

Legal Innovation Lab Wales

Final Evaluation

Final Report



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1. Introduction and context

- 1.1** SQW Ltd (SQW) was appointed by Swansea University in July 2022 to undertake a Final Evaluation of the Legal Innovation Lab Wales operation. This follows Inception and Mid-Term Evaluations completed in 2020 and 2022 respectively.

About the Legal Innovation Lab Wales

- 1.2** The Legal Innovation Lab Wales ('LILW') was a £4.95m, part-ERDF funded operation under the West Wales and the Valleys programme 2014-20. Specifically, the operation was funded under Priority Axis 1: Research and Innovation, and is expected to deliver against Specific Objective 1.1: to, "*increase the success of Welsh research institutions in attracting competitive and private research funding*", and the associated result indicator of an increase in research income amongst HEIs.
- 1.3** Located within the School of Law's Digital Technium building, the operation combined new purpose-built facilities, with additional expert research and technical capacity in three areas:
- **LegalTech:** focused on supporting the development of legal innovations, prototypes and toolkits, underpinned by research into artificial intelligence (AI) and machine learning.
 - **Cyber Threats:** focused on supporting research to advance understanding of cybercrime, terrorist groups' exploitation of new technologies, online grooming, misinformation, fake news and criminal internet use, and the development of cyber-security/terrorism prototypes/toolkits.
 - **Law Clinic:** designed to support the access to justice agenda through facilitating the trialling and scoping of LegalTech innovations to address real world legal issues.
- 1.4** Delivery of the operation commenced in August 2019, with a formal project announcement by Welsh Government and Swansea University in October 2019. The close date for the operation is June 2023.
- 1.5** The operation included both capital and revenue elements:
- Capital funding from ERDF (£0.75m), to fund the design, procurement, and construction of a c.700 sqm facility comprising an: AI and Law Laboratory, a Cyber Threats Suite, a LegalTech R&D Centre, a Law Clinic (part-eligible for ERDF support¹), and an Executive Boardroom.

¹ The focus of the project in relation to the Law Clinic was to fund the development of the space for prototype testing, not its wider remit (provision of pro bono legal advice), which is not within the scope of the ERDF eligible project.

- Revenue funding from ERDF (£2.6m) and Swansea University (£1.6m) to support the appointment of researchers in LegalTech and Cyber Threats, a software development team, and a project management team.

Evaluation purpose and coverage

- 1.6** Consistent with the requirements of ERDF funding, Swansea University committed to undertaking a robust evaluation of the operation. As such, the University commissioned SQW in February 2020 to lead Inception and Mid-Term Evaluations of the operation. The University then subsequently, and separately, commissioned SQW to lead a Final Evaluation in July 2022 (the subject of this report).
- 1.7** Completed in June 2020, the Inception Evaluation focused on the development of a logic model/theory of change for the operation, clarifying the data to be collected to support the programme of evaluation, and confirming the approach to the Mid-Term Evaluation.
- 1.8** The Mid-Term Evaluation, completed in January 2022, focused on assessing how effectively the operation was progressing against its aims and objectives at an interim point. Overall, the findings at the Mid-Term Evaluation stage were encouraging, indicating strong progress in delivering against its Business Plan. Key messages included:
- the operation had delivered a substantial amount of activity in a challenging context and was broadly on course to deliver outputs and outcomes in line with expectations
 - the Covid-19 pandemic had inevitably influenced delivery, leading to a substantial underspend against budget and the need to re-profile the budget reducing the total ERDF grant from an initial £4m to £3.35m
 - securing research funding had proved challenging (owing to delays in the appointment of research staff and to the completion of the Cyber Threats Suite), with modest progress made at that stage against the ERDF target of £3.4m in research funding secured by the close of the operation
 - a range of collaborative R&D projects had progressed successfully, leading to tangible prototypes to be tested and evaluated with users, and in some cases platforms which were available for use
 - there was evidence of wider emerging benefits in relation to enhanced partnerships, networks, and behaviours supporting collaborative R&D.
- 1.9** Some two years on from the Mid-Term Evaluation, the core purpose of this Final Evaluation is to provide an assessment of the impact of the operation as it nears the end of its ERDF period against the aims and objectives set out in the Business Plan. This includes an assessment of the extent to which the benefits realised are ‘additional’ compared to what

would have happened without the LILW The Final Evaluation also provides an updated assessment on delivery by the operation against the ERDF Cross Cutting Themes (CCTs), considers what has worked well and less well in delivery, and considers implications for the sustainability/priorities of the operation following the close of the ERDF period.

- 1.10** The Final Evaluation commenced in September 2022, with primary research completed over March-May 2023. The report was drafted in May 2023, ahead of the formal completion of the operation in June 2023. As such, the Final Evaluation is based on evidence provided as the operation drew to a close, but whilst activity was on-going. This needs to be taken into account when considering the evidence on progress in terms of expenditure and in delivery of ERDF target indicators, and the wider final outcomes and impacts.

Evaluation methodology

Logic model

- 1.11** Logic models are useful devices to inform evaluation, because they encourage thinking about the steps required for an intervention to have its desired effects, and the nature of effects that can be covered in evaluation. A logic model articulates explicitly the relationship between inputs, activities, outputs, outcomes and impacts:

- inputs are the resources used by the intervention, including ERDF funding
- activities are those tasks undertaken by the intervention
- outputs are the readily measurable results of those activities
- outcomes are the changes in the behaviours and performance of those involved with an intervention
- impacts are the ultimate benefits attributable to the intervention and changes in wider conditions, both directly and indirectly.

- 1.12** Logic models also set out the external factors which are expected to influence activity (either positively or negatively), and therefore the realisation of anticipated outputs, outcomes and impacts.

- 1.13** The logic model and associated narrative ‘theory of change’ developed during the Inception Evaluation (and reflecting the position before the project started) are set out below. This Final Evaluation seeks to test the logic model and underpinning theory of change, particularly the extent to which the LILW has delivered the outputs, outcomes and impacts anticipated.

Theory of change for the LILW

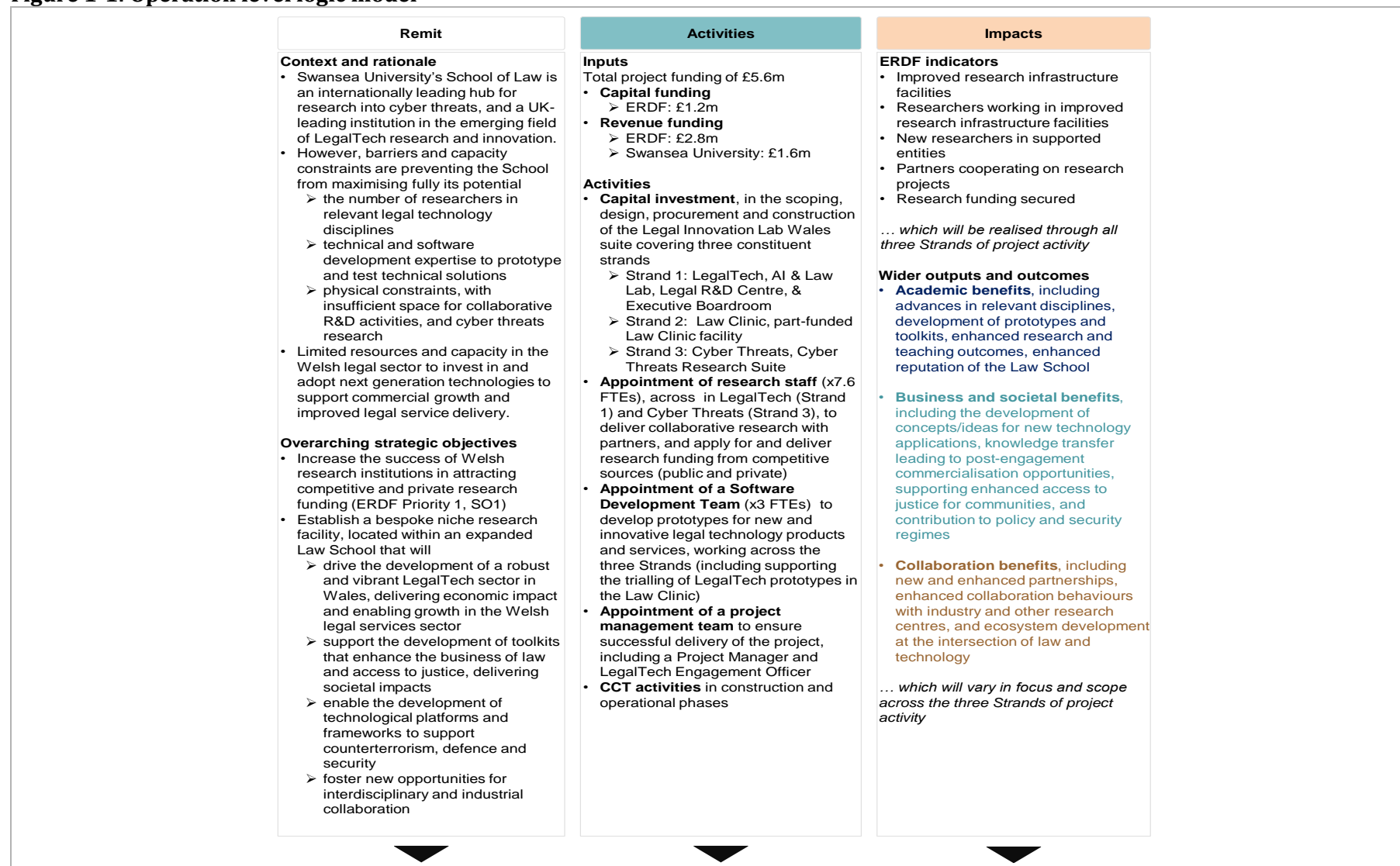
Swansea University's Hillary Rodham Clinton School of Law, is an internationally leading hub for research into cyber threats, and a UK-leading institution in the emerging field of LegalTech research and innovation. The application of technologies such as AI and blockchain are becoming increasingly important in legal practice and national security.

However, existing infrastructure barriers and capacity limitations at the School of Law act as a constraint to the University further pursuing world-leading research and securing competitive research income across the LegalTech and cyber threats disciplines. The Law School has no existing facilities to support legal innovation, research in legal informatics or the application of AI in a legal context, or the facilities necessary to work on secure or sensitive data, nor to meet in a secure environment with partners from law enforcement or international security agencies. Further, the University lacks research capacity across the legal services, computational social sciences, and cyber/counterterrorism spectrum.

The LILW will enable the Law School to enhance its internationally leading position in LegalTech, cyber threats and associated technologies (AI, blockchain etc.), accelerating innovation and research for both academics and sector organisations across Wales, contributing to the recruitment and retention of academic talent in Wales, and supporting the development of a robust and vibrant LegalTech sector in Wales alongside the access to justice agenda. LILW will provide Swansea with a significant competitive advantage in securing competitive research income from public and private sources.

These positive effects will be achieved through the development of a purpose-built LILW suite within the Law School's Digital Technium building. This will be complemented by the expansion of the existing research and technical capacity by recruiting additional researchers and a DevOps software development team to work with academic and commercial partners to design, develop and implement software solutions. Engagement with external partners will be facilitated by the appointment of a LegalTech Engagement Officer, and funding to enable researchers to identify, scope and submit grant applications and secure competitive research funding.

Figure 1-1: Operation level logic model



Key assumptions underpinning the ToC

Project wide

- Recruitment & retention of academics/staff of high calibre staff with the necessary expertise
- Understanding amongst stakeholders/partners regarding what does & does not fall within the remit of LILW
- Sufficient sources of research & innovation income, & linked to this, an adequate number of successful research funding bids secured by LILW
- LILW offers capabilities at the forefront of research & innovation in LegalTech/cyber threats throughout project delivery and beyond. The longer-term sustainability of LILW & its ability to deliver final outcomes will require additional investment to ensure that staff are retained & the facility/equipment remains maintained & up-to-date.
- LILW is integral to and aligned with the strategic positioning & priorities of the wider Law School, ensuring strategic support & commitment from leadership
- Interest, demand & culture of cross-disciplinary collaborations with other university disciplines & research centres
- There is demand from industry for collaborative research with the LILW
- Engagement from the wider research base & industry to utilise & engage in collaborative research with LILW
- Effective relationships/synergies between the three strands of the project (LegalTech, Cyber Threats, & the Law Clinic), which are mutually re-enforcing & provide opportunity for cross-strand activity
- There will be feedback loops, with further funding leveraged from new opportunities & collaborations, findings leading to further research activity, & changes in staff behaviours & attitudes leading to new activities & opportunities

LegalTech

- Willingness & capacity within the legal community to explore/adopt LegalTech
- Local ecosystem/infrastructure that supports start ups
- Economic conditions that support entrepreneurialism & investment in new technologies

Cyber threats

- Engagement from partners from law enforcement or international security agencies
- Infrastructure & expertise align with the current cyber threats challenges
- Research suite provides sufficient level of security – consistent with any necessary legal or regulatory requirements – to enable on-site data interrogation/collaboration activity

Law Clinic

- Community assured that the Law Clinic offers professional expertise in law
- Partners (NGOs, charities, law firms) have the capacity to engage in collaborations
- Steady demand for legal advice from the Clinic throughout delivery to support the trialling of innovations

External factors influencing outcomes

- **Unforeseen delays to project delivery** owing to COVID-19; including delays to staff recruitment, the construction of the cyber threats research suite (now due to be completed early 2021 rather than summer 2020 as planned) & the ability of the project to deliver collaborative projects.
- **Wider economic conditions** (particularly in the context of COVID-19) & the policy/regulatory agendas will influence levels of industry capacity & demand for collaborative research & innovation.
- The **prioritisation of research & innovation funding & the level of competition**, including Research Council / UKRI priorities & investment decisions related to legal tech, cyber threats & related disciplines.
- **Investments in equivalent facilities elsewhere**, which will impact on the extent to which the LILW provides a unique offer to collaborators & industry. Significant investments by competitors in the Wales/UK may impact on the ability of the project to secure competitive research funding, & the retention and attraction of talent, but also provide opportunities for collaboration
- **The UK's departure from the EU** will change access to research funding & movement of people; this may influence the ability of the project to recruit & retain talented staff, & participation in EU-funded research programmes. Linked to this, WEFO-funded projects need to be completed by June 2023 leaving no scope for a change to project end-date
- The **location of LILW** is not located in London - the 'legal hub' of the UK – therefore it may be challenging to attract high calibre academics & national/international interest from stakeholders.

Source: SQW

Sources of evidence

- 1.14** The Final Evaluation adopted a mixed methods approach, comprising both desk-based and primary research. The desk-based research included a review of project documents, and data analysis including monitoring data, expenditure, and performance against targets. The latest monitoring data submitted by the LILW and approved by WEFO available for the Final Evaluation covered the period to January 2023.
- 1.15** The primary research was divided into five strands (see Table 1-1). In total, 38 individuals were consulted for the evaluation, providing a broad and robust evidence base, and a wide range of different perspectives with different types/levels of engagement with the operation.

Table 1-1: Primary research

Research strand	Main areas of focus
Project management and leadership (x7)	Consultations with project management and leadership <ul style="list-style-type: none"> • Overall performance of the LILW against original aims & objectives • Effectiveness of LILW management & monitoring processes • Outcomes & impacts, including any unanticipated effects • Lessons & reflections on delivery against Cross-Cutting Themes • Key lessons learned from delivery & implications for the future
LILW academics / researchers (x13)	Consultations with academics and researchers, covering both LegalTech and Cyber Threats <ul style="list-style-type: none"> • Role and nature of activity undertaken • Effects of the LILW on research activity and funding • Effects of the LILW on collaboration • Personal and wider benefits of the LILW • Lessons & reflections on delivery against Cross-Cutting Themes • Key lessons learned from delivery & priorities for the future
Software Development Team (x4)	Consultations with Lead Developer and all three current Developers <ul style="list-style-type: none"> • Role and nature of activity undertaken • Lessons & reflections on delivery against Cross-Cutting Themes • Key lessons learned from delivery & priorities for the future
Partners cooperating in research projects (x5)	Consultations with partners cooperating in research projects with the operation including private, public and third sector organisations <ul style="list-style-type: none"> • Background/rationale for engagement with the LILW • Nature of activity undertaken with the LILW • Observed / expected benefits as a result of the engagement

Research strand	Main areas of focus
	<ul style="list-style-type: none"> • Additionality in activity & outcomes • Reflections and key lessons • Priorities for the LILW in future
Strategic stakeholders (x9)	<p>Consultations with internal (x7) and external stakeholders (x2), including representatives from (other) departments/institutes in Swansea University, and external consultees from other organisations</p> <ul style="list-style-type: none"> • Engagement with the LILW, and any benefits realised • Strategic alignment • What has worked well and less well overall • Priorities for the LILW in future

Source: SQW

Report structure

1.16 The remainder of the report is structured as follows:

- Section 2: Assessment of inputs and activities
- Section 3: Assessment of Cross-Cutting Themes
- Section 4: Assessment of core benefits
- Section 5: Assessment of wider benefits and assessment against the logic model
- Section 6: Conclusions and recommendations

1.17 There are two supporting annexes: glossary and strand level logic models.

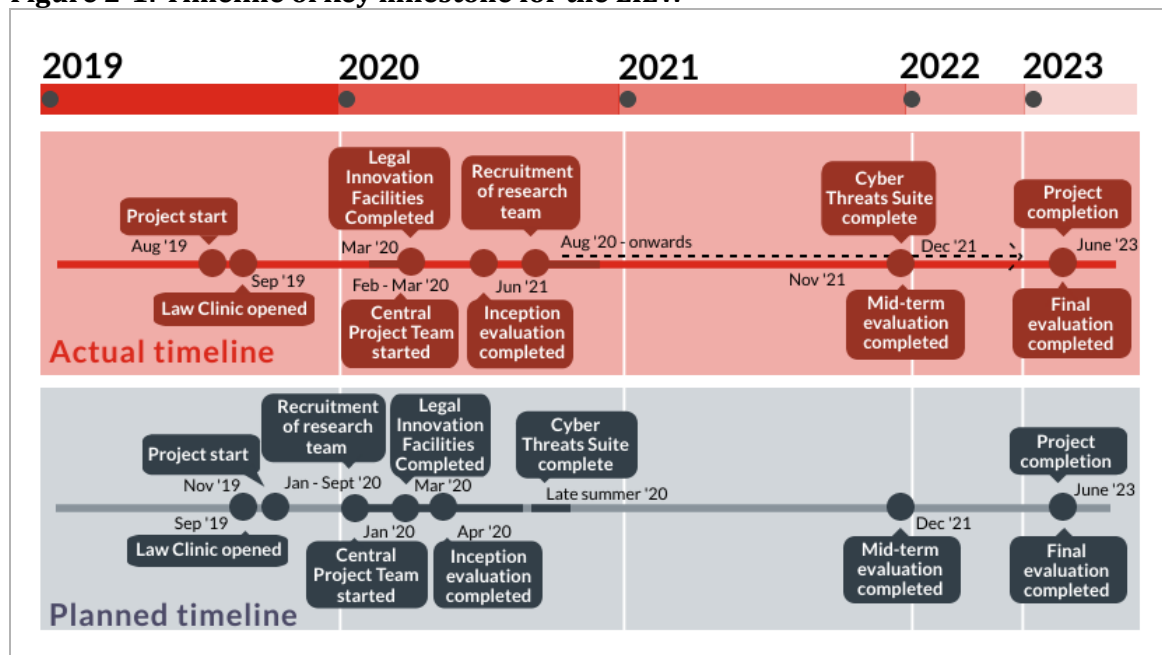
2. Assessment of inputs and activities

Overview of delivery stages

2.1 The operation commenced in August 2019, with a formal project announcement by Welsh Government and Swansea University in October 2019. A timeline showing both actual and planned milestones for the operation is illustrated in Figure 2-1. Overall, timings have remained broadly as set out in the original Business Plan, with two notable exceptions (the reason for which are discussed below):

- the delivery of elements of the physical infrastructure, with the completion of the Cyber Threats Suite delayed by over a year from summer 2020 to winter 2021
- staff recruitment was due to be completed by September 2020, however, recruitment challenges meant that in practice, the full scope of appointments had not been made by this point, and recruitment was ongoing for much of the operation's lifetime.

Figure 2-1: Timeline of key milestone for the LILW



Source: SQW manipulation from project documentation and consultation evidence

Expenditure

2.2 The original budget for the operation was £5.6m, comprising £4.0m from ERDF and £1.6m in match funding from Swansea University. However, by mid-2021 approaching two years into delivery, the project was significantly underspent compared to profile, owing principally to:

- delays in the construction of the Cyber Threats facilities combined with lower than anticipated construction costs
- the impact of recruitment challenges on revenue spend
- the impact of the Covid-19 related restrictions (e.g. on travel / event expenses).

2.3 The operation identified a range of approaches to manage the underspend including the introduction of a new strand of activity (a ‘Virtual LegalTech platform’), and changes to the staffing structure (see below for further details). However, it was also considered necessary to agree a re-profile with WEFO given the scale of the underspend. WEFO approved the re-profile in September 2021. As a result, the operation’s total ERDF capital funding commitment decreased from £1.2m to £0.75m (see Table 2-1). The revenue expenditure was not subject to re-profiling, although Swansea University’s match decreased slightly due to a reduction in the flat rate².

Table 2-1: Original and re-profiled total anticipated costs

	Original total budget			Re-profiled total budget		
	ERDF	SU	Total	ERDF	SU	Total
Capital	£1.2m	-	£1.2m	£0.75m	-	£0.75m
Revenue	£2.8m	£1.6m	£4.4m	£2.60m	£1.58m	£4.18m
Total	£4.0m	£1.6m	£5.6m	£3.35m	£1.58m	£4.93m

Source: Business Plan, September 2019 and Re-profile Addendum, September 2021

- 2.4** By the Mid-Term Evaluation, actual expenditure (as at October 2021) was £1.6m, marginally below planned expenditure by that point (8% below re-profiled budget). At that stage, the majority of outstanding expenditure was revenue expenditure on staffing costs.
- 2.5** At this Final Evaluation stage, by January 2023, overall eligible expenditure was £3.7m, with an underspend of 13% against the planned expenditure of £4.26m. This is a material underspend, in aggregate terms, approximately £560k.
- 2.6** Table 2-2 provides a breakdown of expenditure by category. At January 2023, the underspend was pronounced in aggregate terms on professional services and ICT. The latest Progress Report (November 2022-January 2023) sets out that the main reasons for the underspend across these two categories are as follows:
- Professional services expenditure is below budget largely due to delays progressing the development of the Virtual LegalTech platform. Also, procurement and implementation

² Note, the amount of SU match funding for staff remained unchanged, however, the flat rate (a simplified category for indirect costs at 25% on all revenue costs of the operation) commitment decreased reflecting the decrease in the total revenue budget.

of the Amazon Trusted Research Environment (TRE) had been delayed and this had not yet been claimed.

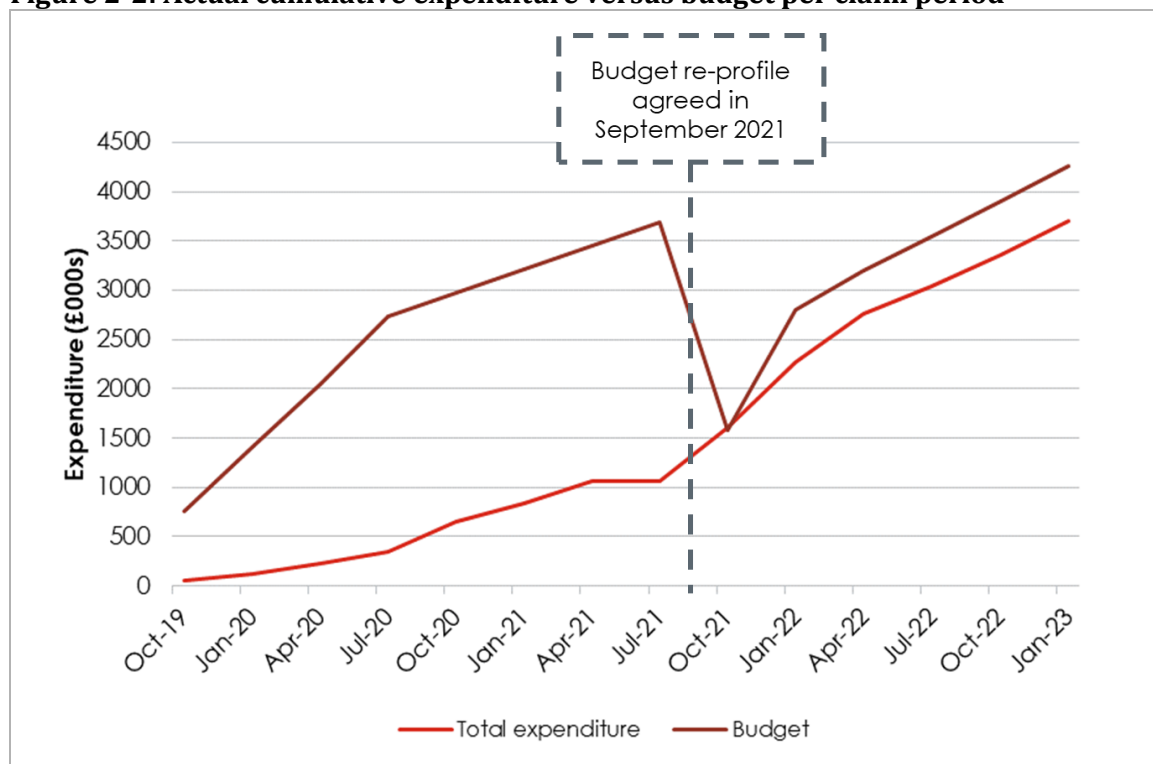
- ICT expenditure is below budget because the Amazon TRE being procured for the PASF will be claimed under the Professional Services Cost heading, rather than ICT as planned. Following the later than planned implementation of the TRE, the operation will then be able to procure the necessary hardware.

Table 2-2: Expenditure to January 2023 (£000s)

	Total expenditure to Jan 2023	Budget to Jan 2023	Variance to Jan 2023	Percentage of budget spent to Jan 2023
Estates	739	745	7	99%
ICT	137	249	112	55%
Staff	2,200	2,219	19	99%
Administration	51	51	0	100%
Marketing / Promotion	19	57	38	33%
Travel	9	16	7	56%
Training Costs	3	8	5	35%
Professional services	31	211	180	15%
Flat rate	508	703	195	72%
Total	3,696	4,259	563	87%

Source: LILW Variance by Claim (includes ERDF and SU match funding)

2.7 Error! Reference source not found. shows the variance between actual cumulative expenditure and budgeted expenditure by claim period. To the point of the re-profile in September 2021, there was a consistent and substantive underspend. Positively, since the re-profile, actual expenditure has aligned more closely overall with the planned expenditure. However, this said, there has been a consistent and material underspend (from 13% to 19% underspend) since the Mid-Term Evaluation point. Whilst this validates the case for the re-profile in late-2021, it suggests that the revised financial profile for operation was still not fully realistic and deliverable over its final 18 months of delivery.

Figure 2-2: Actual cumulative expenditure versus budget per claim period

Source: SQW analysis of data from LILW

- 2.8** The data to the end of January 2023 suggest that of the total LILW budget of c.£4.9m, approximately £1.2m of expenditure will be needed in the final five months of the operational period. The expectation from the project management team was that this would *not* be spent in full, with an anticipated underspend of circa £800k. By spend category, professional services, ICT, and staff are likely to account for the largest surplus spend in aggregate terms. However, this will need to be confirmed following the formal closure of the operation in June 2023.

Activities

Construction of the physical infrastructure

- 2.9** Construction of physical infrastructure commenced in 2019. The Law Clinic and Executive Boardroom opened in September 2019, followed by the LegalTech innovation facilities in March 2020; comprising the AI and Law Lab, and LegalTech R&D Centre respectively.
- 2.10** As noted in the Mid-Term Evaluation, construction of the Cyber Threats Suite fell behind schedule, and was impacted by the Covid-19 pandemic, and associated restrictions. Further, procurement challenges and the complexity of designing the space to adhere to Police-Assured Secure Facilities (PASF) status also led to delays. The construction of the Cyber Threats Research Suite was successfully completed in December 2021. This was around a year later than planned. However, given the challenges associated with the pandemic (both directly in relation to construction, and indirectly regarding effects and pressures on working

patterns and behaviours), and the need to ensure that the specification of the facility met PASF standards (which will be crucial over the long-term, enabling the University to handle secure or sensitive data), this is not considered unreasonable.

2.11 At the point of this Final Evaluation, the PASF accreditation process is ongoing, with external assessment for the accreditation expected in June 2023. A working group was established to support the process; however, this was temporarily suspended due to a change in Project Manager in Summer 2022. Subsequently, owing to the volume of work required to secure the accreditation, the operation sought to recruit a Data and Collaborations Officer in late-2022 to drive the implementation of the PASF. However, no suitable candidates were identified and the position was not filled, which led to some further delays. In February 2023, implementation of a cloud-based platform (Amazon Trusted Research Environment) was completed. Currently (at May/June 2023) the focus is on developing the necessary processes, policies, and collaboration required amongst stakeholders, prior to the external assessment. Images of the facilities are set out in Figure 2-3 below.

“ **This [Cyber Threats Suite] helps makes us unique. We have strong security features, and this help makes Swansea a good place to undertake really sensitive data research**

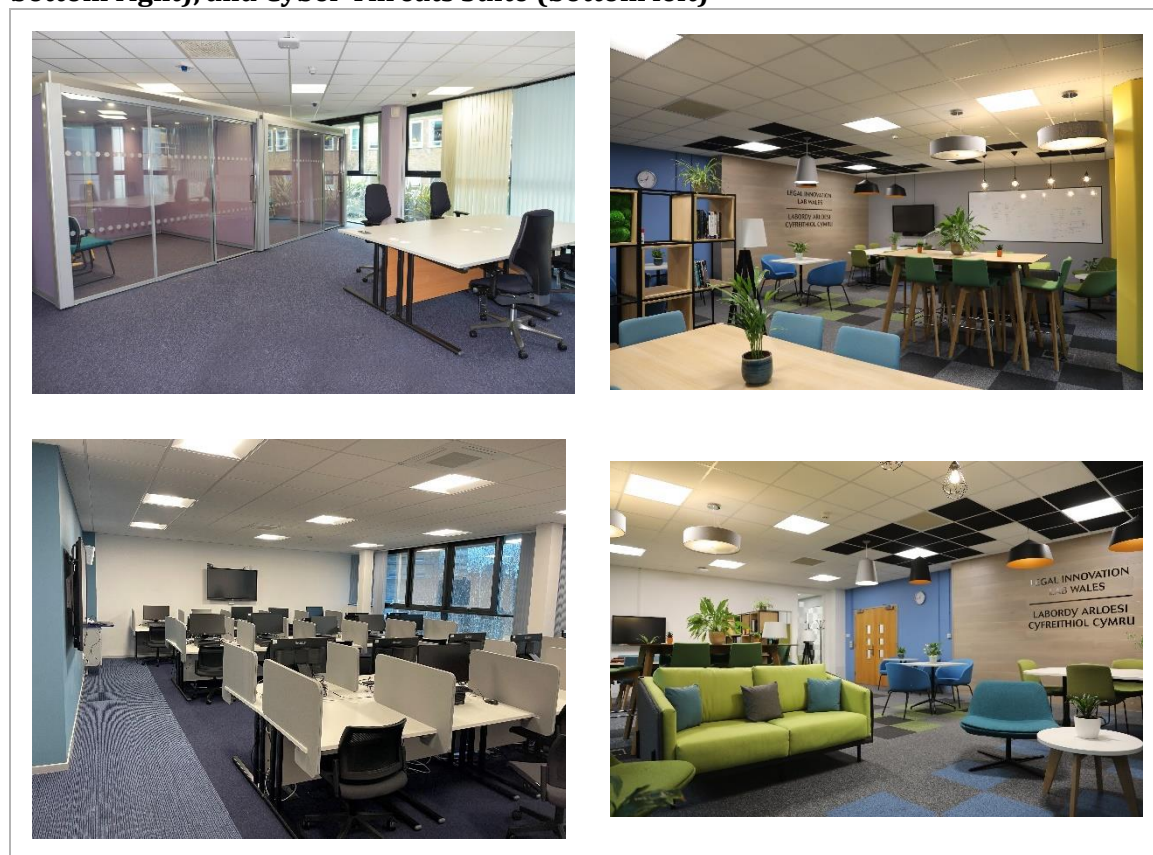


Academic consultee

2.12 Consultees reported that the delay to the completion of the Cyber Threats Suite has led to some adverse effects on the outcomes realised by the operation by this stage; put simply, researchers have not yet been able to secure and deliver projects requiring the use of highly sensitive data that the facilities will allow.

2.13 However, positively, consultees highlighted that the accreditation will provide Swansea University with a distinctive and differentiated offer relative to competitor institutions, which will be of significant value over the longer-term in securing research grants and engaging with key partners across the cyber threats and security landscape. In this sense whilst the delays to the completion of the facility are not optimal, over the longer-term the benefits will be realised following a successful accreditation, and the additional time required to position the facilities to secure this accreditation is recognised as appropriate.

Figure 2-3: Pictures of the Law Clinic (top left), LegalTech R&D Centre (top and bottom right), and Cyber Threats Suite (bottom left)



Source: Swansea University, LILW

Recruitment activity

- 2.14** Reflecting the breakdown of expenditure noted above, core to the delivery of the operation was the appointment of academics/researchers (also an ERDF indicator, see Section 4), software developers, and a project team to support/manage the delivery of the operation.
- 2.15** As also noted above, recruitment activity has been on-going throughout delivery, which has reflected both challenges in appointing individuals for the roles intended, and retaining individuals in those roles; taken together, this has led to some changes in roles as well as individuals. As such, over the lifetime of the operation, the team structure and specific appointments have evolved, providing a shifting and complex landscape in relation to the operation's activity.
- 2.16** Importantly, key changes were formalised as part of the operation's re-profile in September 2021. The key changes were as follows:
- Changes to the LegalTech research team included increasing the Associate Professor post from 0.6 to 0.8 FTE and hiring one Post Doctorate Research Assistant (Research Officer), plus two additional Research Assistants (rather than the additional Senior Lecturer

proposed originally). The changes were in response to unsuccessful recruitment drives for the original posts.

- A Chair role for LegalTech (0.2 FTE) was not appointed and a decision was made not to seek to fill this role (with this position removed from the organisational chart in the August – October 2022 Progress Report).
- An additional Software Developer was appointed in response to strong demand for support.
- The project team was expanded with the appointment of three additional posts: a Project Administrator, Research Funding Officer, and an additional LegalTech Engagement Officer. However, the original Engagement Officer left in November 2021, coinciding with the new Engagement Officer joining. Instead of hiring a second Engagement Officer, the decision was taken to appoint a Project Officer to drive development of the Virtual LegalTech platform, however, two recruitment rounds were unsuccessful, so the role was not filled.

2.17 At the Final Evaluation stage (in May 2023), the operation included the following staffing structure:

- **Two research teams** (LegalTech and Cyber Threats) primarily responsible for conducting collaborative research with partners, applying for grant funding, and producing academic outputs. It is highlighted that the Cyber Threats team are part of the broader well-established Cyber Threats Research Centre (CYTREC) at the University, an interdisciplinary centre with experts spanning law, criminology, political science, linguistics and psychology.
 - LegalTech: an Associate Professor/Co-Principal Investigator (1 FTE), a Senior Lecturer (1 FTE), a Research Officer (1 FTE), and three Research Assistants (x4 FTEs). 7 FTEs in total
 - Cyber Threats: a Chair (0.2 FTE), Associate Professor (0.6 FTE), Senior Lecturer (0.6 FTE), two Lecturers (each 0.6 FTE), Post Doc Research Officer (1 FTE), and two Research Assistants (x2 FTE). The Cyber Threats research team is led by the Co-Principal Investigator, who is *not* supported by ERDF monies. 5.6 FTEs in total
- A **Software Development Team with** responsibility for developing and trialling prototypes for new and innovative legal technology products and services.
 - a Lead Software Developer (1 FTE) and three Software Developers (x3 FTEs). 4 FTEs in total
- A **project team** responsibly for the day-to-day delivery of the project comprising,

- a Project Manager (1 FTE), Project Coordinator (1 FTE), LegalTech Engagement Officer (1 FTE), Research Funding Officer (0.8 FTE), Research Development Officer (0.4 FTE) and REIS Support Officer (0.4 FTE). A Project Administrator was also in post to February 2023; given the short period of delivery remaining a replacement was not appointed. The project team was supported by the two Co-Principal Investigators, and the Heads of the School of Law and Faculty of Humanities and Social Sciences (the latter *not* supported by ERDF monies). 4.6 FTEs in total

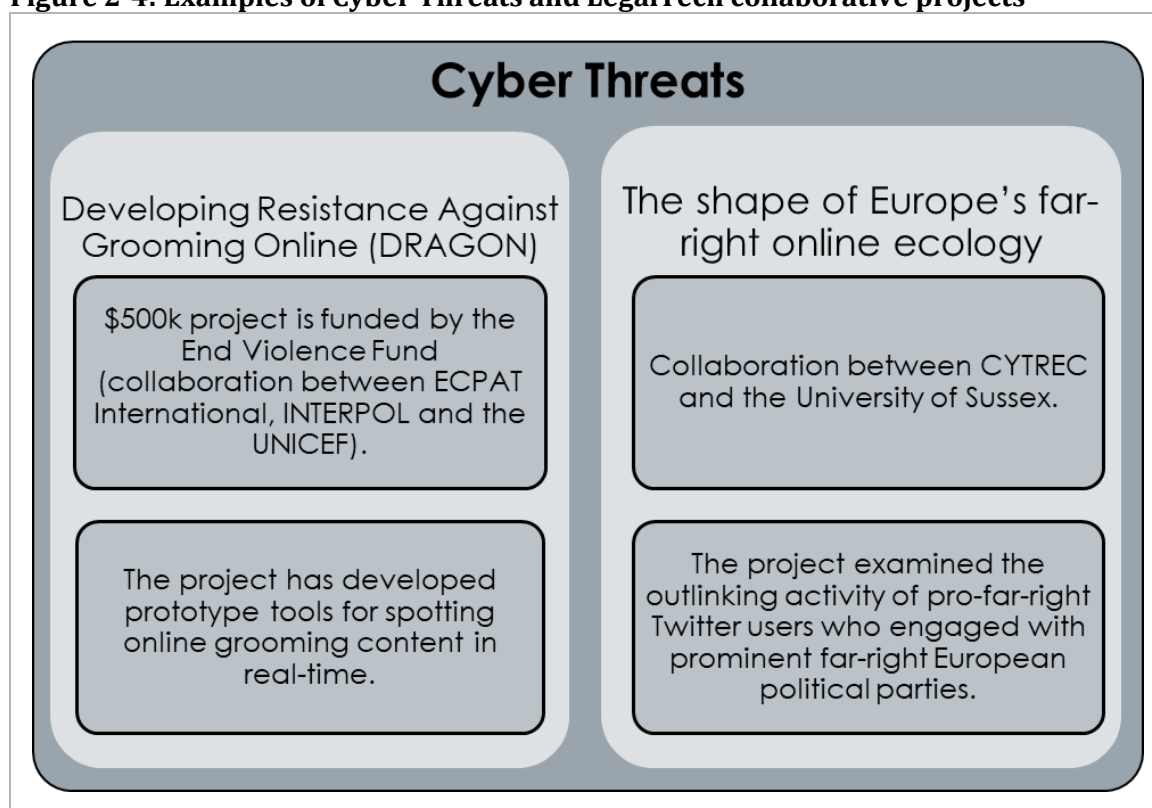
2.18 As indicated, overall, in its final months of delivery the operation was supporting directly 21.2 FTEs, with additional inputs provided by other senior staff at the University.

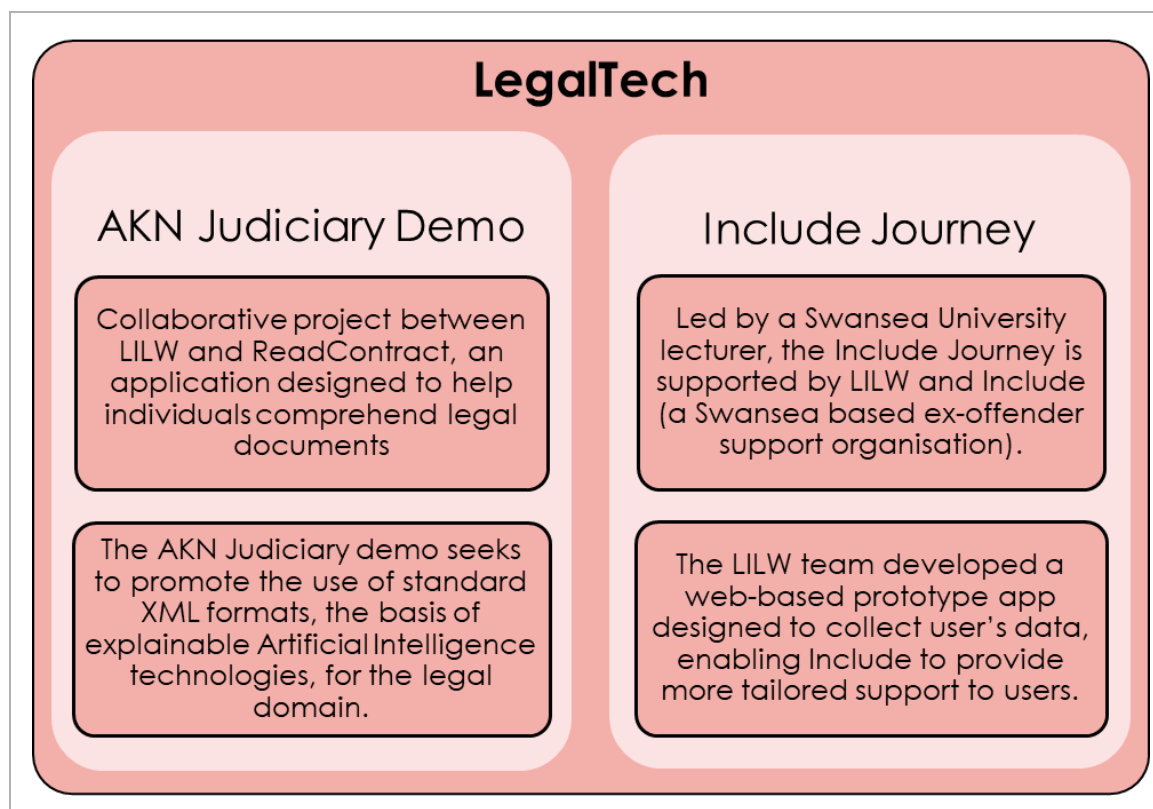
Delivery of collaborative projects

2.19 The operation has developed and delivered collaborative projects with a variety of partners including private sector companies, third sector organisations, sector bodies, and other HEIs. For example, data from May 2023 indicate that the operation has worked on over 15 collaborative projects across both the Cyber Threats and LegalTech strands of activity with partners, including those that have sought and/or secured external funding. Each project is distinct and tailored to the specific issue / opportunity that it is seeking to address; there is no 'standard' activity delivered by the operation.

2.20 Reflecting this, and demonstrating the range of activity progressed, Figure 2-4 provides a selection of examples of collaborative projects involving members of the LILW team.

Figure 2-4: Examples of Cyber Threats and LegalTech collaborative projects





Source: SQW analysis of consultation evidence, LILW Progress Reports, and the LILW website

- 2.21** The operation has also supported the delivery of several ‘strategic’ projects in the LegalTech strand of activity, where the Lab has sought to develop tools and resources that can be used to support enhanced understanding and use of LegalTech innovations and opportunities.
- 2.22** This has included a ‘Virtual LegalTech Lab platform’, which was identified as a new strand of activity as part of the re-profiling process. Led by LILW, in collaboration with the Solicitors Regulation Authority (SRA), and Cambridge and Edinburgh universities, the platform is designed to connect LegalTech professionals in the UK and beyond, supporting the co-creation of LegalTech applications through a model of open innovation. It will address key challenges in the use of legal technology and developing apps that will allow all Welsh and UK law firms to access essential LegalTech tools to enable their effective participation in LegalTech.
- 2.23** Delivery of the Virtual Lab was ongoing at the Final Evaluation stage, and it not anticipated that the platform will be fully operational by the end of operation as planned. There have been two main strands of activity to date: (i) researching and producing an academic publication setting out the rationale for the platform and (ii) working with a developer towards a prototype to be completed by June 2023. On the latter, the University has worked with an external developer on a similar platform already, and is hoping to utilise this platform with some slight customisations to deliver a proof of concept, to help encourage stakeholder buy-in and drive further discussions.

2.24 Progressing the platform has been challenging. There was strong interest initially from several other institutions (notably Cambridge, Ulster, and Edinburgh), but it was reported to the evaluators that formalising this through a collaboration agreement, and subsequently co-designing the platform in partnership was not straightforward. Ulster's involvement in the project ceased due to major structural changes in staffing at the institution. Further, two recruitment rounds to appoint a Project Officer to provide additional capacity to lead on developing the platform were unsuccessful. In addition, progress on the platform was impacted by the handover process associated with a change in Project Manager, although work recommenced subsequently. Given this range of challenges, the progress made at this stage by the activity is encouraging, although the successful delivery and subsequent usage and impact of the platform remains uncertain at this stage. Given the potential of the platform to deliver important legacy benefits from the operation, it is important that the University explores possible funding mechanisms to sustain delivery going forward.

2.25 Other LegalTech strategic projects include:

- **Wales LegalTech start-up map:** The goal of the map is to outline Welsh LegalTech innovation, understand the opportunities and potential challenges of being in LegalTech in Wales and influence policies around LegalTech entrepreneurship in Wales. The LegalTech research team conducted interview research with start-ups and law firms to inform the map, and key findings from the final report will be delivered at a LawTech UK³ event in June.
- **The LegalTech Observatory:** The observatory will act as a hub for news and updates on LegalTech, hosted online. Lab research projects, original content on LegalTech issues, and external projects and LegalTech news will be part of the Observatory. Posts will be organised chronologically allowing the evolution of LegalTech in the UK to be codified. The website has been designed and is ready to go live following the competition and signoff of final formatting/visuals.

Engagement and dissemination activities

2.26 Following the Mid-Term Evaluation, the operation has continued to deliver a broad range of engagement and dissemination activities with staff based at Swansea University and external stakeholders. Positively, as Covid-19 related restrictions eased, the operation was able to engage with/deliver in-person events and activities. Some recent examples include:

- **Attendance and/or contributing to events and conferences.** For example, members of the LILW team delivered a webinar showcasing 'The Covid-19 Impact on Employment Law Forums' project in collaboration with the LegalBeagles online advice forum; attended the Swansea Science Festival where they demonstrated a legal advice chatbot designed

³ LawTech UK is a government-backed initiative, supported by CodeBase and Legal Geek. It was established to support the transformation of the UK legal sector through technology, for the benefit of society and the economy.

by the Lab to help members of the public understand the recent Renting Homes Wales Act; and presented at a 'Lunch'n'Learn' event to raise awareness and engagement with the Lab amongst Swansea University academics.

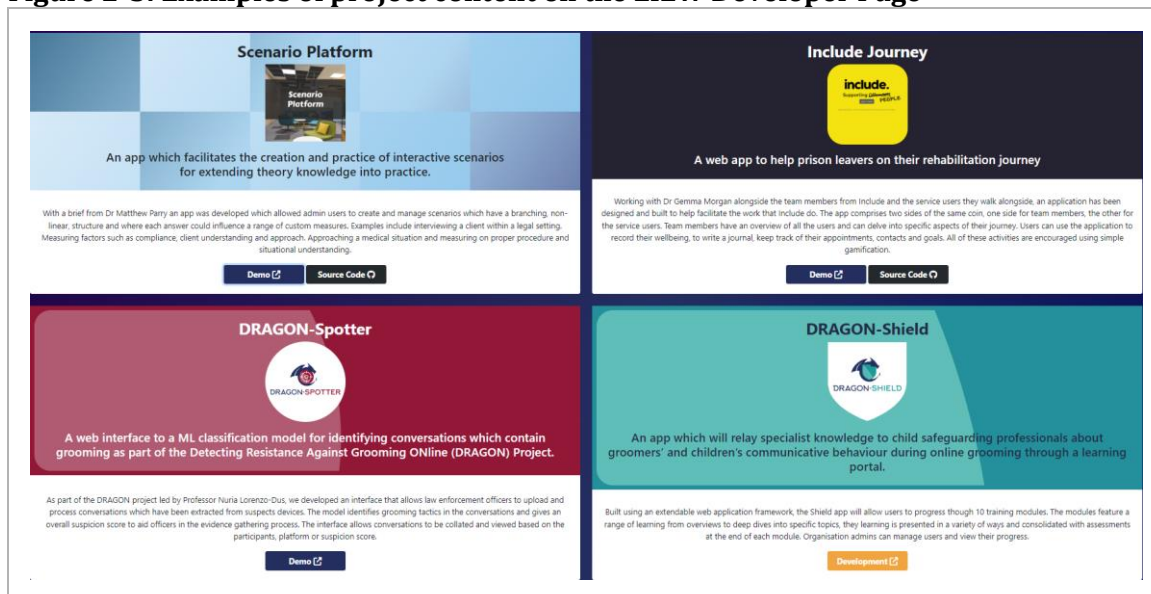
- **Publication of research articles**, including 'A comparative analysis of Islamic State (IS) Channels on Telegram', in the International Journal of Security, Terrorism and Society; 'Making the most of cybercrime and fraud crime report data: a case study of UK Action Fraud' in the International Journal of Population Data Science; a paper on 'Taking stock of available technologies for compliance checking on first-order knowledge' was presented at the 37th Italian Conference on Computational Logic; and two conferences papers were submitted to the 14th International Conference On Global Security, Safety & Sustainability in London.
- **Contributions to reports, insights, and reviews.** For example, a Senior Lecturer published a co-edited 'Handbook of Legal AI', a CYTREC Lecturer had a chapter accepted for publication with the 'Crime Data Handbook', another CYTREC Senior Lecturer co-authored seven book chapters in 2022, whilst the Co-Principal Investigator and Director of CYTREC co-authored a report for the Global Network on Extremism and Technology (GNET).

2.27 In addition, the operation has created a substantial volume of online content, in both English and Welsh, to promote and educate the law sector about LegalTech, including 'tech explainer' videos and blogs (by both the research teams and Software Development Team). The LILW also delivered a series of knowledge exchange sessions over seven weeks in Summer 2022 targeted primarily at trainee solicitors. These aimed to provide insight into how different technologies could be implemented in the workplace. Around 50 individuals signed-up for the sessions, which were focused on providing practical examples and guidance on the use of and opportunities from LegalTech. The operation also hosted (with the Welsh Government) a Legal Hackathon Wales in July 2022.

2.28 Prototypes developed by the LILW are open source and available on the Developer page of the website.⁴ By June 2023, this included details on 11 operation projects, including (where relevant) source code and links to prototypes/demonstrations of the applications and/or further details about the project.

⁴ <https://developer.legaltech.wales/>

Figure 2-5: Examples of project content on the LILW Developer Page



Source: [Legal Innovation Lab Wales Developer Page \(legaltech.wales\)](https://legaltech.wales/en/outputs)

2.29 Further, the 'community outputs' page⁵ of the website provides information on activities related to the CCTs. These resources have been disseminated more widely via the LILW YouTube and Twitter (@LegalLabWales) accounts, where the latter has 474 followers (as at 02/06/23).

Project management and governance perspectives

2.30 Consultations for this Final Evaluation – consistent broadly with the findings at the Mid-Term Evaluation stage – suggest that project management and governance systems and processes of the operation have worked well overall, albeit governance and management structures changed over the course of the operation.

Project management ...

2.31 Delivery of the operation has been led and managed by two Co-Principal Investigators (covering the LegalTech and Cyber Threats elements respectively) who were responsible for overall direction and oversight of the operation, and a Project Manager who is responsible for day-to-day management activities including internal and external liaison. Additional support has been provided through a wider project team which has included (although specific roles have changed over time) a Project Coordinator, LegalTech Engagement Officer, and Research Funding Officer.

2.32 Consultations suggest that strong project management and administration support underpinned delivery of the operation. The provision of a dedicated project team via the ERDF support for the operation was seen to be important, both from a monitoring and reporting

⁵ <https://legaltech.wales/en/outputs>

perspective, and to facilitate the delivery of a range of events, meetings, and wider initiatives which are important to the core purpose of the operation to help raise awareness and buy-in to LegalTech and enhancing the University's existing strong position and profile in relation to Cyber Threats.

- 2.33** Frequent communication via weekly team meetings was valued by researchers and software developers. However, some feedback suggested a lack of interaction and communication between the researcher teams and the software developers in the day-to-day delivery of projects, resulting in less frequent engagement and communication between the constituent parts of the operation. This was likely influenced to some extent by the pandemic and changing working behaviours, and potentially exacerbated owing to changes in personnel throughout delivery (with changing contacts and the need to establish new relationships and understanding).
- 2.34** The original Project Manager left the University and was replaced in August 2022. This led to some short-term delays in the delivery of activity associated with the handover e.g. in relation to the PASF accreditation process and Virtual Platform (as noted above). However, overall it was reported that this transition was well-handled and did not adversely impact on overall progress; this is a positive finding, and was enabled in part through continuity in the academic leadership of the operation.
- 2.35** Monitoring and reporting processes have been implemented effectively overall. Feedback suggested that reporting to WEFO has been thorough and high quality, and the project team has effectively engaged with the University's Research, Engagement and Innovation Services (REIS) department to support with the process.
- 2.36** However, there was scope for better collection of data on the wider benefits of the LILW outside of formal ERDF indicators. The operation sought to implement the use of a consistent and comprehensive process to gather data on key outputs (such as events hosted/attended, research publications, articles, or prototypes developed), involving the distribution of an online form to staff every six weeks. However, the quality and coverage of the material provided in response was very varied and not comprehensive. As such, the data does not provide an accurate reflection of the activity, outputs, and outcomes delivered by the operation. As a result, the evaluation has not drawn on this data source. This is an important learning lesson for any similar future interventions.

...and project governance

- 2.37** As set out in the Mid-Term Evaluation Report, the original governance structure of the operation – with a Project Board, a Project Advisory Board⁶ and a single Principal Investigator

⁶ Called a Project Steering Group in the Business Plan

– was revised to reflect delivery in practice, with the changes formalised as part of the operation’s re-profile.

2.38 In summary, the key changes at the point of the Mid-Term Evaluation were as follows:

- Representation on the Project Board differed slightly from that envisaged in the original Business Plan. The Board was chaired by the Project Sponsor, and included the Project Manager, the (Co-) Principal Investigators, Head of Law Clinic, and representative from REIS. Furthermore, the Board met as required, rather than on a formal quarterly (or other diarised) basis, to ensure productive use of members’ time.
- A Co-Principal Investigator had been appointed with a focus on the LegalTech strand of the LILW; they also led the LegalTech research team.
- The original plan was to establish an Advisory Board to cover both LegalTech and Cyber Threats. However, the operation decided the Board would in practice focus on LegalTech only. This was owing to the well-established and pre-existing presence of CYTREC on the Cyber Treats strand, which has its own governance structure. Further, the LegalTech and Cyber Threats agendas are very different (albeit with potential for knowledge sharing), therefore it was deemed appropriate by the operation to focus the Advisory Board on the less well-developed area of LegalTech. The LegalTech Advisory Board was planned, but had *not* been established by the Mid-Term Evaluation.
- In addition, a separate Advisory Board will be established which will focus exclusively on the Virtual LegalTech platform. The Virtual LegalTech platform Advisory Board was planned, but had *not* been established by the Mid-Term Evaluation

2.39 Subsequently, several points are noted:

- The Project Board continued to operate as before, and was seen by stakeholders to have worked effectively overall. However, towards the latter stages of delivery, meetings became more infrequent. This was in part due to challenges relating to availability of Board members. However, as the operation neared completion, legacy planning meetings with the Faculty’s senior leadership team were held in place of the Board, to discuss the future direction of the Lab post-ERDF funding. Alongside this, the Project Manager interacted frequently with the University’s Planning and Strategic Projects Unit (PSPU) regarding project closure. In addition, the two Co-PIs and Project Manager have had regular, informal meetings throughout the operation period.
- The LegalTech Advisory Board was not established as planned. The process of setting up the board commenced in late-2022, and interest was secured to include senior industry and sector representation from law and access to justice. However, at this point, it was recognised that realising value from the board – in terms of leveraging the strategic advice

of members – was going to be challenge given only six months of the operation period remained. It was therefore decided that the board would not be established.

- Similarly, the Virtual LegalTech platform Advisory Board was not established as planned because of the short outstanding delivery period before the end of the operation.

2.40 The Mid-Term Evaluation noted that earlier set up of the Advisory Board(s) would have helped inform the overall strategic direction of the Lab, and supported timelier and more extensive linkages with the sector. Feedback at this Final Evaluation stage reiterated this point, suggesting that a LegalTech Advisory Board would have been beneficial for providing knowledge and insight to steer delivery. Whilst it is recognised that establishing the board in late-2022 would not have been appropriate given the limited period available to inform activity, overall this should be regarded as a missed opportunity by the operation. Similarly, given its approval in late-2021, the delays in the establishment of the planned Virtual LegalTech platform Advisory Board is also a missed opportunity; a board may have helped to manage some of the issues experienced in the delivery of this activity, enabling delivery by the close of the operation. This is an important learning lesson for any similar future interventions.

2.41 The Mid-Term Evaluation also reported there was scope for greater clarity on the relationships between CYTREC and the operation, and the wider Law Clinic and the operation (with the operation focused on the piloting/testing of new innovations only, not the wider activities delivered via the Law Clinic). Evidence from the Final Evaluation stage suggests that in particular the relationship between the operation and CYTREC continued to raise some ambiguities across both internal and external stakeholders and partners. Thus, feedback from the Cyber Threats team suggested a tendency to refer to ‘CYTREC’ when engaging with partners and applying for funding opportunities. This is not unexpected, but it does provide some challenges when seeking to understand the contribution and outcomes of the operation specifically. Articulating clearly and consistently the relationship between constituent strands of an intervention from the outset is an important lesson for any similar future interventions.

3. Assessment of Cross-Cutting Themes

- 3.1** As part of the ERDF funding approval, the operation was required to meet the requirements of the Cross-Cutting Themes (CCTs) of the Operational Programme in terms of: sustainable development; equal opportunities and gender mainstreaming; and tackling poverty and social exclusion.

Delivery against the case-level indicators

- 3.2** Eight case-level indicators⁷ were agreed between Swansea University and WEFO to demonstrate progress in delivery against the CCTs covering both the construction phase and the launch of the LILW to the end of the delivery period phase. As shown in Table 3-1, the operation has reported activity and positive achievements against all indicators, thereby contributing to the goals of the Wellbeing of Future Generations Act (WFGA)⁸. In particular, in delivering against the case-level indicators the operation has contributed to the following WFGA goals: a prosperous Wales, a resilient Wales, a Wales of vibrant culture and thriving Welsh language, and a Wales of cohesive communities. In addition to the case-level indicators, the operation has fulfilled its obligation to signpost any external partners to the SMART Innovation Gateway⁹.

Table 3-1: Progress against the CCT case-level indicators

WFGA goal	Case-level indicator	Reported activity
	General	
-	Developing/Engaging CCT Champions	Originally, the Project Manager was appointed as the CCT Champion. However, following a change in Project Manager this role was taken on by the Project Coordinator to provide continuity. Project wide CCT meetings were held quarterly, and individuals were encouraged to promote the CCTs and instigate actions to realise their delivery.
A prosperous Wales	Integration of Social Clauses	Social clauses have been integrated into procurement / contractual process. For example, the tender for refurbishment of the CYTREC facilities included a requirement for applicants to complete a Sustainable Procurement Plan and Community Benefits Method Statement which would be delivered through the contract.

⁷ Note, originally seven case-level indicators were agreed but the operation agreed to include an extra case-level indicator because it had already been achieved (Local Supply Chain Development).

⁸ <https://www.futuregenerations.wales/about-us/future-generations-act/>

⁹ The SMART Innovation Gateway is a portal that acts as a business diagnostic and referral process to local businesses to put them in contact with relevant advice and support services.

WFGA goal	Case-level indicator	Reported activity
Sustainable Development		
A resilient Wales	Development of an Eco-code	The LILW Eco-code was completed and circulated to all staff members. The Eco-code covers: waste prevention, transport, energy, positive procurement, biodiversity, water, raising awareness.
A prosperous Wales	Development of travel plan and sustainable transport initiatives	A LILW Travel Plan was completed. The document consists of a flow chart which encourages staff to comprehensively consider the need for travel and encourages them to use public transport if travel is essential.
A prosperous Wales	Local Supply Chain Development	The winning organisation for the CYTREC Scoping tender used a locally based project team, therefore the project assured that this contract actively supported local jobs in South Wales.
A prosperous Wales	Resource Efficiency Measures	<p>The team attended a CCT seminar by Swansea University's Sustainability Team, which introduced:</p> <ul style="list-style-type: none"> • 'Green grants tool' to support staff to incorporate sustainability, climate impacts and associated University commitments into research bids and to deliver a more sustainable research project. • 'SWELL', a Sustainability and Wellbeing scheme that rewards staff at the University for taking positive steps. The operation appointed a SWELL champion and encouraged colleague participation
Equal Opportunities and Gender Mainstreaming		
A Wales of vibrant culture and thriving Welsh language	Activity supporting speakers of Welsh Language	<p>All recruitment materials have been made available in Welsh and English.</p> <p>All marketing materials have been bilingual, including the LILW website which has full English and Wales versions, and the introductory promotional video includes Welsh subtitles.</p> <p>Professional Welsh translators have been employed to ensure translations are of the highest standard.</p> <p>A member of the team completed a Welsh Language Course which enabled increased the individual's Welsh language awareness and enabled them to better use appropriate workplace Welsh with colleagues and stakeholders.</p> <p>A Senior Lecturer and two interns from Swansea University supported the Youth Justice Board (YJB) Cymru to scope out current interventions available to</p>

WFGA goal	Case-level indicator	Reported activity
		young people in the Welsh language and identify gaps in provision.
Tackling Poverty and Social Exclusion		
A Wales of cohesive communities	Community Skill Building Activity	A member of staff is involved in the National Cyber Security Centre's (NCSCs) CyberFirst Ambassador Scheme. The aims of the scheme are threefold: to encourage Key Stage 2 school pupils to explore digital technologies and the implications across society, increase their understanding of cyber threats and online harms, as well as their rights and responsibilities as digital citizens, and bring pupils into a university setting in a fun and engaging way.

Source: SQW analysis of Progress Reports, CCT case studies, and consultation evidence

Wider contribution to the CCTs

- 3.3** In addition to delivering activity against the case-level indicators, the operation has engaged in a variety of activities which contribute more broadly to the CCTs. Examples of such activities are outlined in Table 3-2.
- 3.4** Notably, and very positively, over the course of delivery, the project has produced 24 case studies evidencing the activities they have delivered against the CCTs. Following a refresh of the LILW website, a "Community Outputs" page for the CCT case studies was created and a selection of the case studies have been uploaded¹⁰.

Table 3-2: Broader delivery against the CCTs

Equal Opportunities and Gender Mainstreaming

- In 2021, the School of Law was awarded the **Athena Swan Bronze Award**, in recognition for its work towards promoting gender equality and diversity and identifying and addressing the challenges specific to the department and the disciplines. One of the Cyber Threats academics played a key role in the analysing and summarising departmental data on EDI. The award is valid until April 2025.
- The project coordinator was a member of the University's **EDI task and finish group**. This was formed after specific issues relating to accessibility, particularly for members of staff with disabilities, were raised throughout the University. The group was established with the aim of identifying workable solutions and liaising with relevant stakeholders to disseminate information more effectively and implement necessary changes.
- On **International Women's Day 2022**, some of the women within the Lab spoke at an event about their experiences and aspirations, and provided advice for other women who face similar challenges in their careers. The aim of the event was to raise awareness of women in LegalTech and to encourage others to explore a career in this area.

¹⁰ <https://legaltech.wales/en/outputs>

Tackling Poverty and Social Exclusion

- The **Mr X Christmas Appeal** was set up to collect donations of Christmas presents and give them to under-privileged children. Six and fourteen members of staff contributed presents in 2020 and 2021 respectively, and the project management team organised the collections from people's homes and delivered them to the official donation centres.
- **Include UK** is a third sector organisation who provide support for offenders. A lecturer in criminology worked with the Software Development Team to develop an app to support with offender rehabilitation. The Lead Software Developer participated in a panel discussing the Include Journey UK app, during the **Wales Tech Fest 4 Good 2021** run by the Wales Co-operative Centre (a not-for-profit organisation that supports people in Wales to improve their lives and livelihoods).
- A lecturer in criminology (Cyber Threats strand) is involved in a '**Mock Interview**' programme which has been delivered within all secondary schools in South Central Wales for around 20 years. It helps pupils to understand the recruitment process and prepare them for interviews in the future.
- The LILW submitted a proposal, in collaboration with Discovery (the University's affiliated volunteering charity), to the **Morgan Advanced Studies Institute**. The proposal was for a 3-day event to explore the issues around barriers to disabled people and their parents/carers to accessing and exercising their legal rights.
- The Director of the Law Clinic volunteers for the **Ukraine Advice Project UK**. This group of volunteer legal professionals with immigration and asylum expertise, are providing a free service to connect people fleeing Ukraine with free legal advice on UK immigration, visas and asylum from qualified and regulated lawyers.
- Since November 2019, Swansea Law Clinic has been running a **Drop-in advice service** on Wednesday afternoons. Anyone was able to come along, without an appointment, to any of the Housing, Employment, General or Family clinics. The Clinic worked with solicitors and paralegals from eight different local solicitors' practices, who would use one of the Clinic's appointment booths, along with a student volunteer who would shadow the appointment and take the case note. Together, they would then be able to offer 30-minute advice sessions to anyone who walked in requiring advice.
- Swansea Law Clinic participated in the last two **Law Clinics' Global Day of Action for Climate Justice**, held in November each year. Law Clinics around the world use the day to highlight a certain topic/issue in relation to climate justice.

Source: SQW analysis of Progress Reports, CCT case studies, and consultation evidence

Reflections

3.5 Consultee feedback provides additional commentary on delivery against the CCTs. Overall, feedback reinforces the evidence above suggesting that the operation has delivered strongly against the case-level indicators, and in contributing to the CCTs more broadly. In particular, several factors were seen to have supported the successful delivery against the CCTs:

- First, the CCTs were integrated into the day-to-day delivery of the operation from the outset, and both project management staff and researchers / academics engaged in and valued the activities. This was supported by the early appointment of a CCT champion

(the former Project Manager, and subsequently the project coordinator) to promote activities / issues related to the CCT indicators and the intents of the CCTs more broadly.

- Second, and related to the above, quarterly CCTs meetings led by the CCT Champion helped to maintain a commitment to the CCTs, and provided opportunities for colleagues to share relevant activities / actions.
- Third, there is a strong alignment between the operation's core areas of research and the CCTs, particularly the Lab's access to justice work and the 'Tackling Poverty and Social Exclusion' CCT. This supportive context has helped embed CCT-related actions in the daily operations of the team.

3.6 As noted above, 24 CCT related case studies have been produced over the operation's lifetime, with a selection shared on the LILW website. These case studies have not only been used to provide evidence to WEFO of the activities the Lab has delivered against the CCTs, but also to raise awareness of the CCTs to a wider audience. This is a positive learning lesson for any similar interventions in future.

4. Assessment of core benefits

- 4.1** The next two sections consider the performance of the operation in delivering against the impacts set out in the logic model including the formal ERDF indicators, and wider effects.
- 4.2** Reflecting the requirements of ERDF and the expected contribution to Specific Objective 1.1, we first in this section set out ERDF indicators and benefits related to research. In the next section we consider the wider benefits in terms of academic, business/societal and collaboration benefits. The sections also comment on the ‘additionality’ and value for money of the operation.

ERDF indicators

- 4.3** At the time of writing, the latest monitoring data submitted by the operation to WEFO covered the period to January 2023. The data indicate strong performance by the operation against the ERDF indicators, with four of the five indicator targets achieved well in advance of the end of the operation period in June 2023. Further, the operation had at this point already delivered very significantly above its target for the number of partners cooperating on research projects (at 64 compared to a target of 50). The operation has also appointed more new researchers than anticipated (13 compared to 10.2), which is a particular achievement given the challenges associated with recruitment.

Table 4-1: ERDF Indicator Profile

Indicator	Overall target	Achieved to Jan 2023	% delivery vs. target
Number of improved research infrastructure facilities	1	1	100%
Number of new researchers in supported entities	10.2 FTE	13	127%
Number of researchers working in improved research infrastructure facilities	22	26	118%
Amount of research funding secured	£3.4m	£2.7m	80%
Number of partners cooperating on research projects	50	64	256%

Source: LILW Progress Report Nov 2022 – Jan 2023

- 4.4** As indicated above, the one indicator where the operation had not yet met its target by January 2023 was on the amount of research funding secured. The operation had reported some £2.7m of research secured, which represented 80% of the target with a further five months of delivery available to secure further funding. Consultations with the operation

suggests that there are several outstanding applications which may lead to further research income over this period, supporting further delivery against this target. It is also important to recognise that the physical infrastructure put in place by the operation, notable the Cyber Threats Suite, will play an important role in securing further research funding over the longer-term, with the potential PASF accreditation a key factor influencing this potential benefit.

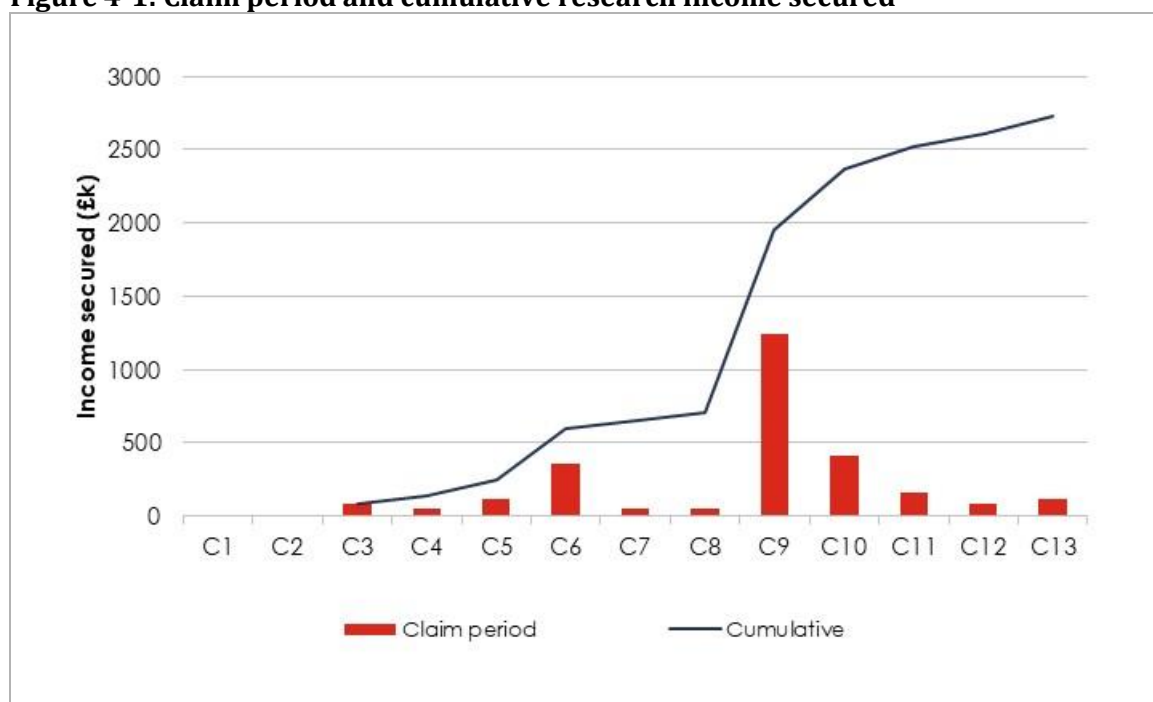
Research activity

- 4.5** Against this backdrop, this sub-section considers in more detail the contribution of the operation in relation to its effects on research activity. This includes further discussion on research funding, research capacity, research partnerships, and draws on qualitative feedback from the Final Evaluation on the effects of the operation on academic attitudes, behaviours and activities.

Research funding

- 4.6** The level of research income secured in each claim period (to Claim 13 in January 2023) and cumulatively over the delivery period is set out in Figure 4-1. The data highlight that income has been secured consistently over the delivery period; this is encouraging considering the potential for further income in the final claim period to June 2023. The high level of income secured in Claim 9 was associated with a £1m+ European Research Council grant in the Cyber Threats strand, specifically the “Trust in User-generated Evidence: Analysing the Impacts of Deepfakes on Accountability Processes for Human Rights Violations (TRUE)” project.

Figure 4-1: Claim period and cumulative research income secured



Source: Swansea University monitoring data

- 4.7** No specific targets were set by WEFO (or by the operation internally) for the sources of research income secured¹¹. However, the operation collected this data as part of its monitoring and reporting processes. The position at January 2023 is summarised in Table 4-2. Funding from EU institutions (including the European Research Council) accounted for the highest proportion of income secured (50% overall). Given the uncertainty over the UK public funding environment, this is an encouraging finding in terms of the ability of the operation to secure funding from EU institutions. Further, approaching £0.5m has been secured from UK Government departments (including the Home Office and Ministry of Justice).

Table 4-2: Cumulative research funding secured and claimed, by source

Indicator	Value (£)	% value	Number of projects
EU institutions	1,357,516	50%	2
UK Government	493,196	18%	4
Charity	431,145	16%	3
HEFCW/WG	290,611	11%	4
Business	134,300	5%	2
Other	19,701	1%	1

Source: SQW based on Swansea University monitoring data

- 4.8** Reviewing the data in more detail indicates over 10 separate individual funders, including several different charities, businesses, and public sector organisations, which highlights the range of potential different sources of funding available to the operation, and going forward. It is notable that the operation has not secured funding from UK Research Councils, which can be seen as both a missed opportunity to date (it is noted that the operation was unsuccessful in a large ESRC application which if achieved would have delivered fully again the income target), and an opportunity for the future.
- 4.9** It is also highlighted that the operation had recorded the number and value of *unsuccessful* grant applications. By October 2022 (with no further data provided in the January 2023 Claim), the operation had submitted 23 unsuccessful applications, with a total bid amount of £8.2m. At this point there were also five bids submitted that were outstanding, to a value of £1.1m. The significant level of competition for funding was highlighted consistently in consultations for the Final Evaluation, notably for UK-level and international awards, and consultees highlighted the learning and partnerships that had been generated by the unsuccessful applications.

¹¹ To note, whilst WEFO did not set specific targets, it does stipulate the sources of income which are eligible to be claimed under ERDF funding.

Research capacity

4.10 As indicated above, the operation has supported the appointment of a substantive number of new researchers in supported entities (ERDF indicator), effectively establishing the LegalTech, and enhancing the Cyber Threats, research community in Swansea. In total, some 16 additional roles, equivalent to 13 FTEs, have been supported, scaling-up materially the capacity of the research base at the University in these areas. The positions cover the full range of academic grades from professors to research assistant (and equivalents) across the two strands, as set out in the table below.

Table 4-3: New research capacity by strand

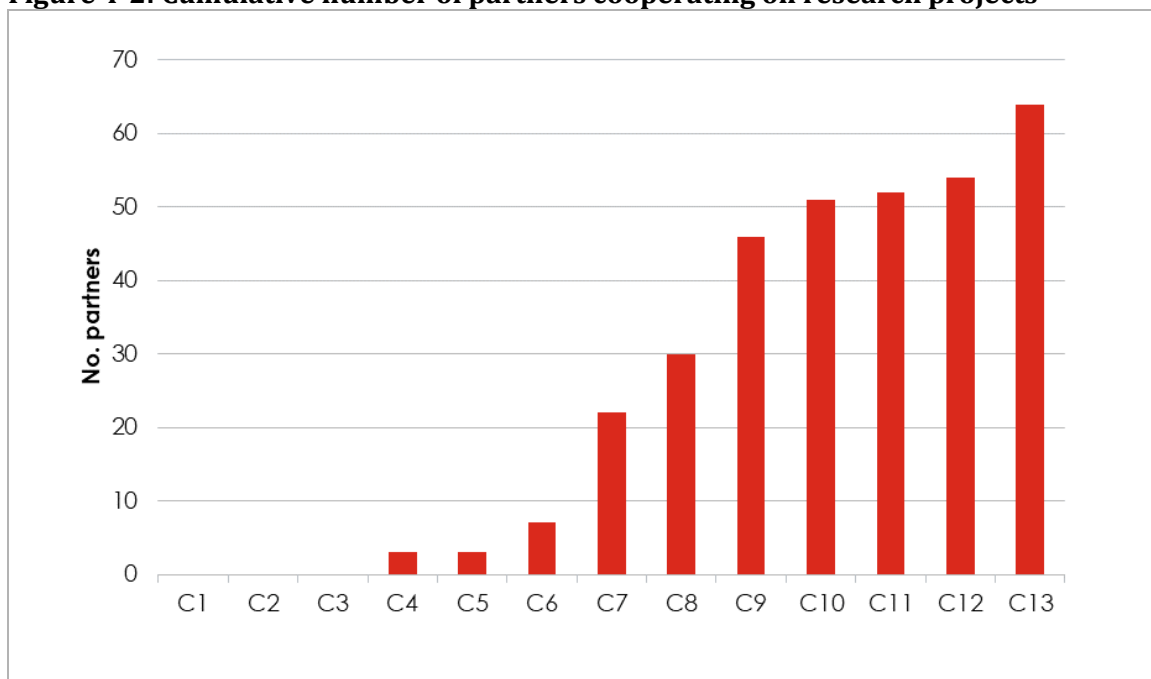
	Cyber Threats	LegalTech
Prof/Assistant Prof	0.8	0.8
Lecturer/Senior Lecturer	1.8	0.6
Research Assistant / Officer	4	5
Total	6.6	6.4

Source: SQW based on Swansea University monitoring data

Research partnerships and collaborations

4.11 As indicated above, the operation had claimed over 60 partners cooperating on research projects by January 2023. The build-up of partners claimed (by Claim Period, to January 2023) is set out in Table 4-3.

Figure 4-2: Cumulative number of partners cooperating on research projects



Source: SQW based on Swansea University monitoring data

4.12 Consistent with ERDF guidelines, this can include where relevant Swansea University as a partner (i.e. a project involving Swansea and one external partner, would equate to two 'partners cooperating on research projects'). Excluding Swansea itself, the data therefore indicate that the operation has involved cooperation on research projects with 43 unique external partners of which: 26 were research institutions (including universities), 16 were private companies, and one was a public institution (South Wales Police).

4.13 Several points are highlighted from the data:

- most (20 of the 26) research institutions were non-UK institutions, including universities in Europe, the United States and other locations internationally. UK university partners included UCL, East Anglia, Exeter, Leeds, and Sussex universities; this highlights the international reach of the operation, which spans both the LegalTech and Cyber Threats strands of activity
- several individual projects accounted for a high number of partnerships, with the operation involved in large-scale collaborations; examples included the large-scale ESRC application noted above (14 external partners) and the 'Tech Against Terrorism Europe' project (five external partners)
- 14 of the 43 partners were involved in successful funding applications/active project collaborations (seven research institutions, six private companies, one public institution)
- the private companies included a mix of Welsh, UK and international firms, and were engaged via nine separate projects, suggesting a positive level of engagement with industry partners through a variety of mechanisms i.e. this was not realised by one or two project only with multiple partners.

Qualitative reflections

4.14 Further to the quantitative data and information on research partnerships, qualitative feedback from consultations with researchers and stakeholders provides additional evidence on the mechanisms through which the operation has supported and realised positive research-related benefits. Six key points emerged from the consultations:

- **First, the support provided by the research office capacity in identifying research funding opportunities, engaging with potential funders, and supporting the development of applications, was regarded as valuable by academics and stakeholders.** This provided important additional capacity and expertise in the process of grant-capture, and was reported to have helped to identify a wide range of potential funding sources (including both public sector and other funders) which can inform grant capture over the longer term. More broadly, this support was seen to have helped to enhance the professionalism and consistency of the grant application and capture process, and enabled this process to be more collaborative, strategic and structured.

- Second, **the operation was regarded – both internally and externally – as having expanded the areas of the research at the University in LegalTech and Cyber Threats, and in turn helped to develop and strengthen the reputation of the University in these areas.** Although it was recognised that this is a ‘long term game’, and both a competitive and constantly shifting landscape, both the scale of resource and profile of the LILW was regarded as important. Particular areas identified where the operation was seen to have played an important role included online extremism and terrorism, and the intersections between technology, access to justice and crime.
- Third, **the operation was recognised as providing significant career and personal development benefits for the individual academics/researchers supported.** As expected, the specific nature of these benefits varied on an individual basis reflecting the experience and research interest of the individuals concerned. However, feedback included the benefits of the operation in terms of enhancing understanding of the use of specific technologies (e.g. coding), the development of skills and experience in applying for competitive funding, and the opportunity provided by the operation for researchers to work and establish relationships with a range of partners, both in other UK universities, international research organisations, and with industry partners. The profile and credibility of the Legal Lab was also identified by some academics, which was seen to have helped develop their own profile and reputations.



Working with some of the big tech partners has been a great experience ... their work is clearly really valuable and relevant to my area of research



Academic consultee

In this context, the opportunity to work on ‘impactful projects’, including those which have the potential to realise direct and tangible societal benefits (for example around access to justice) was also seen as a key benefit of the operation for some of the academics/researchers consulted for the Final Evaluation. Although realised at an individual level, these benefits have the potential to play an important role in helping to retain academics in Swansea, and the Welsh research base more broadly, longer-term.

- Fourth, and linked to this, **the breadth of the activity covered by the LILW, was seen as important and beneficial**, with the opportunity for staff to work on multi-disciplinary projects, and more broadly to engage with colleagues across the Lab including across strands (i.e.. between LegalTech and Cyber Threats), and with the Law Clinic Team and the Software Development Team. Although formal cross-strand activity appears to have been modest (which may have been influenced in part by the high level of turnover of staff), consultations suggests that informal engagement has been evident and helped to generate relationships which may lead to benefits over the longer term. The capital works were also identified as important by some consultees, providing an environment and physical space in the Technium building where colleagues form across the Lab can meet both formally and informally to discuss ideas and share knowledge.
- Fifth, **the work of the Software Development Team in supporting research activity was identified consistently as a key strength of the operation**, both from internal researchers and academics from other parts of the University that have worked with the team to develop new prototypes and demonstrators for their research. The capacity of the Software Development Team was identified as a constraint by some consultees – recognising the modest staffing level, change in staff, and significant calls on their time from academic both within the operation formally and from other parts of the University. However, the team was seen as providing significant added value to the operation.
- Sixth, **the facilities provided by the operation, notably in relation to the Cyber Threats Suite are believed to have been valuable when applying for research funding**. The facilities have also facilitated the development of project ideas and concepts which previously would not have been possible or would have been difficult to complete. Although the benefits of the Cyber Threats Suite have not yet worked through fully into actual research income secured at this stage – with the Suite awaiting PASF accreditation – this was anticipated to be realised in the future, and to have influenced behaviours and grant applications to date.



The interactions with colleagues at LILW has added more depth and flavour to my own research



Academic consultee



I've been working with the software developers ... their help and guidance has been invaluable



Stakeholder consultee

4.15 It is also noted that the operation has led to the production of academic outputs including publications and conference presentations, with further anticipated in the future from on-going or recently completed research. As noted in Section 3, comprehensive data on this was sought by the project team, however, the evidence provided by researchers/academics was not consistent, meaning that it is not possible to provide a definitive assessment at this Final Evaluation stage on the scale and nature of these wider research outputs.

4.16 Taken together, the evidence above suggest that the operation has made a positive contribution to research activity, both in terms of securing research income – demonstrating strong progress against Specific Objective 1.1 to increase the success of Welsh research institutions in attracting competitive and private research funding – and more broadly around the capacity, scope and quality of Legal Tech and Cyber Threats research in Swansea.

4.17 It is not possible assess quantitatively the additionality associated with the operation – with individual funding decisions subject to decisions by funders and a wide range of factors influencing research activity.

4.18 However, the evaluation evidence suggests that the operation has influenced positively the behaviours of academics in seeking research funding including in relation to the sources of funding and the processes of developing bids, helped to enable and facilitate engagement with new partners (both within the university and externally), and provided the infrastructure platform – both physical in the capital works, and in the additional research staff and Software Development team – that have helped to secure income that would not otherwise have been secured. The Cyber Threats Research Suite will also play an important role in enabling the University to deliver sensitive research activity in the future that was not previously possible. Whilst challenging to evidence formally, the consultations with both internal and external partners and stakeholders also suggest that the operation has played an important role in enhancing the ability of the University to attract and retain high calibre academics, through providing a broader portfolio of research work, enhancing the scale and critical mass of researchers, developing and embedding new partnerships and providing enhanced facilities for collaborative research going forward.

4.19 These are positive findings overall, particularly reflecting the challenging delivery context including in relation to researcher recruitment and retention, and the competitive nature of funding, which was highlighted as an important theme in the consultations, and which has influenced the scale of research income secured to date.



The profile, critical mass of expertise, and facilities at LILW ... will continue to provide a basis for the development of compelling and competitive bids



Academic consultee

5. Assessment of wider benefits and assessment against the logic model

- 5.1** This section considers the wider benefits of the operation on collaborative behaviours, businesses, and society against the logic model. It also comments on the extent to which the operation has delivered value for money.

Collaboration benefits

- 5.2** A key strategic aim of the LILW was to foster new opportunities in the School of Law for interdisciplinary and industrial collaboration. **The consultations for this Final Evaluation provide encouraging evidence that the operation has enhanced levels of collaboration across both LegalTech and Cyber Threats.** A common theme that emerged from the consultations is that the LILW has helped to create a community of “likeminded” researchers with a mix of specialisms that interact and collaborate effectively, rather than working in silos.
- 5.3** There is also evidence to suggest that **additional funding opportunities have been identified through collaborative activity.** Notable examples include:
- The Professor (School of Culture and Communication) leading on the DRAGON-Spotter / Shield project successfully secured follow-on funding to conduct an international evaluation, which involves piloting the tools in the UK, Australia and New Zealand.
 - A Senior Lecturer (School of Social Sciences) has secured Welsh Government funding to further develop and trial an app that could better track ‘hate visuals’ in the community (graffiti, hate symbols etc.) in collaboration with Bridgend County Council.
 - The Senior Lecturer (School of Social Sciences) leading on the Include Journey project successfully secured additional funding from Welsh Government and the Ministry of Justice to progress the project further.
- 5.4** However, at this Final Evaluation stage it is **too early to assess whether higher levels of collaboration with external partners will be sustained**, and this will in part depend on the form of the operation beyond the end of the ERDF period in June 2023.
- 5.5** The evidence of collaboration benefits between different stakeholder groups is set out in more detail in the paragraphs that follow.

Collaborative activity within Swansea University

5.6 At this Final Evaluation stage, feedback from consultees indicates the operation has supported an **enhanced collaborative research culture in Swansea University's Law School**. Throughout the operation, there has been ongoing engagement between the LILW and colleagues from the School of Law, including collaborative research projects, engagement with the Software Development Team, and events open to all within the School / Faculty.

5.7 Linked to this, there was strong qualitative evidence that **linkages and synergies between the LegalTech team and the Law Clinic at Swansea University have improved over time**.

There has been a mutually beneficial signposting and referral mechanism for external partners between the two teams. For example, the Lab introduced the Law Clinic to a software company developing a self-guided app for individuals going to employment tribunals. The Clinic piloted the app with their clients resulting in valuable feedback for the company and a beneficial experience for students. Collaborative activity between the Clinic and Lab has also been strong. Examples of activity include:

- The Lab has supported and advised on the Clinic's immigration work, including a Clinic project using an app called 'legalconnection' to support Ukrainian refugees with accessing advice in real time.
- The Lab has led on developing a chatbot to help members of the public understand the Renting Homes Wales Act 2016, which came into force 2022. The chatbot is being trialled in the Clinic.
- The Clinic is developing a new inter-agency referral app with support from the Lab. The app aims to improve information sharing between agencies, and benefit some of the most vulnerable people in society. Funding has been secured to trial the app, and feedback suggest that Lab was an important contributory factor in securing this funding because of the Lab's legalTech expertise.
- The second phase of SRA led Regulators' Pioneer Funded project involved the Clinic working alongside the LegalTech team to develop tech solutions to support the access to justice agenda.

5.8 However, **evidence of improved linkages and synergies between LegalTech and Cyber Threats expertise within the University (i.e. collaboration between themes *within the***



There is a real energy to the [Lab's] work, and I've learnt a lot from some of the other academics, many of whom have a far greater handle on the tech than I do



Internal stakeholder consultee

operation itself) is more limited. Whilst the operation has helped to foster some crossover in activity and engagement (e.g. jointly delivering events, joint meetings, and more informal discussions as set out in Section 4), evidence of more substantive and formal collaborative research activity is limited. This may in part reflect CYTREC's well established and existing presence prior to the operation, compared to LegalTech which was an emerging field of research at the University. Some ambiguity over the links between CYTREC and LILW (discussed earlier), may also have been unhelpful for encouraging inter-disciplinary work. Considering the scope for enhanced opportunities from the intersection between LegalTech and Cyber Threats, and how learning and knowledge can be shared more consistently to identify and leverage these opportunities, this may be an area of further development going forward for the Lab.

- 5.9 More broadly, the internal visibility and profile of the LILW was reported to have improved over time, supporting enhanced interdisciplinary collaboration across the University.** In particular, feedback emphasised the strong links which have developed between CYTREC and Computer Science Department, owing to the convergence of technical expertise and subject areas across the two disciplines. For example, CYTREC academics are closely involved in the EPSRC Centre for Doctoral Training (CDT) in Enhancing Human Interactions and Collaborations with Data and Intelligence Driven Systems based in the Computational Foundry. Feedback also suggested a good level of collaboration between the LILW and the wider Faculty of Humanities and Social Sciences (e.g. criminology, linguistics), although feedback from a minority of consultees suggested that a greater level of collaborative activity between LegalTech and other disciplines at the University was possible. However, there is a need to recognise the capacity of the Lab in terms of staff/time, relative to the wider range of disciplines; there is a need for prioritisation and focus. Considering if and how cross- and multi-disciplinary work can be enhanced is an opportunity going forward.

Collaborative activity with external organisations

- 5.10 Across both LegalTech and Cyber Threats the evidence suggests that the LILW has led to enhanced and/or new collaborations with external organisations,** including industry, public and third sector organisations.
- 5.11 Despite some challenges, the LegalTech team has developed relationships with law firms and key stakeholders** including Cardiff and District Law Society, Welsh Government, Solicitors Regulation Authority (SRA), and Legal News Wales. The Lab is involved with the Cardiff and District Law Society's LawTech committee, providing academic input which was absent prior to the LILW. There have also been various engagements with the SRA, for example, through the Virtual LegalTech platform and the SRA led Regulators' Pioneer Funded project (discussed above).
- 5.12** However, consultee feedback highlighted the challenges associated with engaging the law sector. The key challenge has been a reported reluctance within the sector to adopt new

technologies and the resultant need to educate the sector around the potential uses/benefits of new technologies (and the time/resource implications associated with education). Alongside this, the team has had to navigate competing priorities within organisations and the ERDF related funding restrictions (e.g. around commercialisation).

5.13 In contrast to LegalTech, the University already had strong and established relationships in Cyber Threats research. However, the **operation has supported additional research capacity, leading to a “critical mass” within CYTREC which consultees felt had enhanced the team’s external credibility.** For example, the team has strong links with South West Police, the Global Network on Extremism and Technology (GNET) / Global Internet Forum to Counter Terrorism (GIFCT), United Nations Counter Terrorism Executive Directorate (UN CTED), Europol, UK Counter Terrorism, and Welsh and UK Governments. In addition, CYTREC hosts the biannual¹² Terrorism and Social Media (TASM) conference which brings together a range of researchers, policy-makers and practitioners from different countries and disciplines. The TASM 2022 conference attracted over 200 attendees from over 15 countries, with representation from the major social media companies including TikTok, Facebook and Twitter.



Important stakeholders see CYTREC and LILW as a trusted, credible partner



Internal stakeholder consultee

5.14 In addition, since the Mid-Term Evaluation the Director of CYTREC has taken on the coordinator role in the VOX-Pol network – an EU funded academic network focused on violent online political extremism – meaning the network is now led by Swansea University (formerly led by Dublin City University). Consultees emphasised the potential of this network to contribute to potential research collaborations and funding opportunities in future. Positively, feedback suggests that the operation contributed to CYTREC being appointed network lead through supporting the development of a “focal point” for expertise and activity in this area of research.



[VOX-Pol] provides a very exciting space for new ideas, research collaboration and the development of researchers



Internal stakeholder consultee

¹² Note, the conference was biannual until 2021 (when it was delivered online due to the Covid-19 pandemic), but was also held the following year in 2022.

Business and societal benefits

5.15 Projects have progressed further since the Mid-Term Evaluation, with **some validated technologies / applications now moving towards minimum viable products (MVPs)**. For example, both DRAGON-Spotter and DRAGON-Shield are being piloted and evaluated with the work expected to conclude by July 2023. The Include Journey app which was created by the Software Development Team has also developed further, with a summary of progress and benefits since the Mid-Term Evaluation presented in the text box below.

Include Journey

- The project lead secured two funding awards to progress the project further: £120k funding from the Welsh Government Smart Partnership and £400k from the Ministry of Justice (MOJ).
- The first funding award from the Welsh Government was used to trial the app within Include, and the organisation is now embedding the app into their day-to-day operations. The app is helping staff to better support individuals, as well as generating meaningful data that can be used to identify trends and insights into client behaviour and the effectiveness of interventions.
- More recently, funding from the MOJ was secured to deliver a 9-month pilot of the app with prison leavers from Parc Prison, Bridgend and Swansea Prison. Three months into the pilot, the uptake of the app has been strong and the app is reported to have been well-received by users. Prior to commencing the pilot, the Lab supported the implementation of some marginal modifications to the app (e.g. to address additional security requirements).
- The (potential) benefits of the project are multifaceted, from benefitting service users and staff, to providing additional insights and instruments for service providers and policy makers. There is also potential for the app to be applied across different service areas and sectors.

5.16 A further benefit of the Lab is knowledge transfer between industry and academics, through collaborative research projects or wider engagement/dissemination activities. Consultations for the Final Evaluation in particular highlighted the role of the Lab in sharing knowledge with the law sector. Resources such as the tech explainer videos, along with events such as the knowledge sessions for trainee solicitors, have all been important new mechanisms for knowledge exchange between academia and industry. As noted above, industry engagement has also supported delivery against Specific Objective 1.1 to increase the success of Welsh research institutions in attracting competitive and private research funding, with over £130k of private research income secured to date. This said, the extent to which this engagement has benefitted individuals/firms in the sector is not known, because evidence has not been captured on the benefits of these activities on beneficiaries. Going forward, the Virtual LegalTech platform, LegalTech Observatory, and Wales LegalTech start-

up map, are also viewed as important tools for sustaining knowledge exchange between academia and industry.

5.17 The logic model setting out the potential routes to impact for the operation also included two intermediate business/societal outcomes linked to the Law Clinic: improved access to **enhanced environment for testing new technology applications** in legal services for the legal profession in Wales, and **improved access to legal support for participants** in prototype/toolkit trials/tests. At the Mid-Term Evaluation stage evidence on these outcomes was limited, owing largely to the early-stage of projects and the impact of Covid-19 related restrictions on the ability to utilise the facilities as planned. However, at this Final Evaluation stage, use of the Clinic has returned to pre-pandemic levels, and it has been actively utilised to trial new technologies, such as an app to support an individual going to an employment tribunal and a chatbot offering specialist advice on the Renting Homes Wales Act 2016. In addition to the direct benefits associated with trialling the apps, these projects have also provided helpful insight how such apps/technologies can be combined with the existing support available through Law Clinics.

5.18 Linked to this agenda, there was strong qualitative evidence to suggest that **many of the projects across the Lab's portfolio have the potential to have a "real impact on society"**. Whilst it was noted by consultees that evidencing the benefits of Cyber Threats projects in particular is often challenging due to their sensitive and confidential nature, projects such as the Include Journey (discussed above) and 'hate visuals' apps were identified for their potential to deliver societal benefits to communities/individuals in Wales and beyond.

"These aren't just academic projects – they have huge real-world application and impact. The Lab has given us this ability to innovate and move these ideas from concepts to actual products/projects. Whilst we are all impact aware in the way we work, there is only so far you can go without the technical expertise and support. The Lab has plugged this gap and extended our reach".

Internal stakeholder consultee

5.19 Consultations with a small number of project partners also provided examples of **direct benefits emerging for their organisation/business resulting from collaborations with the LILW**. Notable benefits included new knowledge/insights, networking and relationship benefits, and subsequent funding or business development opportunities. Several partners also cited examples of improvements to internal processes resulting from projects with the Lab, including improvements to data transfer processes and systems which will improve data accessibility/efficiency.

5.20 Further, **qualitative evidence suggested the Lab's work has and will inform policy and decision making**. For example, members of the CYTREC team are involved in Europol's European Counter Terrorism Centre (ECTC) and these contributions will help Europol inform and shape policy. This Network runs an annual conference, and the team at Swansea have

always played a central role in contributing to these events. One of the CYTREC Lecturers led a project for the UK Home Office which also has the potential to inform future policy.

Assessment against the logic model

- 5.21** Drawing on the evidence reported above and in Section 4. Figure 5-1 provides a summary assessment of progress of the Lab in delivering against anticipated intermediate outcomes at this Final Evaluation stage.
- 5.22** Overall, **the assessment shows that there has been strong progress in delivery against most of the intermediate outcomes as the operation draws to a close.** There has been particularly strong progress made towards outcomes related to enhanced knowledge / understanding, collaboration, and the validation/invalidation of new technological applications in LegalTech and Cyber Threats.
- 5.23** At this point, progress towards final outcomes is more mixed, which is not unexpected given the ongoing delivery of the operation at the time of the evaluation and anticipated time-paths to impact. This said, at this Final Evaluation stage there is encouraging evidence of progress towards outcomes related to an enhanced profile and reputation of Swansea University, advances in understanding and knowledge of user perceptions/experience of LegalTech innovations, and delivering research that has the potential to inform policy and decision making.
- 5.24** The logic model also included a number of wider indirect impacts which are inherently hard to quantify and evidence and require additional investment by businesses/organisations if they are to be realised in future. The feedback from stakeholders is that the LILW has progressed the development of new technological platforms across both LegalTech and Cyber Threats, and has contributed to Swansea University developing a strong and well-established reputation in LegalTech and Cyber Threats. However, at this stage there is uncertainty whether the Lab will be in a position to achieve longer-term positive impacts following the close of the ERDF funding period.
- 5.25** Overall, the evidence at this Final Evaluation stage suggests that the operation has delivered value for money. The operation was awarded £3.35m in ERDF funding and at January 2023 had already secured £2.7m in research income that can be directly attributed to the LILW. With the exception of research income secured, the operation has achieved or exceeded all its ERDF indicator targets, and has led to a range of collaboration and profile outcomes, alongside wider business and societal effects. Over the longer-term, the facilities will continue to be utilised, and whilst the exact form and function of the Lab post-ERDF is yet to be determined, it can be expected that there will be some sustained increase in the scale of research activity and income secured, particularly in CYTREC, including as a result of the Cyber Threats Suite which provides the University with a competitive and distinctive offer for the delivery of sensitive, complex and high-security research activity.

Figure 5-1: Summary assessment of progress against intermediate outcomes at Final Evaluation stage

Academic outcomes		
LILW strand	Outcome	Assessment
Common outcomes	Improved ability to engage with stakeholders and secure research funding based upon facilities/expertise	✓✓
	Improved ability to attract and retain high calibre academics at SU	✓
	Broader portfolio of research work, influenced by expertise of new academics and new research abilities and capacity	✓
	Enhancements to course curriculums (PG, UG)	✓
LegalTech / Law Clinic outcomes only	Improved understanding and knowledge of LegalTech issues and opportunities	✓✓
	Enhanced student learning experience from involvement in developing new technology applications in law	✓
Cyber Threats outcomes only	Improved understanding and knowledge of Cyber Threats issues and opportunities	✓✓
Business / societal outcomes		
LILW strand	Outcome	Assessment
Common outcomes	Knowledge transfer between industry and academics	✓✓
LegalTech / Law Clinic outcomes only	Concepts / ideas for new technology applications in legal services validated / invalidated	✓✓
	Improved access to enhanced environment for testing new technology applications in legal services for the legal profession in Wales	✓✓
	Improved access to legal support for participants in prototype / toolkit trials / tests	✓
Cyber Threats outcomes only	Concepts / ideas for new technologies / applications in Cyber Threats validated / invalidated	✓✓

Collaboration outcomes

LILW strand	Outcome	Assessment
Common outcomes	Enhanced collaborative research culture in the Law School at SU	✓✓
	Additional funding opportunities identified through collaborative research	✓✓
	Improved linkages and synergies between LegalTech and Cyber Threats expertise at SU	✓
LegalTech / Law Clinic outcomes only	Improved linkages and synergies between LegalTech and Law Clinic at SU	✓✓

Key

Strong progress: ✓✓

Moderate progress: ✓

Source: SQW

6. Conclusions and recommendations

Conclusions

- 6.1 The operation has been delivered against a challenging backdrop.** Launched in August 2019, the Legal Lab has been impacted directly by the Covid-19 pandemic and the associated restrictions and challenges for both individuals and organisations. The pandemic also influenced working patterns and expectations, with implications for the operation as it was established and subsequently sought to progress and accelerate delivery.
- 6.2 In this context, the findings of this Final Evaluation of the LILW operation are positive overall.** The operation has leveraged effectively and developed further, the expertise, experience and profile of the Swansea University School of Law, to pursue world-leading research and secure competitive research income across the LegalTech and Cyber Threats disciplines. The Lab has successfully constructed and fit-out the LegalTech, Cyber Threats and Law Clinic facilities, established research teams with relevant specialisms in both research areas, and undertaken engagement and dissemination activities with a wide range of stakeholders.
- 6.3 Crucially, the operation has made a positive contribution to research activity.** This includes in terms of securing research income – demonstrating strong progress against Specific Objective 1.1 to increase the success of Welsh research institutions in attracting competitive and private research funding, with £2.7m of research secured by January 2023 – and more broadly around the capacity, scope and quality of Legal Tech and Cyber Threats research in Swansea. The Evaluation also identified a range of wider benefits in relation to enhanced knowledge/understanding, collaborative behaviours, and progressing the development of new technological applications with the potential to generate material social, business and economic benefits in future, that would not have been realised without intervention.
- 6.4 Underpinning this positive performance, the operation has been managed well.** Consultations suggest that strong project management and administration support was evident throughout the delivery of the operation. There was a change in Project Manager during the latter half of the operation which represented a risk to the operation, however, this handover was well-handled, and did not have an adverse impact on progress. Monitoring and reporting processes have been implemented effectively overall. However, there was scope for better collection of data on the wider benefits of the LILW outside of formal ERDF indicators. The operation sought to implement the use of an online form to staff every six weeks, but the quality and coverage of the material provided in response was very varied and not comprehensive.

- 6.5 The Lab can report positive achievements against all eight CCT case level indicators,** contributing to the goals of the WFGA. The Final Evaluation identified specific factors which were seen to have supported the successful delivery against the CCT indicators. For example, the integration of the CCTs into the day-to-day delivery of the operation, quarterly CCTs meetings led by the CCT Champion, and strong alignment between the operation's core areas of research and the CCTs.
- 6.6 However, some challenges have been experienced.** Two key challenges are highlighted. First, whilst most of the capital elements of the physical infrastructure were delivered as planned, the completion of the Cyber Threats Suite was delayed by over a year from summer 2020 to winter 2021, including owing to procurement challenges and the complexity of designing the suite to adhere to PASF status. As a result, the Cyber Threats Suite has yet to secure PASF standard accreditation, and staff have not been able to conduct projects involving the use of secure or sensitive data as originally planned.
- 6.7** Second, delays in staff recruitment presented a challenge, particularly the recruitment of the LegalTech research team. Recruitment challenges, alongside changes to the staffing structure included in the re-profile, means that in practice recruitment was ongoing for much of the operation's lifetime. This led to a lack of continuity and some loss of momentum in delivery.
- 6.8 Consistent with these challenges, despite a re-profile at a mid-point, there has been a consistent underspend against budget throughout the lifetime of the operation.** By the end of the ERDF-period a material underspend of £800k is expected. A range of factors have contributed to the underspend including the recruitment challenges, the implications of the Covid-19 pandemic, and lower than expected construction costs. This said, the re-profile provided an opportunity to expand and change the staffing structure and include new activities, such as the Virtual LegalTech platform which are expected to deliver benefits over the longer-term.
- 6.9 Findings related to the effectiveness of the governance of the operation are mixed.** Positively, there has been continuity in the operation Board in driving delivery, and this mechanism was seen by consultees for the Final Evaluation to have worked well overall; this was consistent with the findings at the Mid-Term stage. However, there were several changes in the governance structure related to individual strands of activity, and the proposed LegalTech and Virtual LegalTech platform Advisory Boards were not established. This resulted in lower levels of external inputs and strategic insight to steer the delivery of these elements of activity, and to maintain momentum than would have been optimal; this represents a missed opportunity for the operation.

Recommendations

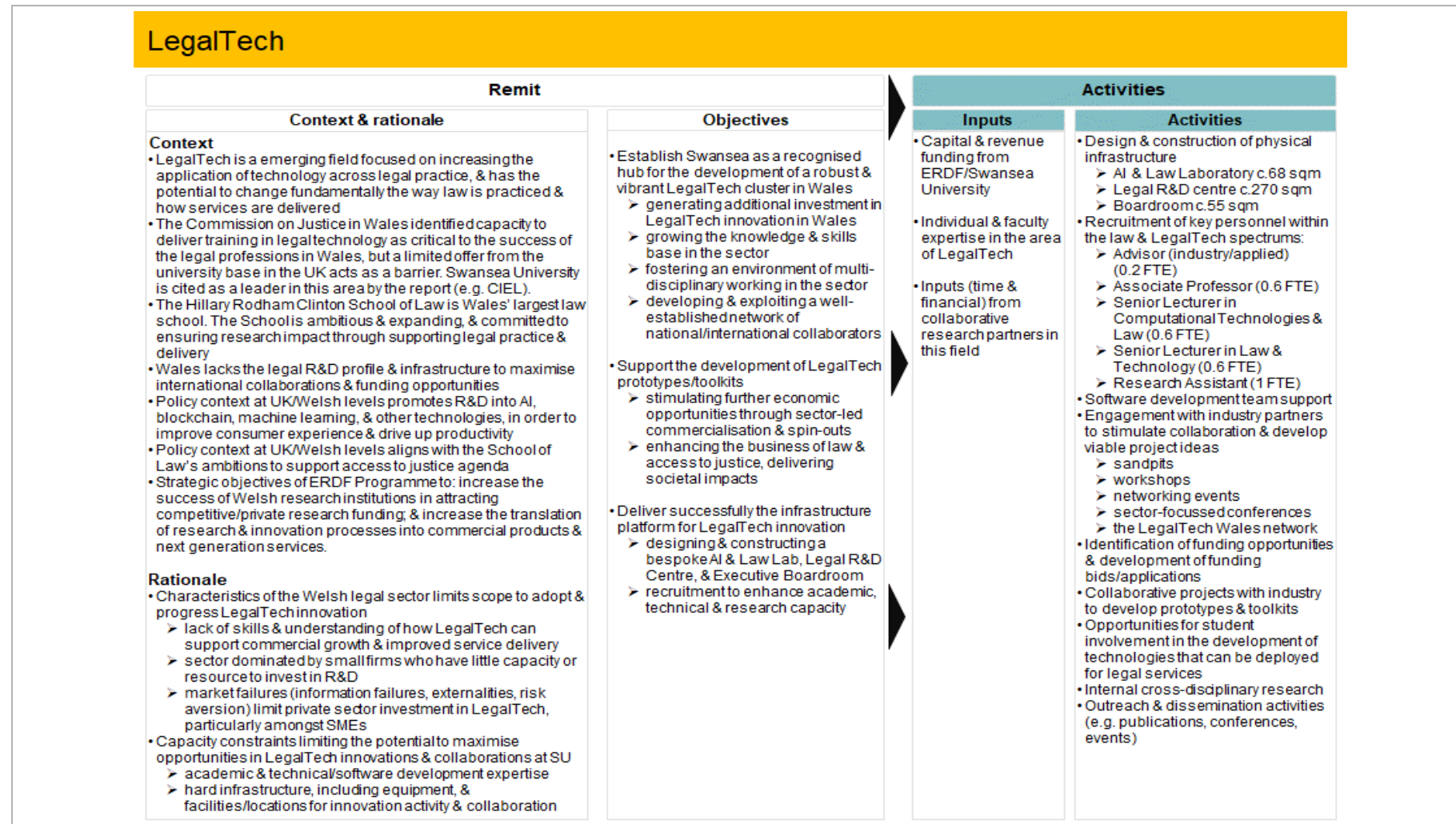
- 6.10** In the context of these conclusions, the following recommendations are made:

- **Recommendation 1:** The University should seek a timely conclusion to its ongoing options review for the LILW post ERDF-completion. This review should consider (i) the function and objectives of the Lab, to ensure that they remain appropriate, and in light of this (ii) the form and funding of the Lab, including in relation to staffing requirements (management, research and software), and the nature/emphasis of activities delivered.
- **Recommendation 2:** Alongside the options review, the University should consider the feasibility of continuing the work associated with the Virtual LegalTech platform. Given the potential impacts of the platform on the ability of Welsh and UK law firms to access essential LegalTech tools, and its potential to deliver important legacy benefits from the operation, exploring possible funding mechanisms to sustain delivery should be a priority going forward.
- **Recommendation 3:** Subject to the findings of the options review, the University should consider the scope for realising enhanced opportunities from the intersection between LegalTech and Cyber Threats expertise established/developed through the operation to date, and how learning and knowledge can be shared more consistently to identify and leverage such opportunities.
- **Recommendation 4:** The University should consider if and how existing cross- and multi-disciplinary work can be enhanced going forward, as a mechanism to help maintain the increase in research income capture delivered during the ERDF funding period.
- **Recommendation 5:** Going forward for the Legal Lab, and in any similar future interventions, the University should consider implementing and embedding monitoring and evaluation mechanisms and processes within project-level activity (for example, baseline/follow-up surveys) to ensure that evidence on the academic, business/societal and collaboration effects of the Lab's activity is collated systematically and routinely.

Annex A: Glossary

- AI: Artificial Intelligence
- CCT(s): Cross-Cutting Theme(s)
- CYTREC: Cyber Threats Research Centre
- EDI: Equality Diversity and Inclusion
- ERDF: European Regional Development Fund
- EU: European Union
- LILW: Legal Innovation Lab Wales
- MOJ: Ministry of Justice
- WEFO: Welsh European Funding Office
- WFGA: Wellbeing of Future Generations Act
- R&D: Research and Development

Annex B: Strand level logic models



Impacts		
Outputs	Intermediate outcomes	Final outcomes
<ul style="list-style-type: none"> • Prototypes developed for new LegalTech applications/products • Research funding bids submitted (volume & value) • Research publications produced • Other professional publications, case studies, newsletters etc. produced • External events & conferences attended/delivered by LILW staff • Events coordinated/led by the AI & Law Lab/Legal R&D Centre delivered • Delegates at events coordinated/led by the AI & Law Lab/Legal R&D Centre • External researchers attracted to the AI & Law Lab/Legal R&D Centre (e.g. visiting fellows, secondments, hosted visitors) • REF Impact Case Studies supported/developed • Press releases & social media content developed • Businesses engaged/supported • New/enhanced partnerships with other disciplines at SU (including Cyber Threats) • New/enhanced partnerships with industry • New/enhanced partnerships with other research centres, academic institutions • Cross-disciplinary research projects completed: internal (e.g. projects with the Computational Foundry) • Collaborative research projects completed: external (industry, other research centres, academic institutions) 	<ul style="list-style-type: none"> • Improved understanding & knowledge of LegalTech issues & opportunities • Improved ability to engage with stakeholders & secure research funding based upon facilities/expertise • Improved ability to attract & retain high calibre academics to SU • Broader portfolio of research work, influenced by expertise of new academics & new research abilities & capacity • Enhanced student learning experience from involvement in developing new technology applications in law • Enhancements to course curriculums (PG, UG) • Concepts/ideas for new technology applications in legal services validated/invalidated • Knowledge transfer between industry & academics • Enhanced collaborative research culture in the Law School at SU • Additional funding opportunities identified through collaborative research • Improved linkages & synergies between LegalTech and Cyber Threats expertise at SU 	<p>Direct</p> <ul style="list-style-type: none"> • Academic advances in the development & application of new technologies in legal services • Increased research capacity/capability in the development & application of AI, blockchain & other technologies in legal services • Enhanced profile/reputation of SU as an internationally leading institution in the development & application of AI, blockchain & other technologies in legal services • Growing community of internationally leading researchers attracted to work in Wales • Research informs policy & decision making • Improved employment prospects for graduates • Increased UG/PG courses applications • Enhanced student experience as a result of new academic staff, facilities & broader subject coverage • Improved quality of research (measured by FWCI, publications in high-impact journals & self-reporting) • Open access/source legal innovations launched • Improved satisfaction for LILW staff • Staff spin-offs • Development of internationally competitive expertise & skills in the application of AI & other technologies to law services • Prototypes/toolkits progressed through Technology Readiness Levels • Improved industry perceptions of the potential benefits of adopting LegalTech • Increased investment in LegalTech R&D by legal sector • Sustained higher levels of collaboration with other disciplines/research centres at the university • Sustained higher levels of collaboration with industry (nationally/internationally) • Creation of an ecosystem that supports research at the intersection of law & technology <p>Indirect (requiring further investment by businesses)</p> <ul style="list-style-type: none"> • New/improved products developed/introduced • New/improved processes developed/adopted • Patents applied for/granted • Business performance effects (e.g. efficiency, cost reductions) • Local/regional skills development • Access to justice benefits as commercialisation of technologies drive efficiencies, therefore reducing the cost of accessing legal advice <p>... & contributing to</p> <ul style="list-style-type: none"> • University REF performance (research quality & impact) • City-regional cluster development, including Swansea Digital District • Growth & sustainability of a vibrant LegalTech sector in Wales (employment, GVA) • Changes to policy/regulatory/legislative landscape relevant to LegalTech

Law Clinic

Remit		Activities	
Context & rationale	Objectives	Inputs	Activities
<p>Context</p> <ul style="list-style-type: none"> • As per the LegalTech Strand context, plus ... • Provision of legal support in Wales is not sufficient or unaffordable for some groups in society. Without the appropriate support, individuals are inadequately equipped to defend themselves, especially for matters ending up in court • Policy context at UK/Welsh levels aligns with ambitions to support access to justice agenda <p>Rationale</p> <ul style="list-style-type: none"> • Capacity constraints limiting the potential to trial & scope LegalTech innovations, & limiting the ability of the Law Clinic to meet increasing demand for legal advice <ul style="list-style-type: none"> ➢ hard infrastructure, including appropriate facilities/locations ➢ technical/software development expertise • Cuts to legal aid in 2013 alongside the contraction of other services (such as Citizens Advice), simultaneously led to increased demand & reduced availability of legal advice • Lack of applied, 'real world' learning & experience for law students 	<ul style="list-style-type: none"> • Support the access to justice agenda through facilitating the trialling & scoping of LegalTech innovations to address real world legal issues <ul style="list-style-type: none"> ➢ maximising the potential & route to impact of other project components ➢ establishing new collaborations with NGOs, charities & law firms to support technology-led innovation • Deliver successfully the infrastructure platform for Law Clinic <ul style="list-style-type: none"> ➢ designing & constructing a bespoke Law Clinic facility ➢ recruitment to enhance technical capacity 	<ul style="list-style-type: none"> • Capital & revenue funding from ERDF/Swansea University • Individual expertise in law/access to & faculty justice (<i>including students</i>) • Inputs (time & financial) from collaborative research partners in this field 	<ul style="list-style-type: none"> • Design & construction of the Law Clinic • Engagement with individuals in the community in need of legal advice • Engagement with NGOs, charities & law firms • Trialling of LegalTech innovations (developed in Lab) in collaboration with partners, in support of the access to justice agenda • <i>Ineligible student-led activities are <u>not</u> included in activities</i>

Impacts		
Outputs	Intermediate outcomes	Final outcomes
<ul style="list-style-type: none"> • LegalTech prototypes/toolkits trialed and tested • Events coordinated/led by the Law Clinic delivered • Delegates at events coordinated/led by the Law Clinic • Students engaged in prototype/toolkit trials/tests • Press releases & social media content developed • Businesses engaged/supported in trials/testing • Individuals supported/engaged in prototype/toolkit trials/tests • New/enhanced partnerships with industry • New/enhanced partnerships with third sector organisations • New/enhanced partnerships between local law practitioners • Cross-disciplinary research projects completed: internal • Collaborative research projects completed: external (industry, third sector) 	<ul style="list-style-type: none"> • Enhanced student learning experience from involvement in developing new technology applications in law in support of access to justice • Concepts/ideas for new technology applications in legal services validated/invalidated • Improved access to enhanced environment for testing new technology applications in legal services for the legal profession in Wales • Improved access to legal support for participants in prototype/toolkit trials/tests • Enhanced collaborative research culture in the Law School at SU • Additional funding opportunities identified through collaborative research • Improved linkages & synergies between LegalTech & Law Clinic at SU 	<p>Direct</p> <ul style="list-style-type: none"> • Advances in understanding & knowledge of user perceptions & experience of LegalTech innovations • Enhanced reputation for SU as a leading institution promoting access to justice • Improved employment prospects for graduates • Increased UG/PG courses applications • Improved satisfaction for LILW staff • Outcomes for individuals supported - for example, empowerment to tackle legal issues, the promotion/protection of individual's rights & entitlements, & positive outcomes from tribunals/other legal processes • Innovation in the sector takes accounts of client needs from an early stage • Prototypes/toolkits progressed through Technology Readiness Levels • Improved industry perceptions of the potential benefits of adopting LegalTech • Increased investment in LegalTech R&D by legal sector • Sustained higher levels of collaboration with other disciplines/research centres at the university • Sustained higher levels of collaboration with industry (nationally/internationally) • Sustained higher levels of collaboration/interaction between local law practitioners • Creation of an ecosystem that supports research at the intersection of law and technology <p>Indirect (requiring further investment by businesses)</p> <ul style="list-style-type: none"> • New/improved products developed/introduced • New/improved processes developed/adopted • Business performance effects (e.g. efficiency, cost reductions) • Access to justice benefits as commercialisation of technologies drive efficiencies, therefore reducing the cost of accessing legal advice • Local/regional skills development <p>... & contributing to</p> <ul style="list-style-type: none"> • Economic & societal benefits from the creation & deployment of technology-enabled platforms that will streamline legal services & enhance access to justice in communities across Wales & beyond

Cyber Threats

Remit		Activities	
Context & rationale	Objectives	Inputs	Activities
<p>Context</p> <ul style="list-style-type: none"> Society's reliance on digital technologies has grown enormously. However, digital services can be open to exploitation, & some cyber forms of offending are prevalent e.g. cybercrime, online fraud, victim response terrorist groups. There are clear social benefits from protecting society from online crime & cyber terrorism. The need to invest in & deploy new techniques, such as AI & machine learning, is constant SU is an internationally leading hub for research in terrorists' use of the internet for propaganda, radicalisation & recruitment. This includes the Cyber Threats Intelligence Centre focused on cybercrime, fraud, digital intellectual property crime, online grooming & trafficking, & crypto drugs markets. Research in the area of cyber threats/security often requires high levels of security & privacy, & therefore specialist facilities, given the sensitive nature Strategic objectives of ERDF Programme to: increase the success of Welsh research institutions in attracting competitive/private research funding <p>Rationale</p> <ul style="list-style-type: none"> Capacity constraints limiting the potential to maximise opportunities in Cyber Threats research at SU <ul style="list-style-type: none"> research facilities do not allow on-site research on secure or sensitive data, with staff travelling to off-site locations, which is expensive, time consuming & restrictive no secure environments for meetings with partners from law enforcement or international security agencies capacity constraints in terms of number of academic staff & technical/software development expertise Opportunities for enhanced collaboration with law enforcement & security agencies are being missed owing to lack of facilities & academic capacity 	<ul style="list-style-type: none"> Advance understanding of cybercrime, terrorist groups' exploitation of new technologies, online grooming, misinformation, fake news & criminal internet use <ul style="list-style-type: none"> creating threat assessment tools integrating safeguards into technological design identifying how SMEs and start-ups can be incentivized to protect their services & platforms from exploitation by criminal/terrorist groups Support the development of cyber-security/terrorism prototypes/toolkits <ul style="list-style-type: none"> enhancing the ability of agencies to respond to existing & emerging threats informing the development of new process and services by industry (including SMEs) Deliver successfully the infrastructure platform for the Cyber Threats Research Suite <ul style="list-style-type: none"> designing & constructing a bespoke suite recruitment to enhance academic & technical capacity 	<ul style="list-style-type: none"> Capital & revenue funding from ERDF/Swansea University Individual & faculty expertise in the area of cyber threats Inputs (time & financial) from collaborative research partners in this field 	<ul style="list-style-type: none"> Design & construction of a c. 215 sqm counterterrorism research suite (key secure facilities include meeting rooms, spaces to host data & video-conferencing) Recruitment of key personnel within the computational social sciences & cyber/counterterrorism spectrums: <ul style="list-style-type: none"> Cyber Threats Research Advisor at professorial level (0.2 FTE) Associate Professor in criminology or law (0.6 FTE) Senior Lecturer in Criminology, Linguistics or Psychology (0.6 FTE) Senior Lecturer in Law or Political Science (0.6 FTE) Lecturer in Criminology (0.6 FTE) Postdoctoral Research Assistant (1.0 FTE) Research Assistant (1.0 FTE) Software development team support Internal cross-disciplinary research Engagement with industry partners to develop viable project ideas Identification of funding opportunities & development of funding bids/applications Collaborative projects with industry to develop prototypes & toolkits Marketing & awareness raising activities to generate engagement/collaborations Outreach & dissemination activities (e.g. publications, conferences, events)

Impacts		
Outputs	Intermediate outcomes	Final outcomes
<ul style="list-style-type: none"> Research funding bids submitted (volume & value) Prototypes developed for new cyber threats technologies/applications Research publications produced Other professional publications, case studies, newsletters etc. produced External events & conferences attended/delivered by LILW staff Events coordinated/led by the counterterrorism research suite delivered Delegates at events coordinated/led by the counterterrorism research suite External researchers attracted to counterterrorism research suite (e.g. visiting fellows, secondments, hosted visitors) REF Impact Case Studies supported/developed Press releases & social media content developed Businesses/private sector agencies engaged/supported Public sector/law enforcement/security agencies engaged/supported New/enhanced partnerships with other disciplines at SU (including LegalTech) New/enhanced partnerships with industry New/enhanced partnerships with other research centres, academic institutions New/enhanced partnerships with public sector/law enforcement/security agencies Cross-disciplinary research projects completed: internal (e.g. projects with the Computational Foundry) Collaborative research projects completed: external (industry, other research centres, academic institutions) 	<ul style="list-style-type: none"> Improved understanding & knowledge of cyber threats issues & opportunities Improved ability to engage with stakeholders & secure research funding based upon facilities/expertise Improved ability to attract & retain high calibre academics to SU Broader portfolio of research work, influenced by expertise of new academics & new research abilities & capacity Enhancements to course curriculums (PG, UG) Concepts/ideas for new technologies/applications in cyber threats validated/invalidated Knowledge transfer between industries & academics Enhanced collaborative research culture in the Law School at SU Additional funding opportunities identified through collaborative research Improved linkages & synergies between LegalTech & Cyber Threats expertise at SU 	<p>Direct</p> <ul style="list-style-type: none"> Academic advances in the development & application of new technologies in cyber threats Enhanced profile/reputation of SU as an internationally leading institution for research & development & application of technologies in cyber threats Growing community of internationally leading researchers attracted to work in Wales Research informs policy & decision making Increased UG/PG courses applications Improved employment prospects for graduates Improved quality of research (measured by FWCI, publications in high-impact journals & self-reporting) Enhanced student experience as a result of new academic staff, facilities & broader subject coverage Open access/source cyber threats innovations launched Improved satisfaction for LILW staff Development of internationally competitive expertise & skills in the application of AI & other technologies to cyber threats Prototypes of technological platforms & frameworks to support counterterrorism, defence and security progressed through Technology Readiness Levels Security agencies & technology/social media companies attracted to work in Wales Improved capacity for public sector agencies to develop & influence policy & regulatory & legal mechanisms Increased public awareness of cyber threats & understanding of how to mitigate risk Increased investment in cyber threats R&D by law/security agencies & industry Creation of an ecosystem that supports research at the intersection of law & technology Sustained higher levels of collaboration with other disciplines/research centres at the university Sustained higher levels of collaboration with industry (nationally & internationally) <p>Indirect (requiring further investment by businesses and other agencies)</p> <ul style="list-style-type: none"> Implementation or commercialisation of prototypes by law/security agencies & industry Business performance effects (e.g. efficiency, cost reductions) Local/regional skills development <p>... & contributing to</p> <ul style="list-style-type: none"> Safety & security promoted through mitigating risks of criminal/terrorist exploitation of the internet University REF performance (research quality & impact) Changes to policy/regulatory/legislative landscape relevant to cyber threats



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About us

SQW Group

SQW and Oxford Innovation are part of SQW Group.

www.sqwgroup.com

SQW

SQW is a leading provider of research, analysis and advice on sustainable economic and social development for public, private and voluntary sector organisations across the UK and internationally. Core services include appraisal, economic impact assessment, and evaluation; demand assessment, feasibility and business planning; economic, social and environmental research and analysis; organisation and partnership development; policy development, strategy, and action planning. In 2019, BBP Regeneration became part of SQW, bringing to the business a RICS-accredited land and property team.

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Oxford Innovation

Oxford Innovation is a leading operator of business and innovation centres that provide office and laboratory space to companies throughout the UK. The company also provides innovation services to entrepreneurs, including business planning advice, coaching and mentoring. Oxford Innovation also manages investment networks that link investors with entrepreneurs seeking funding from £20,000 to £2m.

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