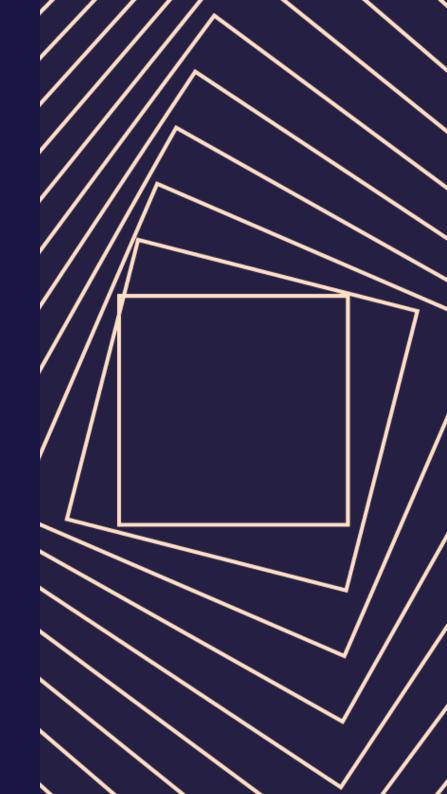
# PROFTECH RESEARCH & INNOVATION ROADMAP 2024-33

A roadmap for the growth of the ProfTech sector, covering FinTech, LegalTech and PropTech. Developed in the West Midlands, to support the prosperity of the region and the UK.







# **CONTENTS**

Creating economic, societal and environmental value through ProfTech Research and Innovation in the West Midlands, improving the lives of its citizens and businesses and driving prosperity across the region and beyond.

FOREWORDS	3
EXECUTIVE SUMMARY	7
INTRODUCTION	14
PRODUCTIVITY	17
OPEN DATA	23
SUSTAINABILITY	30
INCLUSION & WELLNESS	36
SUMMARY & NEXT STEPS	42
APPENDICES:	41
METHODOLOGY	41
CONTRIBUTING ORGANISATIONS	51



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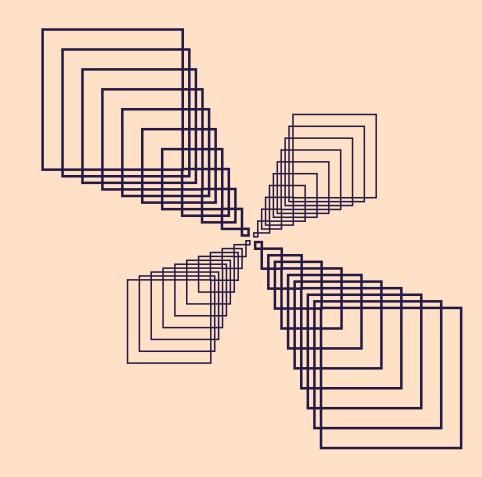
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# **FOREWORDS**

Innovate UK
City of London Corporation
SuperTech



# INNOVATE UK





Stephen Browning, Challenge Director – Next Generation Services, Innovate UK

This roadmap presents an exciting opportunity and an ambitious set of initiatives to drive purposeful, coordinated and collaborative research and innovation activity across the West Midlands; which aims to focus, accelerate and in some cases transform the impact professional services has on consumers, communities and businesses across the region.

The priority themes highlighted in this roadmap will help deliver our Joint Action Plan between Innovate UK and the West Midlands Region and will make a key contribution in the West Midlands and to our Strategic Delivery Plan, particularly our Net Zero and Digital Technologies domains.

In the Next Generation Professional and Financial Services programme we fund and support projects across UK services, including Professional & Financial Services. We continue to support innovation and research across accounting, law, insurance and financial services to drive efficiencies, adoption, access to data and emerging opportunities such as ESG, that contribute to the UK's leading global position as a centre for business and professional services.

Through our investments, knowledge-exchange and dissemination activities, we have been pioneering approaches to capacity building in a sector that is not as familiar with R&D endeavours, but technology and external pressures are necessitating a change in tact.

We are always interested to learn more about emerging trends, challenges and opportunities across the various industries and regions of the UK and to continue to develop our own thinking by engaging with industry and academia. This roadmap provides a welcome window into these items for professional services and technology in the West Midlands.

The activities recommended as part of this roadmap will help deliver impact for the West Midlands and the UK as a whole, and the challenges noted with legacy technology, difficulties in accessing the right data, and challenges with cross-sector collaboration are all problems that are relevant and important to address.

This roadmap will act as a catalyst and a guiding light for future research and innovation in the West Midlands, and help us jointly deliver the impact over the coming years.

# CITY OF LONDON CORPORATION





Chris Hayward, Policy Chairman, City of London Corporation

With over two-thirds of all jobs outside London, the UK financial and professional services sector extends well beyond the boundaries of a single city. It's a national story, with towns and cities across the country contributing to its growing success whilst simultaneously generating regional economic growth and expertise.

The City of London Corporation supports the promotion and growth of financial and professional services throughout the country through our regions and nations programme. Our ambition is to help increase inward investment to regions and build awareness of how London can act as a springboard for regional firms to export their products and services globally.

SuperTech WM is a leading example of how regions can harness local expertise within financial and professional services to drive economic growth and create lasting impact. SuperTech's research and innovation roadmap is the next step in creating a regional skills base, which will enable both the sector and the community to thrive.

The City of London Corporation's relationship with the West Midlands – and SuperTech – is not just strategic, it's symbiotic. In a global financial marketplace, the entire country needs to be working together: where the Square Mile succeeds, the West Midlands succeeds, and vice versa. Our relationship reflects our shared vision in technology, acknowledges the comprehensive nature of the West Midlands' economy, and most importantly, celebrates the cultural and capital corridor linking us.

The SuperTech cluster is a testament to that collaboration. 'The City of London Corporation was delighted to host the launch of SuperTech's Impact Report in September 2023. That report outlined how ProfTech in the West Midlands has developed and how SuperTech has emerged as a significant catalyst of growth.

We at the City of London Corporation recognise that technology is central to both national economic growth and the continuing global strength of British financial and professional services. Alongside HM Treasury, we provided seed funding for the Centre for Finance, Innovation and Technology, which will help the country remain a world-leader in financial innovation. And in September 2023, we launched our groundbreaking Vision for Economic Growth report. Central to our recommendations are steps to become a 'digital-first economy' and adding billions of pounds to our economy: adopting digital verification and reducing fraud.

It is critical that the UK continues to be at the forefront of the digital agenda. The SuperTech roadmap provides an actionable programme of delivery for economic, societal, and environmental impact. This will include each of the region's key ProfTech market segments, principally FinTech, PropTech and LegalTech. This roadmap is a golden opportunity to celebrate and build on the many national and regional achievements — I wish you every success as you move forward.

# **SUPERTECH**





Hilary Smyth-Allen, Executive Director, SuperTech WM

The business, professional and financial services sector is a UK success story and one where innovation and vision continue to set the UK apart. As a globally relevant centre for these sectors, both economically and geographically, Birmingham and the wider West Midlands have a significant stake in this agenda.

It is not news to restate the trends stemming from technology-led disruption that has given rise to 'ProfTech' which encompasses FinTech, InsurTech, PropTech and LawTech amongst others. The growing opportunity for the UK and our region is now very evident and accepted given the leadership stemming from the Kalifa Review of FinTech, LawtechUK and Real Estate Data Foundation, to name but a few key actors. Within this, the importance of regions as engines of this permanent technological revolution is increasingly

appreciated. At SuperTech it is our mission to support the growth of the UK 'pie' and to ensure that the West Midlands shares in the benefits accordingly.

Supporting innovation has been a core part of our endeavours since SuperTech launched a little over 3 years ago. In that time we have built solid relationships with our core businesses, exploring, understanding, listening and building trust. But with such a diverse business base, even within the comparatively niche verticals of fintech, PropTech and LawTech, determining the most effective direction for our combined efforts remains a constant question. And beyond that, where do the unique collective capabilities of the Birmingham and wider West Midlands region have the potential to lead?

This report is purposefully intended to address these questions, drive goals for innovation and growth. It is specifically designed to help us refine our activities and identity to pursue the top line mission. Uniquely anchored in our cross–sector approach, it is full of insights and proposed actions to set our direction for the coming decade. In this I am excited for the years to come.

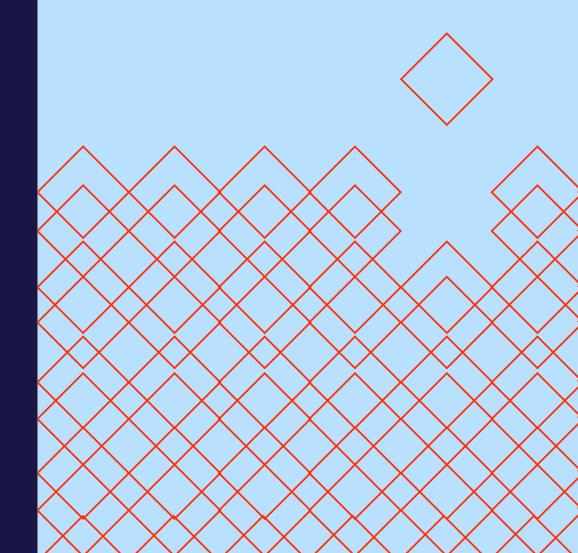
What the report can't bring to life though through the pages is the depth of engagement and sense of community that these pieces of work can catalyse. As a group, we have learnt more about each other and ourselves through this process; a solid foundation for future collaboration required for implementation.

Given our region is historically associated with automotive, real-estate and banking, it probably shouldn't have been such a surprise to find proposition clustering around car ownership/automotive financing and homes, be that transacting, financing, retrofitting or occupying. Other characteristics that have shone through relate to the depth of specialist lending in the region, alongside the presence of tier one organisations and numerous 'prop-fin' – or 'fin-prop' companies. All these findings underline why the original supercluster approach was a good strategy for this region.

Key to advancement are the strong and exciting relationships we have developed with our regional universities who have been incredibly supportive of this work. The West Midlands is fortunate to have some exemplary research activity directly aligned to the ProfTech sectors underway now; far more than a few years ago and this will be critical for successful implementation from hereon.

Through the combined actions of this Roadmap I believe we are now extremely well placed to capitalise on the opportunities that lie ahead. We are very grateful to all who have contributed and look forward to working with all stakeholders as we execute these exciting plans over the coming years.

# EXECUTIVE SUMMARY



## **OVERVIEW**

ProfTech is a critical driver of technologyenabled innovation in the Financial, Professional & Business Services market and continues to transform the lives of consumers and businesses in the West Midlands and beyond. It has the potential to significantly improve the efficiency and effectiveness of Financial, Professional & Business Services, as well as help tackle prominent societal and environmental issues.

FinTech, PropTech, LegalTech, and other emerging technology sectors targeting Financial, Professional & Business Services such as MarTech, are often treated as distinct and separate markets. SuperTech seeks to foster a more unified view, focusing on ProfTech as the summation of these markets. This focus is less common across other regions of the UK and presents an opportunity for the West Midlands to make a differentiated impact through building upon and connecting the region's growing Financial, Professional & Business Services and ProfTech capability. In pursuit of this aim, this roadmap seeks to foster greater collaboration and coordination between ProfTech's market segments and build lasting connections that drive research and innovation across the region.

At its core, the roadmap seeks to broadenthe scope with which industry and academia collaborate, through developing a thematic framework of activity that reflects the appetites and priorities of businesses and universities across the region. As a driver to achieve this, it is key to connect regional,

stakeholders (many of which operate nationally and internationally) who share a desire to drive growth and prosperity for the region.

The roadmap provides an actionable programme of activity that aims to deliver real-world economic, societal and environmental impact. It also plans to deliver this impact across each of the region's key ProfTech market segments, principally FinTech, PropTech and LegalTech and aims to build upon the region's existing infrastructure.

Throughout the development of the roadmap, we engaged extensively with stakeholders across the region. We would like to thank all the organisations and individuals that helped brainstorm, develop and sharpen the structure and content of the roadmap. We consistently found widespread openness and appetite to support greater collaboration between industry and academia, and to drive meaningful and impactful innovation and research activity going forward.

Our forecasts indicate that ProfTech could add 4,600 jobs and £330m to the GVA of the West Midlands over the next 10 years, which would mean the sector was adding more than £1.5bn to the regional economy each year by 2033.

There is a significant inter-relationship between the primary sector and the emerging ProfTech sector. Trends towards more technology enabled services and higher client expectations of frictionless access require incumbents to adapt business models, think beyond client-led innovation and hire a broader range of skill sets often 'fishing in the same pond' as other techenabled sectors. Hence ProfTech has the ability to add new economic growth and jobs, but is also a vital part of supporting the realisation of established sector growth projections.<sup>1</sup>

The UK's Digital and the Business, Professional and Financial Services sectors have both outpaced the growth of the UK economy over the last few years, growing at 12%² (from 2020 to 2023, reaching c£168bn³) and 6.8%⁴ (through 2022), respectively – compared to the UK economy which grew 0.1%⁵ from 2020 to 2023. The UK Digital sector is expecting to grow an additional £41.2bn⁶ by 2025, creating 635,000 jobs – a CAGR of 7.6%.

The West Midlands is the fastest growing region of the UK<sup>7</sup> by GVA and is expected to continue to grow by 1.7% to 2026. The West Midlands is also said to have the fastest growing Tech sector in the UK. The West Midlands Tech sector was valued at £15.3bn<sup>9</sup> in 2023, growing c10% p.a since 2021.

The West Midlands' Business, Professional and Financial Services sector was worth at least £28.5bn with a total workforce of 182,000 in 2022, the sum of Finance, Property and Legal Services which account for £7.9bn, £17.8bn and £2.9bn, 10 respectively. We estimate that ProfTech in the West Midlands is worth c£1.2bn in 2024 and is expected to grow by 2.3% p.a. to 2033, reaching c£1.5bn GVA and a workforce of 21,200.

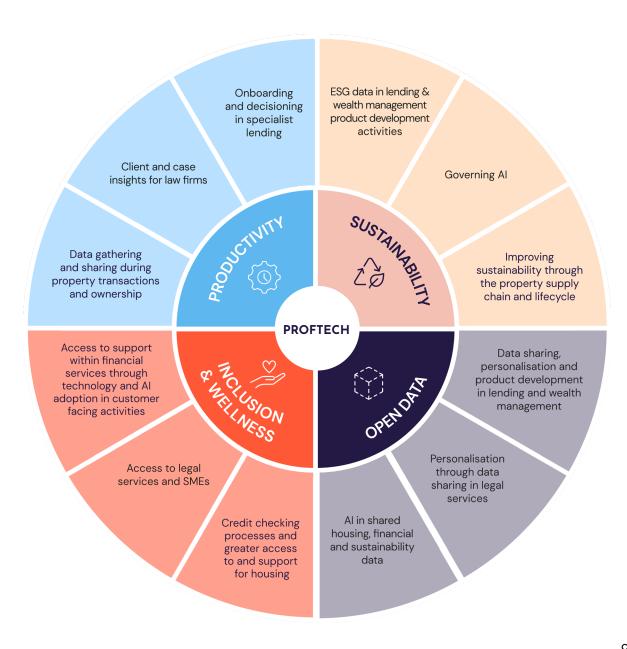
# ROADMAP DESIGN

As part of this engagement, we identified four themes that were frequently regarded as critical focus areas for innovation and research in the future:

- Productivity
- Open Data
- Sustainability
- Inclusion & Wellness

Whilst these themes are not unique to the West Midlands, they present an opportunity to drive cross-sector activity around golden threads that stakeholders across the region are firmly focused on and that align strongly to national and global trends.

These themes were relevant across all end-markets engaged including, but not limited to, specialist lending, payments, wealth management, motor finance, the development and transaction of property, the provision of serviced accommodation and legal services.



<sup>23.5</sup>House of Commons, 2023 <sup>4</sup>The CityUK, 2023 <sup>6</sup>UK Government, 2022 <sup>7,8</sup>EY, 2024 <sup>9</sup>West Midlands Combined Authority, 2024 <sup>10</sup>Office for National Statistics, 2024



"Through our own work we know the immense advancement potential of Open Data. By aligning this with Productivity, Sustainability, Inclusion and Wellness as critical focus areas for identified initiatives, this integrated roadmap sets out a successful path for consumer and business enablement in the West Midlands and the wider economy." – Ezechi Britton MBE, CEO, Centre for Finance, Innovation and Technology (CFIT)

"We are excited by the Roadmap's framework of activity and believe it will foster greater collaboration between industry and academic endeavour. We see clear opportunity to realise significant economic growth in our home region and beyond, and as a globally recognised research university, the flourishing work of our Gillmore Centre for Financial Technology is directly aligned and motivated to help convert these insights into impact." – Matt Hanmer, Advisory Board Member, Warwick Business School

# ROADMAP DESIGN

Each theme is supported by four targeted initiatives, which in turn are supported by a range of activities. Activities are recommended through the next 10 years and comprise a collection of delivery formats such as innovation calls, working groups and hackathons, alongside opportunities for collaborative research projects. These actions will be delivered by a combined effort of the West Midlands ProfTech cluster, including universities and industry participants ranging from startups to large corporates.

The delivery and success of the roadmap will be reviewed twice a year by a steering group, and the summation of these reviews will be made publicly available.

# Research methods used to generate insights and shape the roadmap:

### Stakeholder insights:

- 3 roundtable sessions with key stakeholder groups, including over 30 participants.
- Deep dive discussions with 20+ Financial, Professional & Business Services and ProfTech stakeholders.
- Interactive workshop for 30+ stakeholders drawn from industry and academia, to discuss and refine the emerging themes of the roadmap.

### Desk research and analysis:

- Review of existing and emerging trends relevant to Financial, Professional & Business Services and ProfTech from a regional, national and global perspective.
- Review of critical focus areas for each theme at a regional level, including the region's capability in these areas from industry and academic perspectives.

"

# **RESEARCH & INNOVATION ROADMAP:** Strategic framework

#### STRATEGIC PURPOSE FOR RESEARCH & INNOVATION

To create economic, societal and environmental value through ProfTech Research & Innovation in and from the West Midlands

#### STRATEGIC RESEARCH & INNOVATION OBJECTIVES & OUTCOMES

#### **Economic Value**

Drive enterprise creation and productivity improvements to support the growth of the West Midland's digital economy

#### Societal Value

Increase employment opportunities and financial wellbeing to positively impact the West Midlands' citizens and communities

#### **Environmantal Value**

Accelerate growth of the net zero economy by developing financial capabilities that a ddress the climate change challenge

#### STRATEGIC RESEARCH & INNOVATION THEMES & PRIORITY TOPICS

#### **Productivity**

- Onboarding and decisioning in specialist lending
- Data gathering and sharing during property transactions and ownership
- Client and case insights for law firms

#### **Open Data**

- Data sharing, personalisation and product development in lending and wealth management
- Al in shared housing, financial and sustainability data
- Personalisation through data sharing in legal services

#### Sustainability

- ESG data in lending and wealth management product development activities
- Improving sustainability through the property supply chain and lifecycle
- · Governing Al

#### **Inclusion & Wellness**

- Access to support within financial services through technology and Al adoption in customer facing activities
- Credit checking processes and greater access to and support for housing
- Access to and support within legal services and SMEs

#### **RESEARCH & INNOVATION ROADMAP ACTIONS**

#### Value-driven Innovation

A mix of innovation challenges, immersion sessions and workshops aimed at driving new and improved products and services

#### Research with Impact

A mix of research projects and collaborative whitepapers aimed at driving actionable and impactful insights for ProfTech enterprise application

#### Coordinated Collaboration

A mix of working groups and events to drive and monitor key activities in a collaborative way

#### KEY IMPACTS OF THE PROFTECH RESEARCH & INNOVATION ROADMAP

**2024** £1.20bn GVA 16,600 Jobs **2029** 35bn GVA

£1.35bn GVA 18,600 Jobs 2033

£1.53bn GVA 21,200 Jobs

# **RESEARCH & INNOVATION ROADMAP: Summary of actions**

THEME SHORT TERM: < 3 YEARS MEDIUM TERM: 3-5 YEARS LONG TERM: 5+ YEARS

• Working Group: continually identify, share and review methods and formats for engaging with national initiatives, related to the theme of productivity.

#### Immersion Session(s):

- Develop a short list of 3-5 opportunities for onboarding or decisioning improvements per specialist lending class e.g., buy-to-let, self-employed, development finance etc.
- Develop a short list of 3-5 use cases for data management, analytics and visualisation in law firms.
- Innovation Challenge(s): following the previous activity(s), create an open innovation challenge(s) seeking solutions to the opportunities identified.
- Workshop(s) & Working Group: create a system for regional introductions, connections and integrations between PropTech and FinTech.
- Kick-off Research Project(s): exploratory
  planning including discussing, framing and
  proposing research project(s) scope and
  outline, see long term action(s).

#### Workshop(s) & Collaborative Whitepaper(s):

- Develop concepts and frameworks for regional support for organisations with legacy adoption and digital transformation.
- Develop concepts and frameworks and potential drivers for how organisations can foster greater trust in and openness to data sharing among consumers.
- Develop a detailed view of the impact greater availability and transparency of customer journey data on property buying, from a customer and product perspective.
- Develop concepts and frameworks for the deployment of no- and low-code software development tools in law firms.
- Working Group & Event(s): review progress on driving activities noted during the shortterm see left.

#### Publish Research Project(s):

- Develop a business case for alternative decisioning methodologies (e.g., behavioural) to improve decisioning efficiency and effectiveness.
- Design a regional model for fostering joint proposition development across Financial Services, FinTech, Property and PropTech.
- Develop a blueprint of a regional model for fostering change readiness and innovation culture within law firms.
- Working Group & Event(s): review progress on driving activities noted during the mediumterm, see left.

## • Working Group: continually identify, share and review methods and formats for engaging with national initiatives, related to the theme of open data.

#### Immersion Session(s):

- Develop a short list of 3-5 use cases for personalisation for lending and wealth management.
- Develop a short list of 3-5 use cases for deployment of AI in the residential retrofitting process, pricing (e.g., home insurance) and as a tool for reducing mis-information within the residential buying process.
- Develop a short list of 3-5 methods for sharing business intelligence and best practice between law firms at a regional level.
- Innovation Challenge(s): following the previous activity(s), create an open innovation challenge(s) seeking solutions to the opportunities identified.
- Kick-off Research Project(s): exploratory
  planning including discussing, framing and
  proposing research project(s) scope and
  outline, see long term action(s).

#### Workshop(s) & Collaborative Whitepaper(s):

- Develop concepts and frameworks for personalisation specifically addressing though the concepts of ethics, vulnerability and consumer duty.
- Develop concepts and frameworks for alternatives to EPC ratings e.g., IoT based scoring.
- Develop concepts and frameworks for how usage and maintenance data can be utilised in rent, mortgage and insurance rates.
- Develop a central body charged with sharing and fostering best practice among legal services and technology providers.
- Working Group & Event(s): review progress on driving activities noted during the shortterm, see left.

#### Publish Research Project(s):

- Develop a regulatory and data ethics blueprint for the delivery of personalised financial services products and services.
- Develop a framework for a centralised regional data sharing model to encourage innovation and reduce sector wide duplication.
- Develop a framework for a centralised regional data sharing model to encourage innovation, best practice sharing and change readiness.
- Innovation Challenge & Working Group: deployment of AI in more mature IoT datasets in real estate and insurance e.g., predictive maintenance and personalised premiums.
- Working Group & Event(s): review progress on driving activities noted during the mediumterm, see left.

#### OPEN DATA

**PRODUCTIVITY** 

# **RESEARCH & INNOVATION ROADMAP: Summary of actions**

THEME SHORT TERM: < 3 YEARS MEDIUM TERM: 3-5 YEARS LONG TERM: 5+ YEARS

- . Working Group: continually identify, share and review methods and formats for engaging with national initiatives, related to the theme of sustainability.
- Immersion Session(s):
  - Develop a short list of 3-5 use cases across different lending and wealth management categories e.g., asset classes.
  - Develop 3-5 use cases for automating ESG measurement through standardised and more widely available datasets.
  - Develop a framework of support to improve data management, governance and controls to build a regional platform for innovation.
- Innovation Challenge(s): following the previous activity(s), create an open innovation challenge(s) seeking solutions to the opportunities identified.
- Kick-off Research Project(s): exploratory
  planning including discussing, framing and
  proposing research project(s) scope and
  outline, see long term action(s).

- Workshop(s) & Collaborative Whitepaper(s):
  - Develop concepts and frameworks for new ESG products and services that address circular economy, green finance and social impact themes.
  - Develop a regional framework for residential retrofitting and how technology can make an impact.
  - Research, identify and develop a model for ongoing identification of sustainability issues within the property supply chain.
  - Develop concepts and frameworks for AI risk management, including measurement and tracking protocols and KPIs.
- Working Group & Event(s): review progress on driving activities noted during the shortterm, see left.

- Publish Research Project(s):
  - Develop a blueprint for ESG-relevant data generation and sharing at a more centralised regional level.
  - Develop a blueprint of a regional model for sustainability data gathering, centralisation and insight generation.
  - Develop a blueprint for a regional system that can support future problem solving in a collaborative way, focused on emerging and important governance issues.
- Working Group & Event(s): review progress on driving activities noted during the mediumterm, see left.
- Working Group: continually identify, share and review methods and formats for engaging with national initiatives, related to the theme of inclusion & wellness.
- Immersion Session(s):
  - Develop a short list of 3-5 opportunities to improve access to and support within financial services by adopting technology to customer facing activities. Identify present and expected challenges with implementation and management.
  - Develop a short list of 3-5 opportunities to drive 'fairer' credit decisioning behind property transactions which improves access to services and support offered, through initiatives like Open Finance.
  - Develop a short list of 3-5 opportunities to improve access to legal services and support provided for SMEs by adopting new technologies in simple disputes.
- Innovation Challenge(s): following the previous activity(s), create an open innovation challenge(s) seeking solutions to the opportunities identified.
- Kick-off Research Project(s): exploratory
  planning including discussing, framing and
  proposing research project(s) scope and
  outline, see long term action(s).

- Workshop(s) & Collaborative Whitepaper(s):
  - Develop concepts and frameworks for improving access to and support within financial services, especially for vulnerable customers and with consumer duty in mind by implemented new technologies in customer facing activities.
  - Develop concepts and frameworks to improve access to housing and support before, during and after the buying process by scaling shared ownership models.
  - Develop a blueprint of a digitally-led mediation service for small businesses in the West Midlands.
- Working Group & Event(s): review progress on driving activities noted during the shortterm, see left.

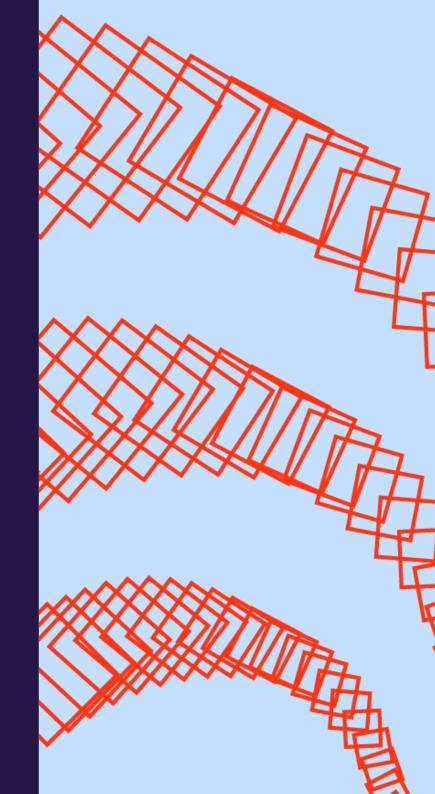
- Publish Research Project(s):
  - Develop a regulatory blueprint that seeks to enable digital innovation (e.g., AI), with the aim of improving access to and support within financial services whilst also adequately protecting consumers.
  - Develop concepts and frameworks to improve access to housing and support before, during and after the buying process by exploring alternative approaches to credit checking on mortgage applications.
  - Develop a regional framework for smart contracts for use by SMEs with embedded cancellation, refund and resolution functionality.
- Working Group & Event(s): review progress on driving activities noted during the mediumterm, see left.

# INCLUSION & WELLNESS

**SUSTAINABILITY** 

# PROFTECH RESEARCH & INNOVATION ROADMAP 2024-33

Core Themes, Insights & Actions





"Whether they are global employers or early start-ups, professional services companies have always flourished in the West Midlands. The region is at the heart of business and technology innovation in the UK and this roadmap introduces an exhilarating prospect for an area that is poised to transform the impact of Professional Services Technology on the advancing needs of consumers, communities and businesses."" –

Stephen Browning, Challenge Director

- Next Generation Services, Innovate UK



# INTRODUCTION

ProfTech, or professional services technology, is an umbrella term used to describe the application of technologies to deliver financial, professional and business products and services to consumers, communities, businesses and public bodies.

Businesses served by the ProfTech market are often Financial, Professional & Business Services businesses, such as financial services, real estate and property businesses, and law firms although ProfTech firms can be competitors to the traditional sector and incumbents. The West Midlands' Financial, Professional & Business Services sector is significant, the sector was worth at least £28.5bn with a total workforce of 182,000 in 2022, the sum of Finance, Property and Legal Services which account for £7.9bn, £17.8bn and £2.9bn,¹ respectively.

Whilst there are a few different methods for categorising the various segments of the ProfTech industry, this report focuses on the three most prominent in the West Midlands: FinTech, PropTech and LegalTech.

The four key themes were developed as a method of grouping and prioritising potential initiatives that were unearthed as part of our engagement with stakeholders across the West Midlands. These themes stood out across the vast majority of identified initiatives and connected initiatives together, when many of them seemed very different at face value.

Developing themes in which to group potential initiatives has helped anchor activity around 'golden threads', which aim to increase the potential for cross-sector engagement.

From its outset, cross-sector engagement was a critical success criterion for the roadmap. The perceived opportunity for and current challenge with collaborating across the various ProfTech sectors was noted almost universally among stakeholders engaged with as part of this process.

Finally, these themes have also helped focus initiative selection and prioritisation. In attempt to select the most impactful initiatives, each were scored based on a set of criteria – namely regional, national and international relevance. The full list of these initiatives and the scoring methodology used can be found in the 'Methodology' section of this report.



"It is crucial to drive closer collaboration between industry and academia to tackle research and innovation related challenges, therefore, I welcome the development and publication of this roadmap. There are several initiatives that help to provide support for these challenges (including UKFin+ Network), but we need industry to help identify, qualify and proactively ask for help with the problems and issues that would benefit from further support. This roadmap provides a great example." - Professor Karen Elliott, Chair of Practice in Finance and Fintech, University of Birmingham & Director of UKFin+ Network

"ProfTech as an approach is quite unique to the West Midlands, and this report further underlines how we will optimise action for our region. The opportunity is clear, technology is the enabler to break traditional siloes and now universities must lean in to help inject additional innovation firepower to pursue this with relentless collaboration." – Joanna Birch, Director, Innovation Enterprise and Employability, Birmingham City University

# "

# **PROFTECH:** Key sub-sectors

FinTech is the new application of technologies to deliver financial products and services to consumers, communities, businesses, and public bodies. FinTech is enabling impact and change in the finance sector and enabling better economic and social outcomes across consumers and businesses.

In the UK, FinTech is the largest and most prominent ProfTech segment, generating £11bn in revenue and driving 10% market share in global FinTech.<sup>2</sup> In the West Midlands, FinTech is a similarly prominent tech sector. In 2023, Whitecap estimated it generates over £470m in GVA, and is expecting ongoing growth (15% CAGR) to 2030.<sup>3</sup>

LegalTech is the new application of technologies to deliver legal products and services to consumers, communities, businesses, and public bodies. LegalTech is helping accelerate digital transformation and the adoption of innovation within legal services and enabling better economic and social outcomes for consumers and businesses.

LegalTech is a fast-emerging tech market in the UK, with an already significant global market. Like PropTech, LegalTech has not yet taken centre stage at a national level, however, critically, there is clear emergence of innovation in technology clusters across the UK including major regional cities such as Birmingham, Leeds, Bristol and Manchester.

PropTech is the new application of technologies to deliver property products and services to consumers, communities, businesses, and public bodies. PropTech is helping drive innovation in the property sector and enabling better economic and social outcomes for property owners, managers, and residents.

By GVA, measured in 2018, the largest segment of the BPFS sector was real estate and associated consultancy, making up 57% of all GVA in the WMCA. Similarly, in number of firms in 2020, the largest ProfTech segment in the West Midlands was Property, where 43% of all ProfTech businesses had a specific focus on Property.<sup>4</sup> More recently, PropTech has seen impressive growth, with a 542% increase in the number of startups / scaleups in three years and 291% increase in employees over the same period.<sup>5</sup>

Source: HM Treasury. 2021. The Kalifa Review of UK FinTech.
 Source: Whitecap Consulting. 2023. FinTech Skills Framework.
 Source: SuperTech. 2020. Understanding the ProfTech Business Base in the West Midlands.
 Source: SuperTech. 2023. Impact Report

## **PRODUCTIVITY**

The productivity theme is focused on leveraging technology and automation to accelerate business operations, reduce low value high volume tasks and enrich organisations' capacity to extract valuable insights from vast volumes of data, facilitating more informed decision—making — all within the context of the burden of compliance with regulation.

Productivity has been a prevalent issue in the UK for many years, with staled productivity growth in at least the past 10 years. Furthermore, there is evident deviation in productivity across the regions of the UK, where the West Midlands (among many other English regions) exhibits lower output per hour than the UK average.<sup>1</sup>

The West Midlands is home to an established and diverse Financial, Professional & Business Services market, including international, national and regional financial services, property and legal services businesses. Barriers to adopting new technologies include legacy technology and culture, and were commonly noted across Financial, Professional & Business Services, making driving productivity improvements through technology more difficult. Thus, focusing on supporting and enabling this at a regional level stands to drive material positive impact for businesses in the region.

Through the course of engaging with key ProfTech and academic stakeholders in the West Midlands, a number of supporting themes were unearthed that helped substantiate and shape the focus on productivity, including:

- Automation
- Customer Journeys
- Digital Transformation
- Legacy Technology
- Data & Analytics
- Artificial Intelligence

The following pages detail potential productivity initiatives and critical areas of need for future research and innovation.

Onboarding and decisioning in specialist lending

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Client and case insights for law firms

Data gathering and sharing during property transactions and ownership



"One of the drivers of additional costs in the lending process that could use attention is that manual tasks are being undertaken by a growing number of employees, which is also being exacerbated by additional requirements coming in from heightened regulation."

- Neil Dyke, Chief Technology Officer & Chief Operating Officer, Phoebus Software

"There is a challenge in automating currently manual processes e.g., CIFAS and NOC referrals. A potential long-term aspiration could be for all decisions to be automated, with decisions based on a broader set of data; meaning we make the right decision every time. Explainable AI models may be a route to achieving this." – Financial services stakeholder

"

## PRODUCTIVITY:

## Onboarding and decisioning in specialist lending

Specialist lending includes a variety of lending categories. For example, types of specialist lenders engaged during the production of the roadmap included mortgage lenders, development finance and automotive finance providers. In a broad sense, specialist lending differs from traditional or 'vanilla' lending because the target customers' needs are typically more complex.

## Legacy technology and complex processes make digital transformation (incl. automation and integrations) challenging.

Whilst these will not include all areas of friction for all specialist lenders, key pain points highlighted during our engagement included the onboarding of new customers and underwriting or decisioning process. Legacy technology, difficulties with digital transformation and the growing need to provide fast and digitally enhanced customer journeys were all key challenges felt by specialist lenders in the region.

Customers today demand simplicity, speed and digitally enabled journeys. Fraud and financial crime prevention processes, such as KYC and AML, and the growing focus on consumer duty make this difficult.

In part driving the challenges noted previously, customer journeys are becoming more simple, fast and digitally enabled. Many customers have come to expect this experience from all providers, which is the case for lending and for financial services more broadly.

A key pain point noted among stakeholders we engaged with included fraud and financial crime prevention processes, such as KYC and AML, which were frequently referenced as a source of inefficiency, from an organisations perspective and at an industry level. The industry perspective was of particular interest, as many suggest that the same questions are asked of an individual customer multiple times across their interactions with financial services.

As customer journeys continue to become more digital, it was noted that a financial services organisation's one-to-one engagement with customers is becoming increasingly narrow and infrequent. Therefore, stakeholders we engaged suggested that the burden of remaining compliant (e.g., with rules preventing fraud and financial crime) as well as delivering on consumer duty is a prominent barrier to rapidly simplifying and accelerating customer journeys in financial services, lending in particular.



"We as a sector have an opportunity to free up staff to add more value to our customers by continuing our automation journey as a way of reducing low-value, high-volume manual work. The ability to automate has been "turbo-charged" with the advent of AI, though there are risks that need careful consideration. The key challenge is how we can make best use of AI to create value for our customers whilst remaining transparent and explainable in the decisions that we make." - Chris Higham, Head of Payments & Cards, Secure Trust Bank



# **PRODUCTIVITY:**

## Onboarding and decisioning in specialist lending

# Exploring tools (such as AI, data analytics and blockchain) to drive productivity.

Whilst many of the challenges described previously (such as legacy technology and digital transformation) are by no means novel, there is a sense that they are being exacerbated by growing awareness and concern about emerging technologies. Common technologies noted were artificial intelligence and blockchain, but also included analytics more broadly.

Going beyond best practice sharing and ideation, which are of course are still valuable exercises, there is an opportunity to collaborate to a greater degree at a regional level to solve these concerns. For example, exploring models and the impact of emerging technologies and developing a more coordinated industry process for consuming innovation going forward were noted as interesting and collaborative problems that could be explored.

# Example products and services that could be looked at in more detail as part of this initiative:

- Embedded lending: integration of lending capability fed directly into e-commerce platforms, enabling customers to access credit at the point-of-sale through a seamless onboarding and decisioning process.
- Personalisation: using advanced analytics and customer data, perhaps through open banking to provide personalised engagement and product suggestions tailored to the specific customer's needs and risk profile.



"Buyer and seller protection and security are key themes and relate to product delivery and regulation. Greater availability and visibility of customer journey data throughout property transactions can help drive these themes. More specifically, more information drives greater product differentiation and helps support the reduction of repeated processes at a sector level, driving efficiency." – Regan Young, Advanced

"There is an opportunity for greater data sharing between property and financial services. For example, building maintenance data (e.g., sensors, cameras etc.), past maintenance data such as when and how often did the building had plumbing issues, can be fed into InsurTech products. There should be a longer-term focus on how to best capture, share and analyse this data at a sector level going forward." - Deep Godara, CEO & Co-founder, Hi.ERD



# PRODUCTIVITY:

# Data gathering and sharing during property transactions and ownership

Buying and selling property in the UK is a heavily intermediated process and is home to plenty of duplicated processes and examples of manual 're-keying'. It is a simple jump from these themes to inefficiency and additional cost, certainly at an industry level; but there is also an adverse impact on both the buyer and seller of the property.

Buyer and seller protection and security, through greater transparency and education, can improve the rate of completion on property transactions.

One theme noted during the course of our engagement was the quantum of value lost by aborted property transactions, including times where information was revealed during the process that meant the transaction was no longer viable – which could have been shared earlier.

In addition, the buying and selling process requires a good amount of education – particularly for first time buyers – for which some stakeholders suggested were not being offered to a satisfactory level. Additionally, it was also noted that misinformation was a relatively common barrier to the education of first time buyers.

In summary, transparency and education were key supporting themes that emerged when focusing on property transactions that present an opportunity for future research and innovation.

Driving more targeted pricing strategies for adjacent products and services (e.g., financial services), as well as predictive maintenance, through developing tools such as IoT and Smart Buildings.

Acting as a potential feedstock for which AI might be deployed onto, IoT and smart buildings provide a potentially rich and near 'real-time' data set which can inform the development of new products and services.

Examples of solutions included real-time and predictive building maintenance, and the potential for pricing these variables into financial services markets – such as insurance or certain types of lending.

# Example products and services that could be looked at in more detail as part of this initiative:

 Al-powered valuation tools: Al-powered solutions to analyse a wide variety of datapoints, including local market trends, property characteristics, and environmental factors, to provide accurate and personalised property valuations for buyers, sellers, and lenders.



"Automation is of interest and automating high volume processes present the greatest opportunity and highest cost to benefit ratio. A theme to explore is promoting 'self-service' internally, perhaps supported by the use of low code and no code solutions. Whilst it may be more difficult to accomplish, the greatest benefit to this approach might be seen in processes that are managed by multiple stakeholders." - Nigel Lang, Chief Information Officer, Fieldfisher

"The management of data is critically important, particularly in terms of getting more out of the data the sector has access to. Generative AI is a key theme to consider going forward, but there is a clear requirement to have a business' data well-managed and organised for it to be successfully deployed." – Legal sector stakeholder

"

## PRODUCTIVITY:

## Client and case insights for law firms

Law firms frequently noted the opportunity to develop greater insights from the data which they have access to. However, much of this data is client related and thus subject to a much tighter set of data protection rules.

# Stronger data management, paving the way for data analytics and visualisation.

There was wide acceptance that one of the barriers to adoption of innovation, was that an organisations' data is not always in the correct place and form. Thus, a key focus of discussion among law firms centred around the need to develop stronger data management processes, ensuring that the right data is in the right place at the right time.

Much of the innovation that was discussed centred on the potential that embedding data analytics and visualisation tools could bring to an organisation, and that this lays a stable foundation for deploying analysis tools and more emergent innovation, such as Al.

# Promoting self-service in automating manual processes, using no-code and low-code.

Law firms also referenced the potential value of enabling more 'self-service' for employees to solve challenges locally, rather than being dependent upon senior management or the IT department. The ability to drive change locally could support a more agile and proactive approach to process automation – assuming that it is governed in an appropriate manner.

Processes that are high in volume and have limited variability were considered prime candidates for this type of innovation. Processes that involve multiple stakeholders may serve to free up a greater amount of employee time than those conducted by a single employee, however, there was wide agreement that these may be more difficult to automate. Automation tools like those based on low and no code software were noted as potential innovations to consider, where simplicity and ease of use will be key to implementing and managing these tools.

# Example products and services that could be looked at in more detail as part of this initiative:

- Data aggregation platforms for law firms:
   solutions to organise and aggregate law firms'
   data to offer a single client view and manage
   unstructured datasets. Such solutions can help
   in business development, case management,
   and relationship intelligence, addressing
   challenges like siloed data and identifying
   growth opportunities.
- Case management solutions: solutions
   offering automated workflows, compliance
   checks, and centralised matter records for
   efficient management of communications
   and case-related information, which are flexible
   and customisable and meet the diverse needs
   of different legal practices.

# **PRODUCTIVITY:** Key activities

SHORT TERM: < 3 YEARS

**MEDIUM TERM: 3-5 YEARS** 

LONG TERM: 5+ YEARS

**KEY CONTRIBUTORS** 

• Working Group: continually identify, share and review methods and formats for engaging with national initiatives, related to the theme of productivity.

Onboarding & decisioning in specialist lending

- Immersion Session(s): develop a short list of 3-5 of opportunities for onboarding or decisioning improvements per specialist lending class e.g., buy-to-let, self-employed, development finance etc.
- Innovation Challenge: following the previous activity, create an open innovation challenge seeking solutions to the opportunities identified per specialist lending class.
- Kick-off Research Project: exploratory planning including discussing, framing and proposing research project scope and outline, see long term action.

- Workshop(s) & Collaborative
   Whitepaper: develop concepts and
  frameworks for regional support for
  organisations with legacy adoption
  and digital transformation.
- Workshop(s) & Collaborative
   Whitepaper: develop concepts and
   frameworks and potential drivers for
   how organisations can foster greater
   trust in and openness to data
   sharing among consumers.
- Working Group & Event(s): review progress on driving activities noted during the short-term, see left.

- Publish Research Project: develop a business case for alternative decisioning methodologies (e.g., behavioural) to improve decisioning efficiency and effectiveness.
- Working Group & Event(s): review progress on driving activities noted during the medium-term, see left.

Aston University (incl. Digital Futures Institute), Birmingham City University (incl. Centre for Enterprise, Innovation & Growth), BNP Paribas, Coventry Building Society, CrediCar, Dudley Building Society, Finecta, FinTech National Network, Paragon Bank, Phoebus Software, Secure Trust Bank, Tech West Mids (TechWM), UKFin+ Network, University of Birmingham (incl. Centre for Cyber Security and Privacy & Sustainable Financial Innovation Centre [SFIC]), University of Warwick (incl. Gillmore Centre for Financial Technology)

Data gathering and sharing during property transactions

- Workshop(s) & Working Group: create a system for regional introductions, connections and integrations between PropTech and FinTech.
- Kick-off Research Project: exploratory planning including discussing, framing and proposing research project scope and outline, see long term action.
- Workshop(s) & Collaborative
  Whitepaper: develop a detailed
  view of the impact greater
  availability and transparency of
  customer journey data on property
  buying, from a customer and
  product perspective.
- Working Group & Event(s): review progress on driving activities noted during the short-term, see left.
- Publish Research Project: design a regional model for fostering joint proposition development across Financial Services, FinTech, Property and PropTech.
- Working Group & Event(s): review progress on driving activities noted during the medium-term, see left.

Advanced, Aston University (incl. Digital Futures Institute), Birmingham City University (incl. Centre for Enterprise, Innovation & Growth), Coventry Building Society, Coventry University, Dudley Building Society, FinTech National Network, Furbnow, Paragon Bank, Tech West Mids (TechWM), UKFin+ Network, University of Birmingham (incl. Centre for Cyber Security and Privacy & Sustainable Financial Innovation Centre [SFiC]), University of Warwick (incl. Gillmore Centre for Financial Technology)

Client and case insights for law firms

- Immersion Session(s): develop a short list of 3-5 use cases for data management, analytics and visualisation in law firms.
- Innovation Challenge: following the previous activity, create an open innovation challenge seeking solutions to the opportunities identified.
- Kick-off Research Project: exploratory planning including discussing, framing and proposing research project scope and outline, see long term action.
- Workshop(s) & Collaborative
   Whitepaper: develop concepts
   and frameworks for the deployment
   of no- and low-code software
   development tools in law firms.
- Working Group & Event(s): review progress on driving activities noted during the short-term, see left.
- Publish Research Project: develop a blueprint of a regional model for fostering change readiness and innovation culture within law firms.
- Working Group & Event(s): review progress on driving activities noted during the medium-term, see left.

Aston University (incl. Digital Futures Institute), Birmingham City University (incl. Centre for Enterprise, Innovation & Growth), Field Fisher, Gowling WLG, LawTechUK, LawTech National Network, Tech West Mids (TechWM), University of Birmingham (incl. Centre for Cyber Security and Privacy), University of Warwick

## OPEN DATA

The open data theme embodies the principles and intended benefits of the existing Open Banking style of innovation, driving greater data sharing and opportunities for efficiency and bringing new products and services to market. This theme focuses on amplifying the voice of the West Midlands within national initiatives such as the Smart Data Roadmap, as well as fostering greater connectivity to enhance the breadth and quality and overall attractiveness of new solutions.<sup>1</sup>

During our engagement it was regularly noted that access to the relevant data was a key barrier to research and innovation activity across all Financial, Professional & Business Services and ProfTech sectors engaged with. There is already plenty of positive activity happening at a national level with this focus; in addition to the Smart Data Roadmap, Innovate UK have run two 'access to data' competitions delivered by Next Generation Services Fund in the last 4–5 years.

Focusing on the facilitation of this process at a regional level and widening the scope with which organisations in the West Midlands can engage with national initiatives is expected to drive material positive impact for the region.

The West Midlands has developed a strong foundation for collaboration already, with incubators, accelerators, and industry associations that facilitate collaboration between technology providers, property developers, and other stakeholders, enabling the co-creation of various data-driven solutions.

This theme does not intend to replace the regional infrastructure already in place but is focused on better connecting this with established and emerging activity across the UK and to bring to light any regional data related idiosyncrasies present across organisations in the West Midlands. The impact of this activity should, in part, focus on enabling product development and delivery models referenced by stakeholders consulted, such as greater personalisation, joint propositions and platform strategies. Security, trust and using data 'appropriately' should remain key principles when delivering on this theme. Both are frequently highlighted as risks to greater openness and wider access to data.

Through the course of engaging key ProfTech and academic stakeholders in the West Midlands, a number of supporting themes were unearthed that helped substantiate and shape the focus open data, including: Al in shared housing, financial and sustainability data

ORTNOATA

Personalisation through data sharing in legal services

Data sharing,
personalisation and
product development
in lending and wealth
management

- Access to Data
- Data Analytics & Insights
- Personalisation
- Platform Strategy
- One-stop-shop
- Cyber Security
- Artificial Intelligence

The following pages detail potential open data initiatives and critical areas of need for future research and innovation.



"For a small or mid-size firm in the financial services market, success is often a question of access to data and there is room for more open source and secure data ingestion across financial services. The market could use a central / regional government infrastructure to access these datasets in a safe and appropriate way." - Zish Khan, Chief Operating Officer, Paragon Banking Group PLC

"The key to driving greater automation and reduce sector-wide duplication will be to get all parties bought into a single source of truth. Open finance will only go so far, the industry is likely to need something centralised that connects everything together." - Neil Dyke, Chief Technology Officer & Chief Operating Officer, Phoebus Software



## **OPEN DATA:**

# Data sharing, personalisation and product development in lending and wealth management

Access to data was a recurrent issue amongst stakeholders engaged, as was the observation that greater automation and more centralised data access could be potential solutions going forward. These challenges are widely felt across the UK and action has and is being taken at a national level.

However, there is room for organisations in the West Midlands to connect and support with these initiatives and to lead where there is whitespace in data access and in the development of products and services, joint propositions and platform strategies, which were all noted as key opportunities by stakeholders engaged.

## Driving greater data sharing, with a focus on creating 'single sources of truth'.

Fostering more open data sharing is not a novel concept, certainly for financial services given the progress made through open banking. Much of the framework for this type of innovation has integration and, in particular, APIs at its heart, as well as developing 'single sources of truth'. This concept was mentioned at length and frequently in our engagement with stakeholders across the region. Creating these data sets, and making them more open, can deliver confidence and a reduction in repeated processes at a sector level – if managed and secured appropriately.

# Driving greater personalisation (of products, services and engagement), supported by behavioural and predictive analytics and Al.

In addition to increased confidence and reducing duplication, more open data can yield opportunities for greater personalisation – if done in a secure way. A common focus across financial services, but particularly in lending and wealth management, personalisation of products and services and customer engagement presents an opportunity for stronger customer relationships through a deeper understanding of and agility in serving each customer needs.

Particularly interesting models noted for achieving this style of innovation, assuming the appropriate data is available, included behavioural and predictive analytics and how artificial intelligence could be used to support the delivery of personalised products and services.



"An area of real interest is the SME lending process that could benefit from greater automation, in particular there are lots of diverse actors across different sectors to co-ordinate to get things done. Connecting these stakeholders together to keep them informed through the process e.g., open banking APIs, would be beneficial. Advances here would drive far better outcomes for customers and help support SME growth and investment going forward. And that can only be good for the UK as a whole." – Simon Healy, Chief Operating Officer, Ashman Finance

"One possible and attractive aim for the future is developing tailored mass personalisation of products and services and customer engagement, with the aim of driving better consumer outcomes that remove complexity and risk from financial choices at an individual level. Perhaps Al can provide a way to achieve this, how can we explore this further?" – Geoff Turral, Co-founder, Car Cloud

## **OPEN DATA:**

# Data sharing, personalisation and product development in lending and wealth management

Cyber security and regulation must lead; though once these concerns are managed, there is room to be more personalised and focused on supporting consumers in need.

Critically, a greater degree of openness around customer data and especially data by which you might expect to learn more about an individual should be met with a firm degree of caution from a security and regulatory perspective. These considerations should lead firmly ahead of the drive for greater personalisation, and can provide confidence for data users and providers if managed to a high standard.

If the appropriate safeguards are put in place, this theme might improve access to financial services by exposing blind spots in product catalogues and by improving engagement with the consumer e.g., identifying a consumer who may need further information or education before they abandon the purchase journey.

Example products and services that could be looked at in more detail as part of this initiative:

Personalised products of various forms:
 the combination of data-driven insights and
 'hyper-personalisation' enables tailored lending,
 investment, and wealth management offerings.
 Using integration of open banking data, alternative
 data sources, and predictive models, financial
 institutions can develop a comprehensive
 understanding of individual customer's and
 introduce personalised product features,
 pricing, and recommendations based on each
 customer's preferences.





"To get the full potential from AI and ML, it should be deployed onto a significant volume of data. Some of these types of data sets exist, but many are siloed within large organisations or behind significant pay walls. Developing a framework for opening these data sets to other players in the market would help drive innovation, certainly in new product and service development." – Becky Lane, Co-founder & CEO, Furbnow



## **OPEN DATA:**

## Al in shared housing, financial and sustainability data

Access to data was a commonly referenced challenge among PropTech businesses. In addition, the potential to deploy AI onto these data sets emerged as strong theme, as was the Internet of Things (IoT) and the creation of new real-time data sets. Adoption of these approaches are still in their nascency and present an opportunity to develop and clarify through collaborative research and innovation activity.

# Driving greater collaboration and data sharing, laying the foundation for deploying more emergent innovation, such as Al.

PropTech businesses noted greater access to data as an opportunity to introduce new and innovative products to market. Whilst this was true for data sharing between PropTech and Property business, it emerged as a particularly strong theme between PropTech and financial services. A key barrier noted included lack of commercial and technical frameworks for how PropTech business can plug into financial services to offer adjacent services.

Whilst not unique to PropTech or Property, the theme of how artificial intelligence and machine learning could be deployed on a broader set of data was of particular interest in supporting the development of new products and services, not just for PropTech's but also for financial services businesses that adopt them.

Fostering a more connected ecosystem presents an opportunity to improve the attractiveness of new innovation, through the development of regional and potentially cross-regional one-stop-shop and platform strategies.

Supporting the creation of joint propositions and fostering the required connectivity across and beyond the regional ecosystem to develop platform strategies, was noted as a significant opportunity. Stakeholders engaged suggested that Financial, Professional & Business Services organisations, particularly related to Property, are becoming increasingly numb to modern, innovative but ultimately narrow products and services.

Greater data sharing, the deployment of new tools and stronger engagement across our ecosystem can help to broaden these through joint propositions and platforms. These broader solutions stand to improve the attractiveness of and openness to emerging innovation, particularly to large Financial, Professional & Business Services organisations.



"A potential future state is a body that manages big data sources, creating a credible source of truth. The process of gathering, organising and analysing this data could be automated or sped up by deploying AI onto it. AI also presents an opportunity to reduce fraud and misinformation among consumers, if it were trained on a reliable set of data."

- Regan Young, Advanced



## **OPEN DATA:**

## Al in shared housing, financial and sustainability data

Example products and services that could be looked at in more detail as part of this initiative:

- Al enabled IoT solutions: deployment of Alenabled IoT sensors to monitor operations and faults in energy, water, and waste management in, for example, smart living spaces. Such solutions could help shared housing operators automate manual tasks and enhance sustainability.
- Automated tenant screening platforms: Alpowered PropTech solution streamlining tenant screening, rent collection, and maintenance scheduling for shared housing providers, leveraging advanced algorithms for efficient operations and enhanced tenant management.



"Exploring and promoting change readiness is a massive opportunity for law firms. There is always a risk that lots of work is completed at a sector level which goes underutilised internally, because of restrictive innovation culture of buying organisations. A potential future state is that law firms have further embedded the ideal practices and processes for consuming innovation, particularly among new hires." – Legal sector stakeholder

"Legal professionals recognise the significant opportunity for organisations to implement AI technologies. As organisations gear up for widespread adoption, providing clarity and guidance on the do's and don'ts will be crucial. Exploring the role a regional or national body could play in facilitating engagement with professional regulators such as the Solicitors Regulation Authority, and encouraging the exchange of best practices among industry and academia, will be instrumental in accelerating the adoption of AI in legal practice." – Vipul Ladwa, Co-Founder & CEO, 108 AI

# "

## **OPEN DATA:**

## Personalisation through data sharing in legal services

There was a recurring desire to improve data management and to generate insights that offer better client outcomes in law firms engaged. Critically, this lays a strong foundation for more personalised legal services in the future.

# Tackling legacy processes and innovation culture and fostering greater knowledge management and best practice sharing.

As well as the focus on methods for consuming innovation among law firms, some of our discussions noted a potential to drive greater readiness for and openness towards innovation. Legacy processes and restrictive approaches to new technology were noted as existing barriers to adoption, which is not in any way atypical across established Financial, Professional & Business Services organisations.

Another key focus of improved data management and insight generation was knowledge management – better learning, sharing and applying learning from the experiences of the organisation as a whole. Some law firms posed the question of 'how can we more proactively review after projects?' or 'how can we improve the service delivered to clients, by learning more about them?'.

## Greater availability of data, insights and learnings pave the way for greater personalisation of products, services and client engagement.

Offering a more tailored service to clients is heavily dependent upon a provider's ability to understand a client's needs, quickly, as well as being agile in delivery and engagement.

However, whilst having a deeper understanding of a firm's clients is interesting; its value is only materialised once the business begins to pivot its activities. Developing and making clear the options available to achieve this presents an opportunity for targeted and collaborative research and innovation as part of the roadmap.

# Example products and services that could be looked at in more detail as part of this initiative:

- Client profiling tools: solutions that can aggregate and analyse client preferences, behaviour, and preferences across multiple touchpoints, helping law firms tailor their services and communications to client needs and expectations.
- Collaborative case management platforms: solutions that enable secure data sharing and collaboration between law firms, clients, and other relevant stakeholders – promoting transparency, efficiency, and personalised service delivery.

# **OPEN DATA:** Key activities

SHORT TERM: < 3 YEARS

**MEDIUM TERM: 3-5 YEARS** 

**LONG TERM: 5+ YEARS** 

**KEY CONTRIBUTORS** 

· Working Group: continually identify, share and review methods and formats for engaging with national initiatives, related to the theme of open data.

Data sharing, personalisation and product development in lending and wealth management

- Immersion Session(s): develop a short list of 3-5 use cases for personalisation for lending and wealth management.
- Innovation Challenge: following the previous activity, create an open innovation challenge seeking solutions to the opportunities identified.
- Kick-off Research Project(s):
   exploratory planning including
   discussing, framing and proposing
   research project(s) scope and outline,
   see long term action(s).
- Workshop(s) & Collaborative
   Whitepaper: develop concepts
   and frameworks for personalisation
   specifically addressing though the
   concepts of ethics, vulnerability and
   consumer duty.
- Working Group & Event(s): review progress on driving activities noted during the short-term, see left.
- Publish Research Project: develop a regulatory and data ethics blueprint for the delivery of personalised financial services products and services.
- Publish Research Project: develop a framework for a centralised regional data sharing model to encourage innovation and reduce sector wide duplication.
- Working Group & Event(s): review progress on driving activities noted during the medium-term, see left.

Ashman Finance, Aston University (incl. Digital Futures Institute), Birmingham City University (incl. Centre for Enterprise, Innovation & Growth), BNP Paribas Personal Finance, CarCloud, Cardtrend, Coventry Building Society, Dudley Building Society, Jaguar Land Rover Financial Services, Paragon Bank, Phoebus Software, Saratoga Software, Secure Trust Bank, Tech West Mids (TechWM), UKFin-Network, University of Birmingham (incl. Centre for Cyber Security and Privacy & Sustainable Financial Innovation Centre [SFiC]), University of Warwick (incl. Gillmore Centre for Financial Technology), Wealth Wizards

Al in shared housing, financial and sustainability data

- Immersion Session(s): develop a short list of 3-5 use cases for deployment of Al in the residential retro-fitting process, pricing (e.g., home insurance) and as a tool for reducing mis-information within the residential buying.
- Innovation Challenge: following the previous activity, create an open innovation challenge seeking solutions to the opportunities identified.
- Workshop(s) & Collaborative
   Whitepaper: develop concepts and
   frameworks for alternatives to EPC
   ratings e.g., IoT based scoring.
- Workshop(s) & Collaborative
   Whitepaper: develop concepts
   and frameworks for how usage and
   maintenance data can be utilised in
   rent, mortgage and insurance rates.
- Working Group & Event(s): review progress on driving activities noted during the short-term, see left.
- Innovation Challenge & Working Group: deployment of AI in more mature IoT datasets in real estate and insurance e.g., predictive maintenance and personalised premiums.
- Working Group & Event(s): review progress on driving activities noted during the medium-term, see left.

Ashman Finance, Aston University (incl. Digital Futures Institute), Birmingham City University (incl. Centre for Enterprise, Innovation & Growth), FinTech National Network, Nimbus, Res:harmonics, Tech West Mids (TechWM), UKFin+ Network, University of Birmingham (incl. Centre for Cyber Security and Privacy & Sustainable Financial Innovation Centre [SFiC]), University of Warwick (incl. Gillmore Centre for Financial Technology), Workbelt

Personalisation through data sharing in legal services

- Immersion Session(s): develop a short list of 3-5 methods for sharing business intelligence and best practice between law firms at a regional level.
- Innovation Challenge: following the previous activity, create an open innovation challenge seeking solutions to the opportunities identified.
- Kick-off Research Project: exploratory planning including discussing, framing and proposing research project scope and outline, see long term action.
- Workshop(s) & Collaborative
   Whitepaper: develop a central body
   charged with sharing and fostering
   best practice among legal services
   and technology providers.
- Working Group & Event(s): review progress on driving activities noted during the short-term, see left.
- Publish Research Project: develop a framework for a centralised regional data sharing model to encourage innovation, best practice sharing and change readiness.
- Working Group & Event(s): review progress on driving activities noted during the medium-term, see left.

Aston University (incl. Digital Futures Institute), Birmingham City University (incl. Centre for Enterprise, Innovation & Growth), Field Fisher, Gowling WLG, LawTechUK, LawTech National Network, Tech West Mids (TechWM), University of Birmingham (incl. Centre for Cyber Security and Privacy), University of Warwick

# **SUSTAINABILITY**

The sustainability theme focuses on capturing key environmental, social and governance concerns across the region. Sustainability is a global theme and is on the priority list of almost every type of organisation across the world.

Often, stakeholders that we engaged talked about the opportunity of or the risks presented by adapting business activity to accommodate for fast emerging sustainability initiatives.

Financial, Professional & Business Services and ProfTech has an important role to play in this landscape and stakeholders across the region feel a call to action. Yet there is room for a more targeted and coordinated approach to solving specific challenges related to sustainability.

Key supporting themes noted during our engagement with stakeholders across the region included:

- Smart Data
- Carbon Off-set
- Circular Economy
- Retrofitting
- Energy Transition
- Artificial Intelligence

The following pages detail potential sustainability initiatives and critical areas of need for future research and innovation.

Improving sustainability through the property supply chain and lifecycle

SUSTAMABILITY

Governing Al

ESG data in lending & wealth management product development activities



"One of the potential future states for ESG could be that sales and marketing functions implement carbon offset incentives and loyalty programs. Within financial transactions, customers could be rewarded with loyalty points tied to carbon offset initiatives. For instance, each pound spent results in the company offsetting one pound of CO2 on behalf of the customer, contributing to environmental sustainability." – Vashti Shaveena Higgins, Director – UK, Europe & Africa, Cardtrend UK

"There is a growing interest in the circular economy, particularly in our market, for example by monitoring vehicles through the entire lifecycle – from sale to subsequent uses and ultimate disposal or recycle. "Circular" residual values at the point of sale is a potential future state for automotive finance. This will create challenges but also significant opportunities for OEMs to collaborate with the industry and ecosystem, especially on the availability and integration of data." – Rebecca Shao, Innovation & FinTech, Jaguar Land Rover Financial Services

## SUSTAINABILITY:

# ESG data in lending and wealth management product development activities

Amongst stakeholders we engaged, sustainability was often (though not exclusively) viewed through the frame of developing new products and services. In particular, key themes included the circular economy and carbon offset.

# Influencing product design and pricing strategies creating a circular economy, through product tracking and data sharing.

The circular economy was frequently noted as a potentially valuable focus area for research and innovation going forward. A key challenge in bringing this idea to life was that the data required to effectively track the lifecycle of a product is not yet available and, critically, depends on a combination of stakeholder groups across the ecosystem to collaborate, centralise and manage.

To develop a circular economy for, for example, a single product the full lifecycle of this product will need to be monitored and used to inform decision—making (e.g., pricing) at other stages of its lifecycle.

A possible future state might be an effectively designed and efficiently managed circular economy for two or three products, which can act as a case and best practice study for other products.

One common application of the circular economy theme was in product design and pricing strategy. For example, if adjusted residual values (e.g., informed by disposal rates, prevalence of unrecyclable materials etc.) are reflected at the point of sale. In this case, product categories with poor value can be priced differently or have a more proactive approach to revieing the sustainability of their design (e.g., materials used).



"Sustainability is critical for us and our mission statement. The market is adapting to macro trends such as the big energy transition, circular economy and financial inclusion. Circular economy is particularly interesting, looking at tracking and recycling, there is opportunity for the industry as a whole to look at building products around this." – James Edwards, Head of Proposition Development, BNP Paribas Personal Finance UK

"There is clear customer appetite for sustainable products and services, but this is not simple to deliver commercially. Focusing on monitoring and measuring changes that help deliver financial and sustainable benefits is a huge opportunity, however the focus must be on small changes – at least at the outset."

– James Paterson, Chief Executive
Officer, Dudley Building Society

# "

# SUSTAINABILITY:

# ESG data in lending and wealth management product development activities

Exploring sales and marketing opportunities presented by the energy transition and carbon footprints (e.g. carbon offset).

Carbon offset was noted as another potential theme to explore and relates strongly to the data and product ideas discussed as part of the circular economy theme. The interest in carbon offset was often in sales and marketing activity, supported also by product and service design. For example, loyalty programmes specifically focused on investing in reducing the economy's carbon footprint.

Example products and services that could be looked at in more detail as part of this initiative:

- Green mortgages: integrated lending solutions like green mortgages could incorporate ESG data to identify and offer preferential rates for properties with greater energy efficiency or lower carbon footprints, incentivising investment in sustainable homes by homebuyers.
- Sustainable investment funds: leveraging ESG data to construct investment portfolios that prioritise entities with strong environmental, social, and governance practices, catering to clients who seek to align their Investments with their ESG goals.
- ESG data-driven advice and related services: tailored financial advice and related services that can help clients assess the ESG characteristics of their existing investments and make informed decisions to better align their portfolios with environmental, social or governance values.



"Sustainability is a difficult problem to solve; it requires quite a big bet to pull off, which carries a lot of risk. There have, however, been lots of calls for action to date, though the big bets don't appear to have come in yet. A potential future state might be greater local enforcement of change, perhaps led by the local authorities and perhaps with more open consultation about where and how funding is being allocated, particularly in the residential market." – Becky Lane, Co-founder & CEO, Furbnow

"Lending decisioning is hampered by traditional datasets, particularly from a sustainability perspective. Being able to access datasets that measure key ESG factors could help improve the decision-making of SMEs on their properties and property services. A potential future state could be going beyond EPC ratings, for example using IoT on sensors of property usage." – Simon Healy, Chief Operating Officer, Ashman Finance



## SUSTAINABILITY:

# Improving sustainability through the property supply chain and lifecycle

The supply chain and lifecycle of property in the UK is a significant industry, with its fair share of challenges presented by adapting to the theme of sustainability. On this topic, stakeholders we engaged with highlighted ESG data, sustainable property lifecycle management, and emerging changes to preference of property ownership as key potential focus areas for innovation and research going forward.

## Driving greater visibility through a more coordinated approach to data sharing and laying a foundation for new tools.

Linking strongly to the open data theme, providing greater visibility and driving more sustainable outcomes in property is an ongoing challenging. A fragmented approach to developing new data, out of date existing data sets and inconsistent KPIs have hindered progress in this area which is one of the key focuses of this imitative. Once more standardised and centralised data sets are in place, there is scope to deploy tools, such as AI or IoT, in the future.

# Better managing the existing stock of property, with a focus on how best to tackle retrofitting in a more coordinated way.

Improving the sustainability of the existing housing stock in the UK was noted as a big challenge, one that requires a much more collaborative and bullish approach than is present today. One prominent example noted during our engagement was in better informing and conducting the retrofitting process of existing properties across the region, which could drive future innovation and research around how best to tackle this at a regional level.

# Example products and services that could be looked at in more detail as part of this initiative:

- Supply chain optimisation: Al powered solutions that provide a platform to help property developers and construction firms optimise their supply chains by analysing their material sourcing, logistics, and waste management to identify opportunities for reducing carbon emissions, waste, and resource consumption.
- Al-powered energy efficiency: systems leveraging Al to monitor and analyse energy usage across the property lifecycle, identifying energy-saving opportunities, optimising building performance, and enhancing overall energy efficiency.



"An ideal future state for AI and ML would be where sophisticated models are seamlessly and safely embedded in existing business processes with KPIs and measurable results, some parallel processing, or manual checks coexisting – with the business and regulators happy with the outcome." – FinTech stakeholder

99

# SUSTAINABILITY:

## **Governing Al**

How best to govern AI was a very frequently noted topic and was discussed with enthusiasm and concern in equal measure. The potential impact AI could make on an organisation of almost any type is significant; however, whilst there is growing appetite to explore it, there is a clear hawkishness about how well it can be operationalised and to what capacity can it be managed.

# Risk management challenges presented by Al adoption.

The most frequently noted risk of adopting Al was focused on a lack of trust in the outputs generated; for example, due to the tool being trained on poor data or through a limited ability to explain its workings. Both of these drivers present difficult challenges to overcome from a risk management perspective and are potential focus areas to drive greater innovation and research going forward.

The UK government has made a point to be comparatively bullish on AI than other countries might, particularly from a regulatory perspective. However, the current regulatory environment is still relatively ambiguous but is expected to crystalise to a degree in the near future.

# Developing a framework for collaborative governance discussions for future disruptive technology trends.

Governance is an evolving discipline, and one that has been put to the test multiple times over the past few years – from Brexit to the rising focus on sustainability to what to do about Al.

During the course of our consultation, it was noted that many organisations find it difficult to quickly and confidently adapt governance activity to meet disruptive trends – at least on their own. Were there a more structured regional framework for collaborative governance best practice, the speed and confidence with which disruptive trends are received by organisations may be increased.

# Potential considerations to explore further as part of this initiative:

- How to ensure accountability and human control over Al systems.
- How to **align Al governance** with broader public interest.
- How to integrate Al governance with data governance regulations and frameworks.
- How to effectively and confidently evaluate the risk to opportunity ratio of AI development and adoption.

# **SUSTAINABILITY:** Key activities

SHORT TERM: < 3 YEARS

**MEDIUM TERM: 3-5 YEARS** 

**LONG TERM: 5+ YEARS** 

**KEY CONTRIBUTORS** 

. Working Group: continually identify, share and review methods and formats for engaging with national initiatives, related to the theme of sustainability.

Data sharing, ESG data in lending and wealth management product development activities

- Immersion Session(s): develop a short list of 3-5 use cases across different lending and wealth management categories e.g., asset classes.
- Innovation Challenge: following the previous activity, create an open innovation challenge seeking solutions to the opportunities identified.
- Kick-off Research Project: exploratory planning including discussing, framing and proposing research project scope and outline, see long term action.
- Workshop(s) & Collaborative
   Whitepaper: develop concepts and
   frameworks for new ESG products
   and services that address circular
   economy, green finance and social
   impact themes.
- Working Group & Event(s): review progress on driving activities noted during the short-term, see left.
- Publish Research Project: develop a blueprint for ESG-relevant data generation and sharing at a more centralised regional level.
- Working Group & Event(s): review progress on driving activities noted during the medium-term, see left.

Ashman Finance, Birmingham City University (incl. Centre for Enterprise, Innovation & Growth), BNP Paribas Personal Finance, Cardtrend, Coventry Building Society, Dudley Building Society, FinTech National Network, Governance360, Jaguar Land Rover Financial Services, Paragon Bank, Phoebus Software, Secure Trust Bank, Tech West Mids (TechWM), UKFin+ Network, University of Birmingham (incl. Centre for Cyber Security and Privacy & Sustainable Financial Innovation Centre [SFiC]), University of Warwick (incl. Gillmore Centre for Financial Technology), Wealth Wizards

Improving sustainability through the property supply chain and lifecycle

- Immersion Session(s): develop 3-5 use cases for automating ESG measurement through standardised and more widely available datasets.
- Innovation Challenge: following the previous activity, create an open innovation challenge seeking solutions to the opportunities identified.
- Kick-off Research Project: exploratory planning including discussing, framing and proposing research project scope and outline, see long term action.
- Workshop(s) & Collaborative
   Whitepaper: develop a regional
   framework for residential retrofitting
   and how technology can make an
   impact.
- Workshop(s) & Collaborative
   Whitepaper: research, identify
   and develop a model for ongoing
   identification of sustainability issues
   within the property supply chain.
- Working Group & Event(s): review progress on driving activities noted during the short-term, see left.

- Publish Research Project: develop a blueprint of a regional model for sustainability data gathering, centralisation and insight
- Working Group & Event(s): review progress on driving activities noted during the medium-term, see left.

generation.

Aston University (incl. Digital Futures Institute), Birmingham City University (incl. Centre for the Built Environment & Centre for Enterprise, Innovation & Growth), Coventry University (incl. Centre for Financial and Corporate Integrity), Furbnow, Primacy Technology, Tech West Mids (TechWM), University of Birmingham, University of Warwick

Governing Al

- Immersion Session(s): develop a framework of support to improve data management, governance and controls to build a regional platform for innovation.
- Kick-off Research Project: exploratory planning including discussing, framing and proposing research project scope and outline, see long term action.
- Workshop(s) & Collaborative
   Whitepaper: develop concepts and
   frameworks for AI risk management,
   including measurement and tracking
   protocols and KPIs.
- Working Group & Event(s): review progress on driving activities noted during the short-term, see left.
- Publish Research Project: develop a blueprint for a regional system that can support future problem solving in a collaborative way, focused on emerging and important governance issues.
- Working Group & Event(s): review progress on driving activities noted during the medium-term, see left.

Aston University (incl. Digital Futures Institute), Birmingham City University (incl. Centre for Enterprise, Innovation & Growth), BNP Paribas Personal Finance, Cardtrend, Coventry Building Society, CrediCar, Dudley Building Society, Finecta, FinTech National Network, Governance360, Gowling WLG, LawTech National Network, Paragon Bank, Primacy Technology, Secure Trust Bank, UKFin+ Network, University of Birmingham (incl. Centre for Cyber Security and Privacy & Sustainable Financial Innovation Centre [SFIC]), University of Warwick

# **INCLUSION & WELLNESS**

The inclusion and wellness theme focuses on delivering positive outcomes for consumers and businesses across Financial, Professional & Business Services and ProfTech.

Whilst inclusion and wellness are closely related, they are quite different in focus. Inclusion is, at its core, focused on ensuring that all consumers and businesses who require Financial, Professional & Business Services and ProfTech products and services have a viable way to access them. Wellness, however, is focused to a greater degree on the wellbeing of the customer, which is far deeper than access to the market and resembles something akin to being and feeling supported.

The distinction between these two concepts and the desire to go beyond access to products and services was of critical importance of the stakeholders consulted.

Those in need for more inclusion and support include individuals, as well as organisations. The West Midlands is home to a diverse population, and, like many other regions of the UK, many find it difficult to access Financial, Professional & Business Services including a financial advice and legal services.

Businesses, particular SMEs which make up the majority of businesses in the region, also have difficulties with access to and support from Financial, Professional & Business Services.

Key supporting themes noted during the course of our engagement included:

- Vulnerability
- Advice Gap
- Transparency
- Societal Change
- Artificial Intelligence & Machine Learning

The following pages detail potential inclusion & wellness initiatives and critical areas of need for future research and innovation.

Access to support
within financial
services through
technology and Al
adoption in customer
facing activities

THE VESC

Access to legal services and SMEs

Credit checking processes and greater access to and support for housing



"A lack of financial inclusion means that segments of the regional, national and global population struggle to access financial services. Apart from the obvious impacts on the individual, this constrains total addressable market and revenues as well as potential for growth. Innovation is needed at the intersection of new technology, business models and regulation in order to allow new products that are low cost and easy to access to be brought to market. Certain barriers (i.e., regulation) can prevent businesses that are new market entrants from gaining traction. A potential future state that solves these problems might be an open ecosystem with multiple stakeholders (academia, technology, business, regulatory) collaborating to make this work."- Mark Gebhardt, Chief Executive Officer, Saratoga Software

"There is an opportunity to embed Al into front-line customer services; however, in my view the technology needs to evolve before it can be seen as a serious contender to traditional digital and telephone customer touch points. For any business that seeks to offer exceptional customer service, there is a great degree of caution around chatbot-like services — one bad experience could see things being derailed." – Chris Higham, Head of Payments & Cards, Secure Trust Bank

### **INCLUSION & WELLNESS:**

## Access to and support within financial services through technology and Al adoption in customer facing activities

The focus on customer facing activities emerged from two different perspectives. The first, which is the most relevant, is that the customer (existing or prospective; individual or business) is the central focus for this theme, and thus an organisation's engagement with them should be equally central. The second was that of all the business functions that stakeholders were most sensitive about deploying emergent innovation was in engagement with the customer. Thus, tackling both these perspectives through this initiative appeared to be a valuable goal.

Focusing on identification, transparency and protection – supported by the financial advice gap, vulnerability and financial literacy themes.

The perceived importance of tackling supporting themes such as the financial advice gap, vulnerability and financial literacy were of critical focus among stakeholders we engaged with. At its core, many of the drivers of change in these fields were focused on a mixture of identification, transparency and protection.

Driving more proactive identification of customers in need, through data and tools such as behavioural analytics and Al.

Identification of existing and prospective customers that require support or broadened access was a critical focus for stakeholders engaged, as it is one of the areas that is very difficult to action – particularly as a single organisation.

Whilst discussing these themes, the potential that greater customer data can drive to help unearth individuals or businesses that are in need was noted as a key opportunity. However, relating largely to our open data theme, access to this depth of data and particularly data from other segments of financial services is difficult.

However, once this data is more readily available, there is opportunity to deploy tools such as behavioural analytics and / or Al to drive more real-time and deeper insights into the degree of access or support a customer is in need of.



"Financial regulation is an important theme to focus on if we wish to solve the evident financial advice gap in the UK. Consumer Duty helps lay the foundation for action, but without possessing full advice permissions, there can be a perceived regulatory risk that prevents fully helping a consumer in need. A potential future state in the medium term may be wide scale adoption of digitally driven 'Targeted Support' services, delivering significantly improved outcomes to end users with their savings, pensions and investments, closing the advice gap and delivering on a significant element of providers' and businesses' Consumer Duty obligations."- Tony Vail, **Chief Strategy Officer, Wealth Wizards** 



### **INCLUSION & WELLNESS:**

## Access to and support within financial services through technology and Al adoption in customer facing activities

### Driving greater transparency in customer service and product design.

Transparency was noted as key, though there was appreciation that there been good progress made on this over the past few years. This supporting theme focuses on transparency of customer service as well and product design. Furthermore, driving greater data and tool adoption can help support transparency e.g., being transparent about exactly the right question or concern at the right time.

## Ensure consumer protection and further unlock the delivery of providers' ethical obligations to consumers e.g., consumer duty.

Protection is an interesting supporting theme and regulation was often the focus of these conversations. One consideration was that the rising focus on consumer and business data, along with adopting tools with which to interpret this data, generates a number of security and regulatory concerns. From a regulation perspective specifically, a critical focus area was in what way can the regulator create a balance between fostering new innovation and protecting consumers.

Another consideration was that existing regulation is pointing providers in one direction (e.g., through consumer duty) and then placing barriers around how an organisation might action on its consumer duty obligations.

## Example products and services that could be looked at in more detail as part of this initiative:

- Educational portals: enhancing financial literacy
  through interactive digital portals, to provide
  individuals and businesses with comprehensive
  educational resources. These could be further
  supporter by open banking data to enable
  personalised and tailored financial guidance,
  facilitating informed decision-making and access
  to appropriate financial services assuming
  the appropriate regulatory and consumer duty
  safeguards are in place.
- In app advanced insights and analytics: access
  to tailored financial insights and analytics based
  on customer financial behaviour and spending
  patterns, by utilising AI and machine learning
  technologies, enhancing subjective accessibility
  and alignment with clients' specific financial goals.



"Inclusion is a key area of focus and presents a real opportunity, overlapping strongly with sustainability, another important topic. One of the key questions at present is how you generate appropriate credit ratings, and we are glad to see positive movement in this space already. There is also financial health and well-being to address too, where consumer duty is highly relevant."—Zish Kahn, Chief Operating Officer, Paragon Banking Group PLC



### **INCLUSION & WELLNESS:**

## Credit checking processes and greater access to and support for housing

Credit checking, conducted as part of a loan application process, was noted as an area of interest for research and innovation. Principally, stakeholders noted the challenge involved in generating credit ratings that are appropriate and that offer the 'fairest' chance of receiving a loan. The ideal outcome of a 'fairer' credit checking approach is to include 'unfairly' excluded applicants, which benefits consumers, businesses and the market.

#### Improving credit ratings through greater data sharing, laying the way for more support during and after credit checking processes.

A sensible first step to developing 'fairer' credit ratings involves generating a more comprehensive view of the applicant. Greater data generation and sharing are key drivers in creating a deeper understanding about the credit risk of an individual or business. In addition to a 'fairer' credit checking process, there may be potential to develop greater support for applicants to do not pass the check. For example, this might include a more detailed appraisal about what caused the check to fail and follow-up services to help improve the likelihood of success on a subsequent application.

Deploying tools such as behavioural analytics and AI to support preventative intervention on credit checks.

In addition to a more data driven and 'fairer' credit rating process, there is scope to use this opportunity to deploy new tools to seek for patterns within applications that suggests the need for further support, either today or potentially in the future – e.g., using Al.

Another potential focus area noted was the potential to take a completely novel approach for credit checking e.g., using behavioural analytics as the primary checking mechanism.

## Example products and services that could be looked at in more detail as part of this initiative:

- 'Rental passport' products: utilising open banking and machine learning to assess financial profiles and creditworthiness of entities using rental payment data such that landlords and property managers can make more informed decisions and improve mortgage access for individuals with limited credit history.
- Flexible deposit payment solutions: allowing home buyers to pay deposits and move-in costs gradually by using open banking data, determining an individual's overall financial stance. Such solutions could promote more inclusive access to housing by reducing upfront financial burdens.



""There is opportunity for AI to help access to legal services, particularly among simple use cases where there is less 'fear' amongst the consumer – for example simple disputes. Significantly less opportunity in highly complex and emotional sensitive fields such as family matters." – Legal sector stakeholder

"

### **INCLUSION & WELLNESS:**

#### Access to and support with legal services and SMEs

SMEs have long been underserved in many segments of the Financial, Professional & Business Services market in the past, which includes legal services. Much of the present LegalTech innovation is focused on improving access to and support with legal services for SMEs. However, importantly, stakeholders engaged agreed that there is more work that can be done in this space.

### Driving inclusion for SMEs in legal services through greater data generation and sharing

Focused more specifically on the inclusion theme, there is scope for more simple processes or matters within legal services to be automated and informed by a centralised data source or aggregator. For example, simple credit disputes between businesses present a potential first step for this approach.

#### Driving wellness for SMEs in legal services by driving broader and deeper support through deploying technology innovation

In addition, and focused more specifically on the support theme, stakeholders suggested there may be room for emerging tools to help broaden and deepen support offered to clients. For example, deploying Al into support queries or for additional legal context for a reduced price could be an opportunity to explore.

## Example products and services that could be looked at in more detail as part of this initiative:

- Virtual legal assistants (Chat Bot): an Al-powered virtual legal assistant that can provide SMEs with on-demand and cost effective answers to simple legal and regulatory queries, document review etc.
- Regulatory compliance software: software solutions designed to help SMEs navigate and comply within markets with a dynamic regulatory environment.

## **INCLUSION & WELLNESS:** Key activities

**SHORT TERM: < 3 YEARS** 

**MEDIUM TERM: 3-5 YEARS** 

**LONG TERM: 5+ YEARS** 

**KEY CONTRIBUTORS** 

• Working Group: continually identify, share and review methods and formats for engaging with national initiatives, related to the theme of inclusion & wellness.

Access to and support within financial services through technology adoption in customer facing activities

- Immersion Session(s): develop a short list of 3-5 opportunities to improve access to and support within financial services by adopting technology to customer facing activities. Identify present and expected challenges with implementation and management.
- Innovation Challenge: following the previous activity, create an open innovation challenge seeking solutions to the opportunities identified.
- Kick-off Research Project: exploratory planning including discussing, framing and proposing research project scope and outline, see long term action.
- Workshop(s) & Collaborative Whitepaper: develop concepts and frameworks for improving access to and support within financial services, especially for vulnerable customers and with consumer duty in mind by implemented new technologies in customer facing activities.
- Working Group & Event(s): review progress on driving activities noted during the short-term, see left.
- Publish Research Project:
   develop a regulatory blueprint that seeks to enable digital innovation (e.g., AI), with the aim of improving access to and support within financial services whilst also adequately protecting consumers.
- Working Group & Event(s): review progress on driving activities noted during the medium-term, see left.

Aston University (incl. Digital Futures Institute), Birmingham City University (incl. Centre for Enterprise, Innovation & Growth), BNP Paribas Personal Finance, Cardtrend, Coventry Building Society, CrediCar, Dudley Building Society, Finecta, FinTech National Network, Paragon Bank, Secure Trust Bank, Tech West Mids (TechWM), UKFin+ Network, University of Birmingham (incl. Centre for Cyber Security and Privacy & Sustainable Financial Innovation Centre [SFiC]), University of Warwick (incl. Gillmore Centre for Financial Technology), Wealth Wizards

Credit checking processes and greater access to and support for housing

- Immersion Session(s): develop a short list of 3-5 opportunities to drive 'fairer' credit decisioning behind property transactions which improves access to services and support offered, through initiatives like Open Finance.
- Innovation Challenge: following the previous activity, create an open innovation challenge seeking solutions to the opportunities identified.
- Kick-off Research Project: exploratory planning including discussing, framing and proposing research project scope and outline, see long term action.
- Workshop(s) & Collaborative
   Whitepaper: develop concepts and
   frameworks to improve access to
   housing and support before, during
   and after the buying process by
   scaling shared ownership models.
- Working Group & Event(s): review progress on driving activities noted during the short-term, see left.
- Publish Research Project:
   develop concepts and frameworks
   to improve access to housing and
   support before, during and after
- the buying process by exploring alternative approaches to credit checking on mortgage applications.
- Working Group & Event(s): review progress on driving activities noted during the medium-term, see left.

Aston University (incl. Digital Futures Institute), Birmingham City University (incl. Centre for Enterprise, Innovation & Growth), Coventry Building Society, Coventry University (incl. Centre for Financial and Corporate Integrity), Dudley Building Society, FinTech National Network, Paragon Bank, Tech West Mids (TechWM), UKFin+ Network, University of Birmingham (incl. Centre for Cyber Security and Privacy & Sustainable Financial Innovation Centre [SFiC]), University of Warwick (incl. Gillmore Centre for Financial Technology)

Access to and support within legal services and SMEs

- Immersion Session(s): develop a short list of 3-5 opportunities to improve access to legal services and support provided for SMEs by adopting new technologies in simple disputes.
- Innovation Challenge: following the previous activity, create an open innovation challenge seeking solutions to the opportunities identified.
- Kick-off Research Project: exploratory planning including discussing, framing and proposing research project scope and outline, see long term action.
- Workshop(s) & Collaborative Whitepaper: develop a blueprint of a digitally-led mediation service for small businesses in the West Midlands.
- Working Group & Event(s): review progress on driving activities noted during the short-term, see left.
- Publish Research Project: develop a regional framework for smart contracts for use by SMEs with embedded cancellation, refund and resolution functionality.
- Working Group & Event(s): review progress on driving activities noted during the medium-term, see left.

Aston University (incl. Digital Futures Institute), Birmingham City University (incl. Centre for Enterprise, Innovation & Growth), Field Fisher, Gowling WLG, LawTech National Network, LawTechUK, Tech West Mids (TechWM), University of Birmingham (incl. Centre for Cyber Security and Privacy), University of Warwick

### **SUMMARY & NEXT STEPS**

This roadmap outlines impactful research and innovation activities that can help develop economic, environmental, and societal value for the West Midlands and UK ProfTech.

Successful implementation will require involvement from a range of stakeholders in the West Midlands ProfTech cluster and beyond, including national and international organisations, as well as universities from across the region.

The roadmap will be led and facilitated by SuperTech. However, wider stakeholder participation is required to implement and deliver the R&I actions set out in this Roadmap.

#### SuperTech will lead the arrangement of:

- Key dates for actions to be initiated and completed.
- Reviews of progression throughout the 10-year roadmap and alignment to the overarching purpose.
- Measurement against the objectives, with a scorecard of KPIs such as GVA, employment and number of organisations.
- Facilitating collaboration on innovation and research.

#### Research with Impact:

SuperTech will engage with the academic community in respect of the research topics proposed.

The initial steps for research topic actions presented in this roadmap include:

- Work with university leaders to generate research briefs that directly respond to the actions identified in the roadmap, as well as pursue funding opportunities in a collaborative and joined up way.
- Establish relevant steering groups demonstrating collaboration across industry and the research community.
- Monitor and review progression (including the KPI scorecard).

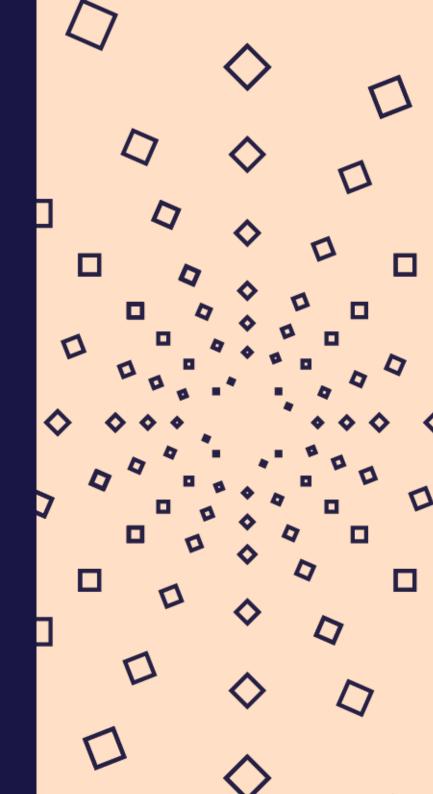
#### Value-drive Innovation:

A rollout plan will be developed to implement the proposed programme of immersion sessions, innovation calls and workshops. This will include developing a sponsorship proposition to maintain the commitment for an industry-led programme.

The initial steps for the roadmap immersion sessions, innovation calls and workshops include:

- SuperTech to start the implementation of the priority actions identified in the roadmap.
- Continue the work with industry stakeholders to refine a series of problem statements for each theme, ensuring industry value in the future solutions.
- Market innovation activity across UK and international ProfTech clusters, raising the profile of ProfTech innovation in the West Midlands.

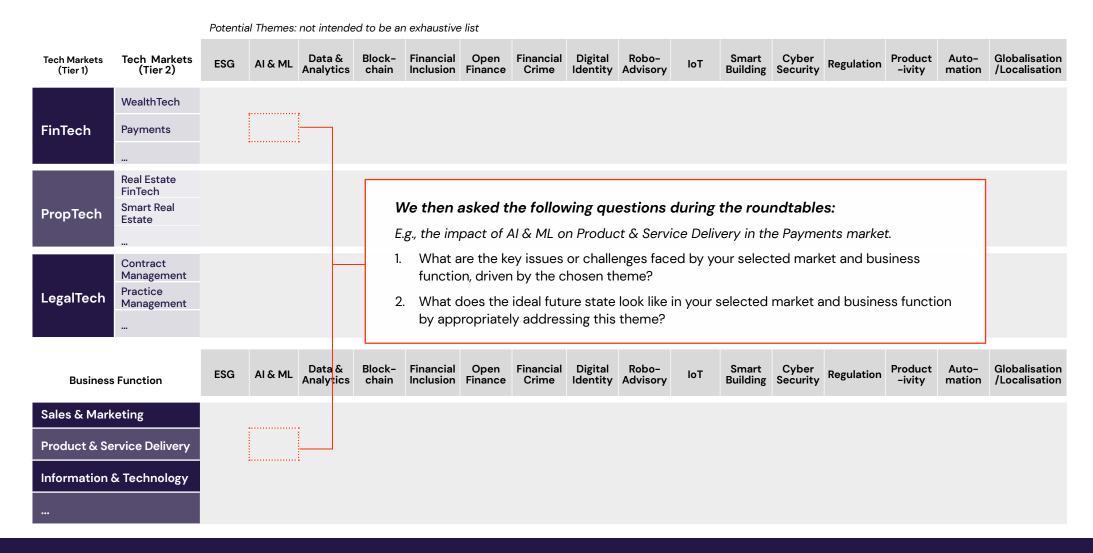
# APPENDICES



## METHODOLOGY: Unearthing Potential Initiatives

To unearth themes and initiatives that were of greatest importance to stakeholders in the region, a framework was developed which mapped specific technology markets to a non-exhaustive list of potential themes. The aim was to create a list of themes and, through discussion, a set of more targeted initiatives that could

be addressed by the roadmap. The key focus was in capturing the needs and concerns of both industry participants and academics from across the region, increasing the scope of collaboration on planned innovation and research activity through the roadmap.



## METHODOLOGY: Unearthing Potential Initiatives

#### **Industry responses**

Through a number of roundtables and 1-1 discussions, the framework on the previous was developed into a heat map as well as more detailed notes about specific areas of concerns within each theme / market.

Potential Themes: not intended to be an exhaustive list Globalisation /Localisation **ESG** AI & ML Open Finance Smart Building Tech Markets **Tech Markets** (Tier 1) (Tier 2) WealthTech **Payments** Lending Banking FinTech InsurTech RegTech **ESG** Real Estate FinTech **Smart Real** Estate **Shared Real PropTech** Estate ConTech **Legal Services** LegalTech

### **METHODOLOGY:** Unearthing Potential Initiatives

#### **Academic responses**

Input from academics was received at a high level, where universities ranked their own interest across the heat map below. Thus, there is a greater degree of variability across the key themes and markets compared with the industry perspective on the previous page.

However, there did appear to be quite a strong overlap of interest in areas such as Data, AI, ESG, Open Finance, Financial Inclusion and Cyber Security. All of which were discussed further and imbedded within the themes and initiatives of the roadmap.

		Potential Themes: not intended to be an exhaustive list																		
Tech Markets (Tier 1)	Tech Markets (Tier 2)	ESG	AI & ML	Data & Analytics	Block-chain	Quant-um Comput-ing	Financ-ial Inclus-ion	Open Finance	Financ-ial Crime	Digital Identity	Robo-Advisory	То	Smart Contracts	Smart Building	eBilling	Cyber Security	AR/VR/XR	Platform Strategy	Big Data	Organisational Capacity Building
	WealthTech																			
	Payments																			
	Lending																			
FinTech	Banking																			
	InsurTech																			
	MobilityTech																			
	eCommerce																			
	Real Estate FinTech																			
Dua ve Tarab	Smart Real Estate																			
PropTech	Shared Real Estate																			
	ConTech																			
LegalTech	Contract																			
	eDiscovery																			
	Case																			
	Practice																			

### **METHODOLOGY:** Scoring Identified Initiatives

Potential initiatives developed as part of the framework(s) included on the previous pages, and through more detailed conversations with key stakeholders, were scored using three focal points, regional, national and international alignment. The final scores are rounded average of these three scores. Regional alignment was of critical focus for the roadmap and was developed through

scoring the relevance of each initiative to industry academia and the degree to which it was relevant across ProfTech - not just one technology segment, for example. The outputs on this and the following pages present reflect the complete list of initiatives and scores generated.

Market	Theme	Initiative	WM Industry Relevance	WM Academic Relevance	Potential ProfTech Synergies	Regional Alignment	National Alignment	International Alignment	Average Score
	Productivity	Investigate the potential in streamlining the onboarding and decisioning process in specialist lending	3	3	3	3	3	3	3
		<ul> <li>Investigate the potential in centralising KYC and AML processes across the region to reduce duplication</li> </ul>	2	3	2	2	2	1	2
		<ul> <li>Investigate the potential to enhance the effectiveness and efficiency of the servicing process in specialist lending.</li> </ul>	3	3	2	3	3	3	3
	Open Data	<ul> <li>Investigate the potential for greater personalisation in Lending and Wealth Management to better inform consumers and price more effectively</li> </ul>	3	3	1	2	3	3	3
		<ul> <li>Integrate synergistic payments offerings to offer a one- stop-shop proposition to financial service business in the region</li> </ul>	2	3	1	2	1	1	1
		Investigate the potential for regional initiative on open finance processes in banking and lending	3	3	2	3	2	2	2
FinTech	Sustainability	<ul> <li>Investigate the role of analysis and insight generation in better supporting the governance of financial services businesses</li> </ul>	2	3	1	2	3	3	3
		<ul> <li>Investigate the role of data in supporting more targetted sales and marketing activity to incentivise more sustainable consumer buying</li> </ul>	2	3	2	2	3	3	3
		<ul> <li>Investigate the potential of personalised ESG data in supporting product development activity in the lending and wealth management markets</li> </ul>	3	3	2	3	3	3	3
	Inclusion & Wellness	<ul> <li>Investigate the potential to reduce administrative overhead for financial intermediaries and improve access to financial advice</li> </ul>	2	3	1	2	3	3	3
		<ul> <li>Investigate methods of better understanding indicators of vulnerability to offer more personalised and effective advice to consumers</li> </ul>	2	3	1	2	3	3	3
		Investigate the potential to improve access to financial services through AI processes in customer service	3	3	3	3	3	3	3
		<ul> <li>Investigate the required polciies and metrics required to govern the ethics of automated decisioning in supporting financial advisory / lending businesses</li> </ul>	3	3	2	3	3	3	3

### **METHODOLOGY:** Scoring Identified Initiatives

Potential initiatives developed as part of the framework(s) included on the previous pages, and through more detailed conversations with key stakeholders, were scored using three focal points, regional, national and international alignment. The final scores are rounded average of these three scores. Regional alignment was of critical focus for the roadmap and was developed through

scoring the relevance of each initiative to industry academia and the degree to which it was relevant across ProfTech - not just one technology segment, for example. The outputs on this and the following pages present reflect the complete list of initiatives and scores generated.

	Productivity	<ul> <li>Investigate the potential of reducing duplication in the mortgage process specifically for newly constructed apartment buildings</li> </ul>	2	3	2	2	2	1	2
		<ul> <li>Investigate the potential for increasing information and efficiency of the data gathering process required for property transactions</li> </ul>	2	3	2	2	3	3	3
		<ul> <li>Investigate the potential for IoT (e.g., sensors and cameras) to improve the effectiveness of residential and commercial property management</li> </ul>	3	2	1	2	2	2	2
	Open Data	<ul> <li>Investigate the potential for stronger information sharing between financial services, PropTech and property businesses</li> </ul>	3	3	3	3	2	1	2
		<ul> <li>Investigate the role of AI in supporting big data and analytics processes and insight generation among shared housing, financial and sustainability datasets</li> </ul>	3	3	3	3	3	3	3
Duan Talah		<ul> <li>Investigate the potential for data and analytics to improve price modelling for shared buildings e.g., apartment buildings and office spaces.</li> </ul>	2	3	1	2	1	1	1
PropTech	Sustainability	Investigate how data, analysis and insight generation can better support the governance of property businesses	2	2	2	2	3	3	3
		Investigate the potential for data and analytics to support regional retrofitting processes in residential housing	2	2	1	2	3	3	3
		<ul> <li>Investigate the potential of data and analytics in improving reporting processes and insight generation on the sustainability of property supply chains</li> </ul>	2	2	2	2	3	3	3
	Inclusion & Wellness	Investigate the potential of personalisation in combatting loneliness in shared living spaces in urban areas	2	2	1	2	2	2	2
		<ul> <li>Investigate the potential to better inform credit checking processes for property transactions to improve access to housing</li> </ul>	3	2	3	3	3	3	3
		<ul> <li>Investigate the potential to automate and enhance information sharing process to reduce stress cause during the residential property purchase journey</li> </ul>	2	2	3	2	3	3	3

## **METHODOLOGY:** Scoring Identified Initiatives

Potential initiatives developed as part of the framework(s) included on the previous pages, and through more detailed conversations with key stakeholders, were scored using three focal points, regional, national and international alignment. The final scores are rounded average of these three scores. Regional alignment was of critical focus for the roadmap and was developed through scoring the relevance of

each initiative to industry academia and the degree to which it was relevant across ProfTech - not just one technology segment, for example. The outputs on this and the following pages present reflect the complete list of initiatives and scores generated.

	Productivity	Investigate the potential for data, analytics and AI to support law firms in better understanding their clients and cases	3	3	1	2	3	3	3
		Investigate how no- and low-code application tools can better enable self service automation among employees in law firms	3	2	1	2	1	1	1
	Open Data	Investigate the role of data sharing in driving greater personalisation of legal services	2	3	1	2	3	3	3
LegalTech		Investigate the role of open data in enhancing employee education and training in law firms	2	2	1	2	1	1	1
	Sustainability	Investigate the role of data, analysis and insight generation in better supporting the governance of law firms	2	2	1	2	3	3	3
		<ul> <li>Investigate the role of technology and data in enhancing Al governance processes to support compliance with emergent regulation</li> </ul>	2	3	3	3	3	3	3
	Inclusion & Wellness	Investigate the potential to reduce administrative overhead during minor dispute cases to improve access to Legal Services for small businesses	2	3	1	2	3	3	3

Low = 1 Scoring Key:

### METHODOLOGY: West Midlands GVA & Workforce

#### Workings

Categorising jobs within ProfTech is challenging, as not everyone working in established legal, financial, property or technology sectors is working in ProfTech. Therefore, we have adopted a proxy methodology to estimate the overall ProfTech sector roles. We found the West Midlands legal, financial and property workforce using SIC codes (64–66, 68 and 69) via NOMIS.

We used SIC 62 to as a proxy to estimate the West Midlands proportion of the overall Tech Nation tech workforce figure. Tech Nation uses a wider range of SIC codes to calculate the overall tech workforce, including those that are part of 26, 58, 61, 63 and 95, so by default all these categories are also included in our workforce estimates.

To calculate the ProfTech workforce and GVA we have adopted the following methodology:

West Midlands (WM) estimated ProfTech workforce = 5% of combined WM tech, financial, property and legal workforce

**WM technology GVA per worker** = Total WM SIC code 62 GVA , Total WM SIC code 63 number of employees

**WM ProfTech GVA** = Estimated WM ProfTech workforce x WM technology GVA per worker

**Forecasted ProfTech GVA** = Forecasted ProfTech workforce x WM technology GVA per worker

We used the forecast formula in excel to forecast the WM ProfTech workforce using data from 2015 to 2022. We then multiplied this by the current GVA per worker to create a ProfTech GVA forecast for years up to 2033.

### CONTRIBUTING ORGANISATIONS

108.Al CrowdProperty Paragon Bank

Advanced Dudley Building Society Phoebus Software

Ashman Finance FieldFisher Primacy Technology

Aston University Finecta Res:Harmonics

Birmingham City University Gateley Saratoga Software

BNP Paribas Governance360 Secure Trust Bank

BoardSecure Gowling WLG Streets Consulting

Car Cloud Community Hi.ERD Swoopos

Cardtrend Innovate UK UKFin+ Network

Centre for Finance, Innovation

Jaguar Land Rover Financial Services

University of Birmingham

& Technology (CFIT) Land Attic University of Warwick

City of London Corporation Mazars Wealth Wizards

Coventry Building Society Nimbus Maps West Midlands Combined Universities

Coventry University Nue Heights West Midlands Growth Company

CrediCar Oxygen Finance Workbelt

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