coding tutorials to introduce them to the basics of coding.

The platform has gone from strength to strength since securing Ufi grant funding with its users receiving valuable learning outcomes. All those who apply to the programme are taken through the platform and are able to review their progress at different stages. Data is also gathered by the Code Your Future administration team to enable them to assess and support further progress. The platform has improved the efficiency of the application process and the assessment method.

The Ufi grant “created a spark of growth” within the organisation and due to the success of the platform, they now have a dedicated team for product development.

They still use the web-based platform which is continually developed to improve functionality and features when necessary. In its first year, the platform supported 500 users and since the project finished around 2,000 new coders use the platform each year.

Klik2Learn - Journey 2 Basic Skills (VocTech Seed 2018)

Journey 2 Basic Skills is a course for adults with low literacy skills and has been developed in collaboration with two of Scotland's largest Further Education Colleges. It uses animation, audio and games to enable learners to grasp the basics of literacy, numeracy and English.

Klik2learn has successfully launched the Journey 2 Basic Skills course and has secured a variety of clients, largely colleges, schools and Local Authorities. Demand has recently been boosted further due to the support needs of Ukrainian asylum seekers wanting to quickly integrate into the labour force and communicate with their host families.

The product has helped a wide variety of people such as those in rural communities, children in school, and those without the means to finance tutoring or help.

iDEA - Developing the Gold Pilot (VocTech Impact 2018)

iDEA uses a blended learning approach that aspires to be a digital and enterprise equivalent of The Duke of Edinburgh Award. Participants take on a series of challenges to earn points which aggregate towards their Inspiring Digital Enterprise Awards. The iDEA badges provide flexible learning, available to anyone free of charge, when and where they want to learn. The Ufi project focused on developing the Gold award.

At the end of the funding period, iDEA created and launched the 'Gold' award with a small selection of gold badges. By autumn 2022, there were 10,000 gold badges completed. The development of the Gold Award level required the recruitment of additional corporate users as an important route to new learners accessing and utilising the programme.

Marine Society and Sea Cadets (MSSC) – Waypoint (VocTech Impact 2018)

The MSSC designed is a bespoke digital platform to enhance communication within the cadet community. It supports Sea Cadets and is also accessed by Sea Cadet volunteers and cadet next of kin.

In addition to news feeds, notifications about events, access to digital magazines, cadets can also access courses (some paid for) and careers information, advice and guidance. Originally, it was only intended for volunteers and cadets, but this was expanded to parents and/or carers who are provided with logins, predominately for the purpose of paying for courses.

The platform was developed for use by the sea cadets however, the air cadets and army have subsequently been inspired to develop their own version.

PACEY – EY Smart, now CEY Smart (VocTech Impact 2018)

CEY Smart is a web app with bitesize CPD modules for childcare practitioners. The training platform focuses on changes in regulation, knowledge of which is mandatory for practitioners.

PACEY's CEY Smart CPD training app allows PACEY members access to over 45 bite sized courses across nine themes. Feedback gathered from members is that the training is empowering, offering practical, usable tools that can enhance their practice immediately. Since March 2020, 22,000 practitioners have signed up to the platform and CEY Smart has over 12,750 active users accessing CPD courses. Almost 2,000 users have joined the dedicated EY Smart Facebook group, which hosts regular Facebook live events with experts in the sector. Their breadth of user types has expanded, giving PACEY further reach into the nursery sector.

Playlingo – Readable (VocTech Seed 2016, VocTech Impact 2018)

Readable is an app designed to help adults learn workplace and general English. It targets those in the UK whose first language is not English and who need to improve their language skills to access work or build their careers.

Ufi grant funding was considered to be significant from the perspective of a small, learning design studio. A working prototype was created of significant quality to enable it to be released on the Google Play store and to a point where it was ready to be pitched for investment. The Readable app is available and has had 100,000+ downloads on Google Play. Since Ufi grant funding, the product has pivoted to add a range of different content formats to the chat stories originally funded.

Ambios -Wildskills (VocTech Seed 2019)

Wildskills is a nature conservation vocational skills training package, delivered remotely into a learner's own environment through the loan of wildlife survey equipment. The course is supported by access to enriched online training materials and live training broadcasts.

Ambios finished with a commercially viable product for online distance learning for wildlife conservation training. The distance learning camera trapping courses are still running, although course cohort numbers were lower coming out of lockdown due to the changing needs of the audiences. However, opportunities to engage with nature having opened up again. The course has run a number of times commercially since the end of the funding and the team are now exploring options around embedding it into other blended learning delivery methods. To date, the course has been delivered to around 100 students.

In addition to the camera trapping course, Ambios launched two further distance learning courses: a Bird Identification course and Erasmus+ Wildskills EU training course in Padova. They are currently exploring a number of other blended learning opportunities.

Talkout VR – COPS Virtual Reality Simulation (VocTech Seed 2019)

The Computer Operated Police Simulator (COPS) product was designed to support the police with a new form of vocational training through a platform to train first response officers. The project created VR bitesize learning in various training modules linked to the national curriculum such as “Stop and search”, “Crime scene investigation”, “De-escalation” and “Domestic Violence”.

The team are working with various different police forces on VR training and mobile training and are in talks with four other police forces. The product has been licenced to the University of Law, opening up the market to future police studying for their degree. New modules can be created within a week and the training programmes are constantly being developed to fit with the curriculum and legislation.

Throughout the funding and since, the team partnered with over 30 organisations and are hoping to work with more universities and police forces in the future. To date, around 4,000 users have experienced the training.

First Step Trust - SMaRT Pathways (VocTech Seed 2019)

First Step Trust developed a proof of concept for a virtual garage that will enable those with limited literacy to demonstrate their competence in key skills in vehicle maintenance without the barrier of written work or assessment.

At the end of the funding, First Step Trust had produced the garage workshop VR learning environment and was seeking to roll it out to learners in challenging environments, including prisons and mental health units. The project is currently receiving funding through Ufi's 2021 Challenge Fund and since the Ufi Seed fund, has secured further funding and contracts with statutory organisations.

A workbook to complement the VR learning is currently being developed and they have since added two additional environments, a kitchen (to learn Level 2 food hygiene) and a construction site. Also in development is a ‘Train the Trainer’ programme from which they have people with lived experience (mental health/limited educational experience) help set up/preload the VR and deliver the programme in specific environments. To date, the training has benefitted around 400 learners.

Open University - Open Networking Lab (VocTech Seed 2019)

The Open Networking Lab Accessibility project aimed to support individuals with visual impairments to acquire basic computer networking skills through the use of accessible network simulation software.

The Open University is supporting the original product on which the funded version for visually impaired learners was based and the two versions are now integrated (via the OpenLearn platform). The Open Network Lab is used for short 'badged' courses to support individuals and colleges to recognise their learning. Continuing with PT Anywhere and the course "Discovering computer networks: hands on in the Open Networking Lab" is still available online on the Open University's Open Learning website.

City of Glasgow College - Citizen Literacy App (VocTech Impact 2019)

The project developed a no cost, advert-free, web-based programme that supports adults who are beginning to learn to read and write. It can be used for autonomous online learning or to support a classroom-based face to face course of instruction.

Following the funding, the project team formed a spinout Community Interest Company to continue to develop and progress the learner app and supporting course material. The work funded by Ufi paved the way for additional funding from Nesta. Phase One soft launch is now complete, and the team are working towards Phase 2 roll out, aiming for a fully commercial service by early 2023.

The adult literacy course is now up and running, supporting tutors and their learners, featuring printed and digital learning resources, including the free learner app. Digital and print tutor tools, training and support are available through a subscription, accompanied by paid-for tutor and learner workbooks and free, downloadable resources. The free learner app supports the face-to-face course with 30 lessons containing approximately 600 activities for independent learning. The programme will be promoted through a global marketing initiative. The team's work has gained international interest from practitioners working in Australia and the United States plus they are in discussions with several organisations in the UK.

Meganexus - Nucleus In Cell Technology (VocTech Impact 2019)

The project aimed to develop learning for prisoners that can occur in their cell rather than in the limited time that they are out of their cells. Nucleus sought to enable the individual to utilise their time with educational and vocational resources, providing opportunities to build skillsets, furthering their chances of breaking the re-offending cycle and to achieve successful rehabilitation.

They demonstrated the technology could work in test prisons and overcame many necessary obstacles to using an electronic device within a physical prison environment. The project is continuing to be developed with ambitions to increase reach. Since the end of the funding period, the company has experienced demand across the prison service and as a result, is expanding the number of prisons they are working with.

They are currently liaising with the probation service about consent to support progression into work, from within the prison, and on release. In addition, two other related projects are developing linked to this initial project:

Supporting the voluntary and community sector who engage with prisons/ex-offenders. There is recognition that reaching this sector with learning resources is challenging and there is potential for adapting the project to enable support organisations to guide prisoner learning to help reduce re-offending.

Further development of the 'virtual campus', both in cell and also for use when prisoners are released.

MyKnowledgeMap - Evidence4Life (VocTech Seed 2017)

MyKnowledgeMap developed their cloud e-portfolio service offering – “Myshowcase.me” to enable 3rd party vendors, employers and popular Learner Management Systems to link to their systems to it easily. This would enable learners to receive their own free lifelong personal Myshowcase account populated with the relevant activities from their training, including completed assessments, projects, assignments and other work and include micro-credentials in Open Badge form.

The Open Badges platform is used worldwide and is a commercial success. Although without the Ufi grant funding the team felt the project would have gone ahead, it is likely it would have been approached differently or been smaller in scale. The project secured additional funding from both commercial and non-commercial sources following Ufi grant funding.

Openbadges.me is used in over 100 countries and is the only digital badging platform which can be fully white labelled.

Bolton College – Ada (VocTech Seed 2018)

Ada chatbot, developed as iOS and Android apps enables students to access college information and services without having to login to traditional graphical user interfaces.

The product is up and running with the user base growing year on year. It can currently be accessed by Bolton's 11,000 students and 600 staff members. Further investment from both commercial and non-commercial sources has been secured since the end of Ufi grant funding. The college has engaged with a wide group of influential partners (for example, Jisc) to support the work which has opened up additional opportunities for the institution. Trials for the chatbot were ongoing in several colleges across the UK throughout 2022 (Ayrshire, Blackpool and The Fylde, Sandwell, and Yeovil colleges).

National Youth Agency - NYA Learning Hub (VocTech Seed 2019)

The NYA Youth Work Academy developed a vocational learning platform and collaborative learning space for the UK Youth Work Sector. The organisation is looking more widely to see how a 'digital first' approach can change how they work.

As a result of creating the platform, the NYA secured additional funding, both from commercial and non-commercial sources, enabling them to create additional digital courses for learners, which they are hoping to continue into the foreseeable future. To support the sustainability of the platform, qualification training is being sold to organisations to help generate income.

Many more, free CPD courses have been added and further accredited units are being developed, enabling learners to create their own bespoke learning journey. The platform has become a key product for the organisation and staff are asked to engage with it and consider how ongoing and future projects can dovetail into the platform.

Digital Unite – DCN Aspire (VocTech Specialist 2019)

Digital Unite's aim was to use a digital platform to create online training that equips people with learning disabilities to develop their skills and become a volunteering 'Aspire Champion'.

Digital Unite feels the product launched is delivering genuine impact for learners with learning difficulties by supporting them to enhance their essential skills for life and work. To date the platform has supported over 300 learners. Since the end of the Ufi grant funding period, the team have redesigned the Aspire platform based on user feedback to increase its accessibility. This feedback was also used to guide the development of Digital Unite's new learning platform. Relationships with existing organisations have helped inform Aspire's membership strategy. There are plans to relaunch the membership opportunity as part of a wider Champion programme or one dedicated to people who are learning disabled once learning has been migrated to the new Learning Management System.

Skills for Logistics Ltd – FLOW (VocTech Specialist 2019)

FLOW is an online talent growth platform for the transport and logistics sector that provides micro-qualifications, learning tools and a collaborative networking space around skills for employers, training providers and learners. The aim was to create a marketplace of quality assured training and a platform that allowed logistics learners to access vocational learning readily and easily.

The project experienced a number of successes during its development phase that may potentially support the opening of markets for the product in the future:

- Recognition from GXO Logistics that FLOW was an improvement on their in-house talent management system.

- FLOW was promoted to DHL, a logistics company, as a way of reducing the time required for their induction training, without sacrificing the quality of the training.

- FLOW introduced a blended learning approach to the Certificate of Professional Competence (CPC) required every five years by HGV drivers, which was endorsed by the government.

Since the Ufi grant funding period ended, delivery of the CPC has continued and DHL and GXO continue to show interest in FLOW's driver induction training. Skills for Logistics are also currently working with the FE sector to register students on FLOW to bridge the gap between students and industry.

During the funding period, FLOW engaged 561 users: 507 learners, 27 employers, 17 training providers and 10 administration employees. To date they have reached over 1,500 learners and are predicted to reach 10,000 learners when FE Colleges use FLOW to register their students in 2023 as intended.

Interactive Scientific (iSci) - Nano Simbox (VocTech Seed 2015)

iSci developed an immersive digital platform to make complex science interactive and accessible to all from science learner to researcher.

At the time of the 2019 evaluation interview, Interactive Scientific had gone on to access other funding to develop aspects of the product across different markets and avenues. They were targeting Universities/HE and BTEC/Access students, corporate research/training modules, and at home and non-formal learning. The iSciVIS, as it is now called, is still available as part of the suite of products offered by Interactive Scientific.

Relate - Developing text-based therapeutic & supportive skills

The objective for the project was to create and pilot a course delivered fully online to develop text-based therapeutic skills. The course was designed to be suitable for counselling professionals and those working in a wide range of helping and supporting vocations and was part of the organisation's strategy of increasing their digital offering.

Relate were aiming by the end of 2020 to have moved the bulk of training online and in 2019, were continuing to build new courses with a long-term aim of developing a new role and concept, "The Digital Practitioner", counsellors using entirely digital methods of offering support.

The organisation's 2020/21 annual report alludes to the challenges of the pandemic and the need for it to quickly transform from being a primarily face-to-face service delivery organisation to being able to support relationships entirely online and on the phone. Throughout this period 2,398,537 people used its online self-help services.

Agylia – Mobile Training and Support and Agylia Care (VocTech Seed 2017 and VocTech Impact 2018)

The project sought to deliver training to domiciliary care workers that is easily accessible via Apps on smartphones and tablets, bringing together a library of training and support modules. The company was purchased by Civica in 2020 and Agylia branded learning platforms are still available through its website.

Founders4Schools - Improving employability of young women through Workfinder

Funding was secured to help develop F4S's Workfinder platform which supports young people to search and apply for work experience placements without being dependent on their parental networks or schools that may have limited resources.

At the time of completing the 2019 survey, work was continuing with additional commercial funding being secured. It is difficult to deduce from existing information how the specific Ufi project evolved beyond the funding although in 2018/19, the company announced the spin-out of its work experience and internship placement service into an independent company called Workfinder.

Wizenoze - Web for Classrooms (VocTech Seed 2017)

Wizenoze Ltd developed the "Web for Classrooms" (WfC) to help provide learners with internet content that is readable by their ability.

At the time of completing the 2019 survey, a larger-scale version of the product was being launched and it is now operational as a subscription service. It is "the largest curated and safe-for-school collection of online content available in the world". The WfC has 6,545,345 (and growing) English web pages from trusted site sources, hand checked by teachers for suitability for the teaching curriculum and indexed by reading age.

eCom Scotland - Assessing Reality (VocTech Seed 2017 and VocTech Impact 2018)

Working with Ufi through the Seed project and alongside colleges and SQA, eCom Scotland developed an immersive experience to deliver assessment through virtual reality (VR).

At the time of their survey response in 2019, eCom Scotland had just secured Impact funding and work was underway on the next stage of development, supporting the long-term goal of creating and rolling out the Software as a Service product and helping more businesses adopt the software.

eNetReality™, as it is now called, has succeeded in its objective of enabling users to create learning and assessment experiences for any organisation's workforce. It is trademarked, commercially licenced product and is available for an annual fee of £2,500.

Continued: Seeking a route to market

The following section outlines those projects with a viable product that are in the process of going out to market.

Acadmi - Intelligent mobile training for construction (VocTech Seed 2018)

Acadmi's B2B Training App provides companies, working within the Construction Industry, with their own branded platform to deliver highly engaging, interactive and mobile-first content to their workforce. Acadmi leverages unique video technology within a bespoke, personalised experience to improve employee's engagement rates in training and ability to apply learning within the workplace.

Three courses were developed during the Ufi grant funding period. Acadmi were accepted onto Europe's largest accelerator programmes within construction (5SPRING), which allowed them to explore AR and VR construction training and expand their library. This is likely to be skills-based training as opposed to compliance training under the Ufi grant funding. The team realised there was potential to deliver additional technologies on the platform, e.g., medical reports and the reporting of incidents and they created this reporting feature. The team are planning to release some VR/AR content/modules by the beginning of 2023. Acadmi has found lack of accreditation has been a barrier to securing interest from companies. Acadmi are currently working towards accreditation and are hoping this will be achieved in 2023.

MYBE Awards - Digital change makers (VocTech Impact 2019)

MYBE Awards developed and trialled a prototype platform for digital learning to enable prisoners, ex-offenders and associated others affected by Criminal Justice to re-enter the workforce, build futures and reduce reoffending in a sustainable way.

Whilst testing the learner platform technology with a developed online qualification they received over 660,000 expressions of interest. This led to 142,600 people engaging direct among the target audience cohorts from which 2,648 enrolled on a learner journey between April and 6th December 2021. The project finished with IP possibilities, significant affirmation of what works with people furthest from the labour market and a sustainability strategy. In addition, the project has stimulated interest from several Government departments including The Home Office, the Ministry of Justice/Probation Service and the DWP and the Cabinet Office.

The predominance of mobile technology used in preference to web-based technologies raised significant implications for the engagement, delivery of learning and retention of underserved learner groups. As a result, the team re-developed marketing and technology access to be mainly through mobile technology devices. The team have found that more participants access their services through mobiles and Microsoft Teams than their learner platform. They have experienced significant demand for their learning and progression programmes but feel they are not able compete with organisations offering free programmes.

The team feel that disrupting the marketplace seems the only viable option but that this type of strategy may not enable significant penetration due to the wide use of Adult Education Budgets (AEB) of which they have limited access.

Careers Matters – THRIVE (VocTech Specialist 2019)

Thrive is a digital platform for the care-experienced community to access a mentored service, working with a virtual career coach and gain access to employment pathways.

The project created the first digital platform of its type in a sector where there is a high demand for support. Career Matters has since secured further Impact funding with Ufi and at the time of interview was three months into the project to understand how communities can most effectively be reached and supported.

The project received additional funding from both commercial and non-commercial sources and gained a commissioned service in a similar area across the NHS, which will support next stage developments. Social investment opportunities are also being explored.

There is recognition that to achieve scale, then collaboration across the system is required. A steering committee has been established and Career Matters are in discussion with various government departments. The vision is for every LA, prison and care home to have access to support from the organisation. It is planned that those with lived experience drive developments through the piloting of models and concepts. This work continues until late 2023.

Continued: Design evolved / still being developed

This section highlights those projects that, at the time of consultation, were still in development and/or testing or progressing and exploring design, functionality or formats.

GTA England – Apprentices’ Mate (VocTech Seed 2017, VocTech Impact 2018)

The Engineering Apprentices’ Mate is a point and play AR learning experience for engineering apprentices, using virtual machinery or equipment to provide the apprentice with individual learning, support and assessment activities.

Under the Impact fund, the platform was tested with 94 users and valuable lessons were learnt regarding usage frequency in relation to stage of apprenticeship, functionality and look and feel. The platform is currently undergoing its second iteration of development with the aim of rolling out to the GTA network at the end of 2022, with the potential to reach 12,500 employees.

Efforts are underway to commercialise the product, although this process had stalled slightly at the time of the 2022 interview. They are currently in conversation with another Ufi funded project and other partners around Surface’s functionality may be applied for tools in other environments and/or sectors.

Fluence - Passive Accreditation in prisons (VocTech Impact 2018)

The project applied Fluence’s auto-grading technology to convert ‘naturally occurring evidence’ from the work produced by prisoners on site as part of the learning process, into formal evidence of their abilities. Fluence worked in partnership with Novus, the largest secure training provider in the UK.

A substantial addition during the project was the creation of a system to read and interpret prisoners’ hand-written documents; resulting in a 23% improvement in grading consistency among tutors compared to when graded by manual only and 14 hours of time saving each week on marking. The AI was also able to reliably detect which aspects of the curriculum a learner had covered, and track how much evidence would lead to a ‘pass’.

The team built effective working relationships with partners from Novus, HMPPS, Innovate UK and Ufi. They felt that Ufi’s brand position helped them engage with the education sector. This allowed the main project team to respond constructively to changing events and challenges such as COVID-19 lockdowns. The project could not estimate how many learners participated as it was mainly aimed at tutors. The technology continues to be utilised and refined, for example, quality assuring regulatory standards for National Highways.

Applio - Vocational Game-based Learning (VocTech Impact 2018)

This project was a partnership between Applio, who are specialists in designing and developing game-based learning (GBL) and Birmingham Metropolitan College. This GBL resource aimed to improve the professional skills of young learners entering the workplace, in areas such as situational judgement, communication, problem solving and team working. It allows the client to develop their own GBL content around a few scenarios for their learners. It aimed to replace current approaches (face-to-face, labour intensive workshops and e-learning) to increasing learning effectiveness.

Key outcomes included: Commercial exploitation with three early adopters offering scaling-up opportunities; the development of a multi-tier pricing model; proved that 10%+ of blended learning content for specific courses could be achieved; Student combined sentiment exceeded target (4.6 out of 5 against target of 3.5) on 5-point Likert scale; future pipeline of courses/use cases.

Progress following funding has included pivoting to HE and Health Care markets and further product development with six core game types that can be adapted to different settings/subjects. Onboarding rates have been around 200 users per month, compared with the original ambition of 100 per month. Future planned activity will involve expansion of the business model with a standard offer using the app alongside a tailored development offer for those that want to adapt further.

National Composite Centre (NCC) – Augmented Learning (Manufacturing Skills Fund, 2017, VocTech Impact 2019)

The project was a continuation of the preceding Ufi funded project 'Augmented Learning for High Dexterity Manufacturing', which sought to utilise advances in technology and learning design as well to improve and digitise composites training.

Following advice that the product would be more successful targeting the industry route, the decision was taken to pivot and change the target market. The NCC are now focussing on selling the product to industry providers and customers as opposed to educational settings. The product is continuing to be developed with the focus being less on user friendliness and more on precision. The journey undergone, the development pathway and the wealth of previous work has enabled them to build an 'immersive workbench'. This is a new training tool which is planned to launch as an internal test version/demo by December 2022.

Contented Brothers – Skilling Me Softly (VocTech Specialist 2019)

Skilling Me Softly is a VR experience to support new recruits' introduction to a workplace environment. The team produced a fully working, bespoke prototype VR experience that can be accessed via a mobile VR app and experienced through the device screen or via a headset, tested and validated by both learners and employers.

The software has continued to be used by L'Oréal and the VR technology is being demonstrated in meetings with clients. The team are currently repurposing it to have wider applicability, with an aim to reskin the app for new clients. They intend to build on it further and add additional content while addressing minor tech updates.

It is currently being marketed to customers and research is underway as to how corporations can fit the product into their budgets. The long-term objective is to create a business product and charge corporate companies for their employees to use during training.

Continued: Limited expansion, dormant and/or not confident with finding a route to market

The following section outlines projects that have found it challenging to scale products and secure interest from the market. In most cases, a viable product has been launched but a route to market is yet to be successfully established.

Sara Dunn Associates – Cuppa (VocTech Springboard 2015, VocTech Seed 2015, VocTech Impact 2017)

Cuppa delivers just-in-time knowledge to care workers via their mobile phones. Cuppa 'Sips' – short items on everyday care tasks – offer practical, on-the-spot learning, refreshers and job aids in formats care workers like, with the functionality care managers need.

Cuppa continues as part of the Project Manager's core business, enhanced by an 'enrichment' support business expert, originally funded by Ufi. The project is currently trying to find an appropriate, profitable route to market into the care sector though this has been extremely challenging to achieve. Beyond the Impact project, the PM will hopefully engage with more care home organisations within the South East and South West regions, covering some 100,000 homecare workers. The longer-term plan is to target the national market covering 650,000 homecare workers. There is also significant potential to develop content for residential and community care workers who make up the remainder of the 1.5 million care workforce nationally.

Desq - Signs of Life (VocTech Seed 2018)

Signs of Life is a training resource that provides healthcare professionals with a simulated environment in which they can practice the care of the deteriorating patient. Played out in a hospital ward or care home, patients/residents are observed, and decisions made on interventions required.

Feedback on the "Signs of Life" game from Health Education England and practitioners confirmed the product was an effective means for healthcare professionals to practice the procedures and routines for medical observations and clinical care. The app is currently available as an e-learning resources on Health Education England's online platform "e-learning for Healthcare Hub" but it has proved challenging to secure buy-in elsewhere.

The Project Manager felt in hindsight that it would have been better to work with a Healthcare Trust, organisation or a larger number of medical professionals to help with content production, to scale the product and get it to market. Engaging the healthcare sector was extremely challenging. Despite efforts to secure interest of local healthcare trusts, charities, and learning and skills organisations such as Skills for Care, engagement and usage has remained low.

Blueflame Digital - Chomp dental training games (VocTech Seed 2018)

Chomp Dental is a new mobile app that focuses on teaching the key entry level skill of dental charting in an engaging and entertaining way. Progress is recorded and reported, highlighting any weaker areas of the trainee's knowledge.

At the end of the funding period, the app held four modules of entry-level curriculum. Several more were planned but low input from dental practitioners and user-testing negatively affected future development. Funding streams to help re-invest in the app and help build more content are currently being sought to support it becoming an accredited learning resource by City & Guilds. However, without additional funding, the project lies dormant. The Chomp app is still available on Google Play Store and regularly has a small following of users.

Solution 42 – Spotless (VocTech Seed 2019)

The project produced a web-based prototype of a scenario-based learning program, in the context of a care home environment for those in cleaning roles. Real-life scenarios were presented to learners who then chose the course of action, with choices being logged and linked to individual feedback.

The product suffered from user testing challenges due to COVID-19, exacerbated by the project manager's care home group contact leaving their position. As such the project was unable to access the asset of cleaners as planned and encountered further communication and pilot testing challenges on discovering low numbers of the target audiences did not have email addresses.

At the end of the Ufi project, SMART grant funding was applied for, but this was unsuccessful. Feedback from the application process and panel was that there needed to be more evidence on impact, return on investment and ability to invest back into research and innovation as a business. A poster about Infection Prevention Control was submitted as part of an annual conference and the project lead was invited to speak at a care home conference in June 2022, but nothing has emerged in terms of financial backing.

Spotless currently lies dormant, and the project lead is giving themselves a three-year window to find a suitable funding partner.

LTE Group Manchester College - Gamification in construction (VocTech Seed 2019)

The project aimed to create a gamification app for construction learners to help embed the development of transferable, future-proof skills to complement technical construction skill.

Initially the product was working well for the LTE group but then engagement and impact slowed. The Gamification in Construction tool is still in use by the LTE Group, but only at a small scale. For it to be used at a larger scale would require more content, development and resources to be rolled out further across the college for other subjects.

However, the learnings from developing the gamification project led them to taking on a wider digital and blended learning project across nine colleges for Greater Manchester.

WAMITAB - WastEd: the digital learning community for sectors leading environmental change (VocTech Specialist 2019)

WAMITAB developed simple, online, gamified learning applications for the waste and resource management sector. The apps teach fire evacuation and hazard identification skills to waste operatives.

The two training games developed are currently on CIWM's website and free until December 2022. Significant organisational change at WAMITAB affected the degree to which employees were able to dedicate time to the project internally following the funding. While the project has been influential within the organisation in terms of communicating the value of using gamification for training, there are currently no plans to develop further modules.

Boston College - Blended Team Leading in Agritech (VocTech Specialist 2019)

Boston College produced an adaptive e-learning package to enable AgriTech employees' access to contextualized work-related, team-leading training and qualifications through blended delivery. The aim of the project was to overcome the barriers to training of time, travel and access within the AgriTech sector, but it developed into a review on the whole approach to online delivery and how to meet the needs of individuals when they are learning independently.

Once the project was completed promotion was initially going well with interest from a college and companies wanting similar systems for inductions for staff, such as health and safety and introductions to machinery. However, during COVID, the project lost focus as staff at the college were needed to support the roll out of virtual learning across the college. This change in staff focus made it difficult to keep the project momentum moving through the lockdowns.

During COVID-19 interruptions there was a shift in the project with the focus moving away from linear learning but having an individualised journey to maintain engagement. The project is currently being held back by lack of funding and content generation. The team need people to support it with further content development in order to aid expansion and for it to be applied to different scenarios/qualifications.

Fusion 48 – Frailty SIM (VocTech Seed 2016)

The purpose of the project was to produce a VR digital learning application that would benefit vocational learners in the care market, reaching those who have direct contact with older people living with frailty and giving them a greater understanding of the condition, helping them effectively manage those in need of care.

Frailty SIM apps are still available on Google Play and the App Store with the development of the product for market. However, the product's profile within the healthcare and digital vocational sectors was less than anticipated and scaling the product and commerciality proved challenging. At the time of interviewing in 2019, plans to develop the app further had stalled due to lack of funding.

Discontinued after funding and status unknown

Two projects were discontinued entirely following funding:

Collab Group - Apprentice Collaboration Platform (VocTech Seed 2016): The project did not continue beyond the funding. In retrospect, the PM felt that they should have been more rigorous in testing feasibility of the project. The aim was to create and develop a new platform with a technical partner and it was realised early into the project life cycle that was going to be difficult from a resource and time commitment perspective.

Bradford College - Titration Station (VocTech Seed 2017): The project did not continue following the end of Ufi grant funding. Ultimately lack of staff resource and lack of senior buy-in meant the team were unable to take the work further.

There were 28 projects that took part in either the 2019 or 2022 evaluation but from the information available, it has not been possible to ascertain their current status. Either no evidence has been found of their continuation since 2019 or project contacts stated that the future of the project was uncertain.