



**UK Research
and Innovation**

Unit 1

Weavers Court

Linfield Industrial Estate

Linfield Road

Belfast

BT12 5GH

Attn: [REDACTED]

By email to: [REDACTED]

Date: 17/04/2023

Your ref: N/A

Our ref: PS23031

Dear Sirs,

Award of contract for the supply of PS23031 UKRI - Innovate UK Econometric study on A4I

Following your tender/ proposal for the supply of PS23031 UKRI - Innovate UK Econometric study on A4 to UKRI, we are pleased to award this contract to you.

This letter (Award Letter) and its Schedule(s) set out the terms of the Contract between:

- (1) **United Kingdom Research and Innovation**, a statutory corporation whose registered office is at Polaris House, North Star Avenue, Swindon, England, SN2 1FL ("**UKRI**"); and
- (2) **Xpand Group Limited**, [a company incorporated and registered in England with company number NI647655 and registered VAT number 306832609 whose registered office is at Unit 1 - Weavers Court Linfield Industrial Estate, Linfield Road, Belfast, United Kingdom, BT12 5GH (the "**Supplier**")].

Unless the context otherwise requires, capitalised expressions used in this Award Letter have the same meanings as in the terms and conditions of contract set out in to this Award Letter (the "**Conditions**"). In the event of any conflict between this Award Letter and the Conditions, this Award Letter shall prevail. Please do not attach any Supplier terms and conditions to this Award Letter as they will not be accepted by UKRI and may delay conclusion of the Contract.

For the purposes of the Contract, UKRI and the Supplier agree as follows:

Term

- 1 Commencement Date: 17/04/2023

2 Expiry Date: 31/08/2023

Description of Goods and/or Services

- 3 The Specification of the Goods and/or Services to be delivered is as set out in the Supplier's quotation dated.
- 4 The Services shall be performed at the Supplier's premises and/or a third party's premises and in each case the address.
- 5 Not Used

Charges & Payment

- 6 The Charges for the Goods and/or Services shall be as set out in the Supplier's quotation dated.
- 7 All invoices should be sent, quoting a valid purchase order number (PO Number) provided by UKRI, to: finances@uksbs.co.uk
- 8 To avoid delay in payment it is important that the invoice is compliant and that it includes a valid PO Number, PO Number item number (if applicable) and the details (name and telephone number) of your UKRI contact (i.e. Contract Manager). Non-compliant invoices will be sent back to you, which may lead to a delay in payment. If you have a query regarding an outstanding payment please contact our Accounts Payable section either by email to finance@uksbs.co.uk between 09:00-17:00 Monday to Friday.

Supplier's Limit of Liability

- 9 The Limit of Liability of the Supplier under this Contract shall be: 125% of the total Charges paid and payable to the Supplier under this Contract.

Notices

- 10 The address for notices of the Parties are:

UKRI

Polaris House, North Star Avenue,
Swindon, England, SN2 1FL

Attention: [REDACTED]

Email: [REDACTED]

Supplier

Xpand Group Limited

Unit 1, Weavers Court Linfield Industrial
Estate Linfield Road Belfast BT12 5GH

Attention: [REDACTED]

Liaison

- 11 For general liaison your contact will continue to be [REDACTED] in their absence

We thank you for your co-operation to date and look forward to forging a successful working relationship resulting in a smooth and successful supply of the Goods and/or Services. Please confirm your acceptance of the award of this contract by signing and returning the enclosed copy of this letter to [REDACTED] at the following address, [REDACTED] No other form

of acknowledgement will be accepted. Please remember to quote the reference number above in any future communications relating to this contract.

Yours faithfully,

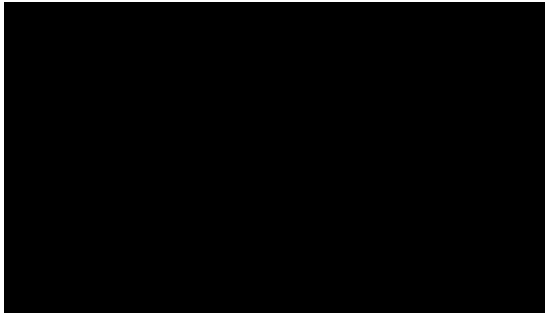
Signed for and on behalf of **United Kingdom Research and Innovation (UKRI)**

Signature:

Name:

Position:

Date:



.....

We accept the terms set out in this Award Letter and the Schedule(s).

Signed for and on behalf of **Xpand Group Limited**

Signature:

Name:

Position:

Date:



.....

Terms and Conditions of Contract for Goods and/or Services**1 INTERPRETATION****1.1** In these terms and conditions:

- "Award Letter" means the letter from UKRI to the Supplier printed above these terms and conditions;
- "Central Government Body" means a body listed in one of the following sub-categories of the Central Government classification of the Public Sector Classification Guide, as published and amended from time to time by the Office for National Statistics:
- (a) Government Department;
 - (b) Non-Departmental Public Body or Assembly Sponsored Public Body (advisory, executive, or tribunal);
 - (c) Non-Ministerial Department; or
 - (d) Executive Agency;
- "Charges" means the charges for the Goods and/or Services as specified in the Award Letter;
- "Commencement Date" means the date for the start of the Contract as set out in the Award Letter;
- "Confidential Information" means:
- (a) all confidential information and data which is acquired from or made available (directly or indirectly) by the Disclosing Party or the Disclosing Party's representatives however conveyed or presented, including but not limited to any information or document relating to the Disclosing Party's business, affairs, operations, budgets, policies, processes, initiatives, plans, product information, pricing information, technical or commercial know-how, trade secrets, specifications, strategies, inventions, designs, software, market opportunities, personnel, customers or suppliers (whether relating to this Contract or otherwise) either orally, in writing, or in whatever form obtained or maintained;
 - (b) any information or analysis derived from the Confidential Information;
 - (c) anything marked as confidential and any other information notified by or on behalf of the Disclosing Party to the Receiving Party as being confidential;
 - (d) the existence and terms of this Contract and of any subsequent agreement entered into in relation to this Contract;
 - (e) the fact that discussions and negotiations are taking place concerning this Contract and the status of those discussions and negotiations; and
 - (f) any copy of any of the information described in (a), (b), (c), (d) or (e) above, which shall be deemed to become Confidential Information when it is made. For the purposes of this definition, a copy shall include, without limitation, any notes or recordings of the information described in (a), (b), (c), (d) or (e) above (howsoever made);
- "Contract" means the contract between (i) UKRI and (ii) the Supplier constituted by the Supplier's

countersignature of the Award Letter and includes the Award Letter and Schedules;

"Data Protection Legislation"	means, for the periods for which they are in force, all laws giving effect or purporting to give effect to the GDPR, the Data Protection Act 2018, or otherwise relating to data protection, including the Regulation of Investigatory Powers Act 2000, the Telecommunications (Lawful Business Practice) (Interception of Communications) Regulations 2000 (SI 2000/2699), the Electronic Communications Data Protection Directive (2002/58/EC), the Privacy and Electronic Communications (EC Directive) Regulations 2003 (SI 2426/2003) and all applicable laws and regulations relating to the processing of personal data and privacy, including where applicable the guidance and codes of practice issued by the Information Commissioner, in each case as amended or substituted from time to time;
"Data Subject"	shall have the same meaning as in the Data Protection Legislation;
"Date of Delivery"	means that date by which the Goods must be Delivered to UKRI, as specified in the Award Letter.
"Deliver"	means hand over the Goods to UKRI at the address and on the date specified in the Award Letter, which shall include unloading and any other specific arrangements agreed in accordance with Clause 6. Delivered and Delivery shall be construed accordingly.
"Disclosing Party"	means a Party that makes a disclosure of Confidential Information to another Party;
"EIR"	means the Environmental Information Regulations 2004 (or if applicable the Environmental Information Regulations (Scotland) 2004);
"Expiry Date"	means the date for expiry of the Contract as set out in the Award Letter;
"FOIA"	means the Freedom of Information Act 2000 (or if applicable the Freedom of Information (Scotland) Act 2002);
"GDPR"	means: <ul style="list-style-type: none"> (a) the General Data Protection Regulations (Regulation (EU) 2016/679); or (b) any equivalent legislation amending or replacing the General Data Protection Regulations (Regulation (EU) 2016/679);
"Good Industry Practice"	means all relevant practices and professional standards that would be expected of a well-managed, expert service provider performing services substantially similar to the Services or substantially similar to the Goods provided to customers of a substantially similar size and nature as UKRI;
"Goods"	means the goods to be supplied by the Supplier to UKRI under the Contract;
"Information"	has the meaning given under section 84 of the FOIA;
"Intellectual Property Rights"	means: <ul style="list-style-type: none"> (a) copyright, rights related to or affording protection similar to copyright, rights in databases, patents and rights in inventions, semi-conductor topography rights, trade marks, rights in Internet domain names and website addresses and other rights in trade names, designs, know-how, trade secrets and other rights in Confidential Information;

- (b) applications for registration, and the right to apply for registration, for any of the rights listed at (a) that are capable of being registered in any country or jurisdiction; and
 - (c) all other rights having equivalent or similar effect in any country or jurisdiction;
- "Limit of Liability" means the limit of liability identified in the Award Letter;
- "Party" the Supplier or UKRI (as appropriate) and "Parties" shall mean both of them;
- "Personal Data" means the personal data (as defined in the Data Protection Legislation) which relates to or originates from UKRI, or any of UKRI's employees, contractors or customers and which is processed by or on behalf of the Supplier under this Contract;
- "Personal Data Breach" shall have the meaning given in the Data Protection Legislation;
- "Purchase Order Number" means UKRI's unique number relating to the order for Goods and/or Services to be supplied by the Supplier to UKRI in accordance with the terms of the Contract;
- "Receiving Party" means a Party to which a disclosure of Confidential Information is made by another Party;
- "Request for Information" has the meaning set out in the FOIA or the EIR as relevant (where the meaning set out for the term "request" shall apply);
- "Services" means the services to be supplied by the Supplier to UKRI under the Contract;
- "Specification" means the specification for the Goods and/or Services to be supplied by the Supplier to UKRI (including as to quantity, description and quality) as specified in the Award Letter;
- "Staff" means all directors, officers, employees, agents, consultants and contractors of the Supplier and/or of any sub-contractor of the Supplier engaged in the performance of the Supplier's obligations under the Contract;
- "Staff Vetting Procedures" means vetting procedures that accord with good industry practice or, where requested by UKRI, UKRI's procedures for the vetting of personnel as provided to the Supplier from time to time;
- "Term" means the period from the Commencement Date to the Expiry Date as such period may be extended or terminated in accordance with the terms and conditions of the Contract;
- "TUPE" means the Transfer of Undertakings (Protection of Employment) Regulations 2006 as amended or replaced from time to time;
- "VAT" means value added tax in accordance with the provisions of the Value Added Tax Act 1994; and
- "Working Day" means a day (other than a Saturday, Sunday, public holiday or 27, 28, 29, 30 and 31 December) when banks in London are open for business.

1.2 In these terms and conditions, unless the context otherwise requires:

- (a) references to numbered clauses are references to the relevant clause in these terms and conditions;
- (b) any obligation on any Party not to do or omit to do anything shall include an obligation not to allow that thing to be done or omitted to be done;

- (c) the headings to the clauses of these terms and conditions are for information only and do not affect the interpretation of the Contract;
- (d) any reference to an enactment includes reference to that enactment as amended or replaced from time to time and to any subordinate legislation or byelaw made under that enactment; and
- (e) the word 'including' shall be understood as meaning 'including without limitation'.

2 BASIS OF CONTRACT

- 2.1 The Award Letter constitutes an offer by UKRI to purchase the Goods and/or Services subject to and in accordance with the terms and conditions of the Contract.
- 2.2 The offer comprised in the Award Letter shall be deemed to be accepted by the Supplier on receipt by UKRI of a copy of the Award Letter countersigned by the Supplier.

3 SUPPLY OF GOODS AND SERVICES

- 3.1 In consideration of UKRI's agreement to pay the Charges, the Supplier shall supply the Goods and/or Services to UKRI subject to and in accordance with the terms and conditions of the Contract.
- 3.2 In supplying the Goods and/or Services, the Supplier shall:
 - (a) co-operate with UKRI in all matters relating to the supply of Goods and/or Services and comply with all UKRI's instructions; and
 - (b) comply with all applicable laws.
- 3.3 The Supplier shall supply the Goods in accordance with the Specification. The Supplier warrants, represents, undertakes and guarantees that the Goods supplied under the Contract shall:
 - (a) be free from defects (manifest or latent), in materials and workmanship and remain so for 12 months after Delivery;
 - (b) be of satisfactory quality (within the meaning of the Sale of Goods Act 1979) and comply with any applicable statutory and regulatory requirements relating to the manufacture, labelling, packaging, storage, handling and delivery of the Goods;
 - (c) conform with the specifications (including the Specification), drawings, descriptions given in quotations, estimates, brochures, sales, marketing and technical literature or material (in whatever format made available by the Supplier) supplied by, or on behalf of, the Supplier;
 - (d) be free from design defects; and
 - (e) be fit for any purpose held out by the Supplier or made known to the Supplier by UKRI expressly or by implication, and in this respect UKRI relies on the Supplier's skill and judgement. The Supplier acknowledges and agrees that the approval by UKRI of any designs provided by the Supplier shall not relieve the Supplier of any of its obligations under this clause 3.3.
- 3.4 In supplying the Services, the Supplier shall:
 - (a) perform the Services with all reasonable care, skill and diligence in accordance with good industry practice in the Supplier's industry, profession or trade;

- (b) use Staff who are suitably skilled and experienced to perform tasks assigned to them, and in sufficient number to ensure that the Supplier's obligations are fulfilled in accordance with the Contract;
- (c) ensure that the Services shall conform with all descriptions and specifications set out in the Specification;
- (d) not do or allow anything to be done that would, or would be likely to, bring UKRI into disrepute or adversely affect its reputation in any way; and
- (e) provide all equipment, tools and vehicles and other items as are required to provide the Services.

4 TERM

- 4.1 The Contract shall take effect on the date specified in the Award Letter and shall expire on the Expiry Date, unless it is otherwise extended in accordance with the provisions of the Award Letter or terminated early in accordance with the terms and conditions of the Contract.

5 CHARGES, PAYMENT AND RECOVERY OF SUMS DUE

- 5.1 The Charges for the Goods and/or Services shall be as set out in the Award Letter and shall be the full and exclusive remuneration of the Supplier in respect of the supply of the Goods and/or Services. Unless otherwise agreed in writing by UKRI, the Charges shall include every cost and expense of the Supplier directly or indirectly incurred in connection with the supply of the Goods and/or performance of the Service.
- 5.2 All amounts stated are exclusive of VAT which shall be charged at the prevailing rate. UKRI shall, following the receipt of a valid VAT invoice, pay to the Supplier a sum equal to the VAT chargeable in respect of the Goods and/or Services.
- 5.3 The Supplier shall invoice UKRI as specified in the Contract. Each invoice shall include such supporting information required by UKRI to verify the accuracy of the invoice, including the relevant Purchase Order Number and a breakdown of the Goods and/or Services supplied in the invoice period.
- 5.4 In consideration of the supply of the Goods and/or Services by the Supplier, UKRI shall pay the Supplier the invoiced amounts no later than 30 days after verifying that the invoice is valid and undisputed and includes a valid Purchase Order Number. UKRI may, without prejudice to any other rights and remedies under the Contract, withhold or reduce payments in the event of unsatisfactory performance.
- 5.5 If UKRI fails to consider and verify an invoice in a timely fashion the invoice shall be regarded as valid and undisputed for the purpose of clause 5.4 after a reasonable time has passed (which shall be no less than 14 calendar days).
- 5.6 If there is a dispute between the Parties as to the amount invoiced, UKRI may reject the invoice in its entirety. The Supplier shall not suspend the supply of the Goods and/or Services unless the Supplier is entitled to terminate the Contract for a failure to pay undisputed sums in accordance with clause 17.5. Any disputed amounts shall be resolved through the dispute resolution procedure detailed in clause 20.
- 5.7 Where the Supplier enters into a sub-contract, the Supplier shall include in that sub-contract:
 - (a) provisions having the same effects as clauses 5.3 to 5.6 (inclusive) of this Contract; and

- (b) a provision requiring the counterparty to that sub-contract to include in any sub-contract which it awards provisions having the same effects as clauses 5.3 to 5.7 (inclusive) of this Contract.
 - (c) In this clause 5.7, "sub-contract" means a contract between two or more suppliers, at any stage of remoteness from UKRI in a subcontracting chain, made wholly or substantially for the purpose of performing (or contributing to the performance of) the whole or any part of this Contract.
- 5.8 If any sum of money is recoverable from or payable by the Supplier under the Contract (including any sum which the Supplier is liable to pay to UKRI in respect of any breach of the Contract), that sum may be deducted unilaterally by UKRI from any sum then due, or which may come due, to the Supplier under the Contract or under any other agreement or contract with UKRI. The Supplier shall not be entitled to assert any credit, set-off or counterclaim against UKRI in order to justify withholding payment of any such amount in whole or in part.
- 6 DELIVERY**
- 6.1 The Supplier shall Deliver the Goods to UKRI on or by the Date of Delivery. Unless otherwise agreed in writing by UKRI, Delivery shall be on the date and to the address specified in the Award Letter. Delivery of the Goods shall be completed once the completion of unloading the Goods from the transporting vehicle at the Delivery address has taken place and UKRI has signed for the Delivery.
- 6.2 Any access to UKRI's premises and any labour and equipment that may be provided by UKRI in connection with Delivery of the Goods shall be provided without acceptance by UKRI of any liability in respect of any actions, claims, costs and expenses incurred by third parties for any loss or damages to the extent that such loss or damage is not attributable to the negligence or other wrongful act of UKRI or its servant or agent. The Supplier shall indemnify UKRI in respect of any actions, suits, claims, demands, losses, charges, costs and expenses, which UKRI may suffer or incur as a result of or in connection with any damage or injury (whether fatal or otherwise) occurring in the course of Delivery or installation to the extent that any such damage or injury is attributable to any act or omission of the Supplier or any of his sub-Suppliers.
- 6.3 Delivery of the Goods shall be accompanied by a delivery note which shows the Purchase Order Number and the type and quantity of the Goods and, in the case of part Delivery, the outstanding balance remaining to be Delivered.
- 6.4 Unless otherwise stipulated by UKRI in the Award Letter, Deliveries shall only be accepted by UKRI on Working Days and during normal business hours.
- 6.5 Where (i) the Supplier fails to Deliver the Goods or part of the Goods or (ii) the Goods or part of the Goods do not comply with the provisions of clause 3, then without limiting any of its other rights or remedies implied by statute or common law, UKRI shall be entitled:
- (a) to terminate the Contract;
 - (b) to require the Supplier, free of charge, to deliver substitute Goods within the timescales specified by UKRI;
 - (c) to require the Supplier, free of charge, to repair or replace the rejected Goods, or to provide a full refund of the Charges of the rejected Goods (if paid);
 - (d) to reject the Goods (in whole or part) and return them to the Supplier at the Supplier's own risk and expense and UKRI shall be entitled to a full refund on those Goods or part of Goods duly returned;

- (e) to buy the same or similar Goods from another supplier; and
- (f) to recover any expenses incurred in respect of buying the goods from another supplier which shall include but not be limited to administration costs, chargeable staff time and extra delivery costs.

7 PROPERTY AND GUARANTEE OF TITLE

- 7.1 Without prejudice to any other rights or remedies of UKRI, title and risk in the Goods shall pass to UKRI when Delivery of the Goods is complete (including off-loading and stacking).
- 7.2 The Supplier warrants that:
 - (a) it has full clear and unencumbered title to all the Goods;
 - (b) at the date of Delivery of any of the Goods it shall have full and unrestricted right, power and authority to sell, transfer and deliver all of the Goods to UKRI; and
 - (c) on Delivery UKRI shall acquire a valid and unencumbered title to the Goods.

8 STAFF

- 8.1 If UKRI reasonably believes that any of the Staff are unsuitable to undertake work in respect of the Contract, it may, by giving written notice to the Supplier:
 - (a) refuse admission to the relevant person(s) to UKRI's premises;
 - (b) direct the Supplier to end the involvement in the provision of the Goods and/or Services of the relevant person(s); and/or
 - (c) require that the Supplier replace any person removed under this clause with another suitably qualified person and procure that any security pass issued by UKRI to the person removed is surrendered,

and the Supplier shall comply with any such notice.
- 8.2 The Supplier shall:
 - (a) ensure that all Staff are vetted in accordance with the Staff Vetting Procedures and if requested, comply with UKRI's Staff Vetting Procedures as supplied from time to time;
 - (b) ensure that no person who discloses that he/she has a conviction that is relevant to the nature of the Contract, relevant to the work of UKRI, or is of a type otherwise advised by UKRI (each such conviction a "**Relevant Conviction**"), or is found by the Supplier to have a Relevant Conviction (whether as a result of a police check, the Staff Vetting Procedures or otherwise) is employed or engaged in the provision of any part of the supply of the Goods and/or Services;
 - (c) if requested, provide UKRI with a list of the names and addresses (and any other relevant information) of all persons who may require admission to UKRI's premises in connection with the Contract; and
 - (d) procure that all Staff comply with any rules, regulations and requirements reasonably specified by UKRI.

9 **ASSIGNMENT AND SUB-CONTRACTING**

- 9.1 The Supplier shall not without the written consent of UKRI assign, sub-contract, novate or in any way dispose of the benefit and/ or the burden of the Contract or any part of the Contract. UKRI may, in the granting of such consent, provide for additional terms and conditions relating to such assignment, sub-contract, novation or disposal. The Supplier shall be responsible for the acts and omissions of its sub-contractors as though those acts and omissions were its own.
- 9.2 Where UKRI has consented to the placing of sub-contracts, the Supplier shall, at the request of UKRI, send copies of each sub-contract, to UKRI as soon as is reasonably practicable.
- 9.3 UKRI may assign, novate, or otherwise dispose of its rights and obligations under the Contract without the consent of the Supplier provided that such assignment, novation or disposal shall not increase the burden of the Supplier's obligations under the Contract.

10 **INTELLECTUAL PROPERTY AND INDEMNITY**

- 10.1 All Intellectual Property Rights in any materials provided by UKRI to the Supplier for the purposes of this Contract shall remain the property of UKRI but UKRI hereby grants the Supplier a royalty-free, non-exclusive and non-transferable licence to use such materials as required until termination or expiry of the Contract for the sole purpose of enabling the Supplier to perform its obligations under the Contract.
- 10.2 The ownership of all Intellectual Property Rights in any materials created or developed by the Supplier pursuant to the Contract or arising as a result of the provision of the Goods and/or Services shall vest in UKRI. If, and to the extent, that the ownership of any Intellectual Property Rights in such materials vest in the Supplier by operation of law, the Supplier hereby assigns ownership of such Intellectual Property Rights to UKRI by way of a present assignment of future rights that shall take place immediately on the coming into existence of any such Intellectual Property Rights all its Intellectual Property Rights in such materials (with full title guarantee and free from all third party rights).
- 10.3 UKRI hereby grants the Supplier a royalty-free, non-exclusive and non-transferable licence to use any Intellectual Property Rights in the materials created or developed by the Supplier pursuant to the Contract and any Intellectual Property Rights arising as a result of the provision of the Goods and/or Services as required until termination or expiry of this Contract for the sole purpose of enabling the Supplier to perform its obligations under the Contract
- 10.4 Without prejudice to clause 10.2, the Supplier hereby grants UKRI a perpetual, royalty-free, irrevocable and non-exclusive licence (with a right to sub-license) to use any Intellectual Property Rights vested in or licensed to the Supplier on the date of the Contract or during the Term to the extent not falling within clause 10.2 including any modifications to or derivative versions of any such Intellectual Property Rights, which UKRI reasonably requires in order to exercise its rights and take the benefit of the Contract including the Goods and/or Services provided.
- 10.5 The Supplier shall indemnify, and keep indemnified, UKRI in full against all cost, expenses, damages and losses (whether direct or indirect), including any interest, penalties, and reasonable legal and other professional fees awarded against or incurred or paid by UKRI as a result of or in connection with any claim made against UKRI for actual or alleged infringement of a third party's intellectual property arising out of, or in connection with, the supply or use of the Goods and/or Services, to the extent that the claim is attributable to the acts or omission of the Supplier or any Staff.
- 10.6 UKRI shall promptly notify the Supplier of any infringement claim made against it relating to any Goods and, subject to any statutory obligation requiring UKRI to respond, shall

permit the Supplier to have the right, at its sole discretion to assume, defend, settle or otherwise dispose of such claim. UKRI shall give the Supplier such assistance as it may reasonably require to dispose of the claim and shall not make any statement which might be prejudicial to the settlement or defence of the claim.

11 RECORDS

11.1 If required by UKRI, the Supplier shall:

- (a) attend progress meetings with UKRI at the frequency and times specified by UKRI and shall ensure that its representatives are suitably qualified to attend such meetings; and
- (b) submit progress reports to UKRI at the times and in the format specified by UKRI.

11.2 The Supplier shall keep and maintain until 6 years after the end of the Contract, or as long a period as may be agreed between the Parties, full and accurate records of the Contract including the Goods and/or Services supplied under it, and all payments made by UKRI. The Supplier shall on request afford UKRI or UKRI's representatives such access to those records as may be reasonably requested by UKRI in connection with the Contract.

12 CONFIDENTIALITY, TRANSPARENCY AND PUBLICITY

12.1 Subject to clause 12.2, each Party shall:

- (a) treat all Confidential Information it receives as confidential, safeguard it accordingly and not disclose it to any other person without the prior written permission of the disclosing Party; and
- (b) not use or exploit the Disclosing Party's Confidential Information in any way except for the purposes anticipated under the Contract.

12.2 Notwithstanding clause 12.1, a Party may disclose Confidential Information which it receives from the other Party:

- (a) where disclosure is required by applicable law or by a court of competent jurisdiction;
- (b) to its auditors or for the purposes of regulatory requirements;
- (c) on a confidential basis, to its professional advisers;
- (d) to the Serious Fraud Office where the Party has reasonable grounds to believe that the other Party is involved in activity that may constitute a criminal offence under the Bribery Act 2010;
- (e) where the Receiving Party is the Supplier, to the Staff on a need to know basis to enable performance of the Supplier's obligations under the Contract provided that the Supplier shall procure that any Staff to whom it discloses Confidential Information pursuant to this clause 12.2(e) shall observe the Supplier's confidentiality obligations under the Contract; and
- (f) where the Receiving Party is UKRI:
 - (i) on a confidential basis to the employees, agents, consultants and contractors of UKRI;

- (ii) on a confidential basis to any Central Government Body, any successor body to a Central Government Body or any company to which UKRI transfers or proposes to transfer all or any part of its business;
- (iii) to the extent that UKRI (acting reasonably) deems disclosure necessary or appropriate in the course of carrying out its public functions; or
- (iv) in accordance with clause 13.

and for the purposes of the foregoing, references to disclosure on a confidential basis shall mean disclosure subject to a confidentiality agreement or arrangement containing terms no less stringent than those placed on UKRI under this clause 12.

- 12.3 The Parties acknowledge that, except for any Information which is exempt from disclosure in accordance with the provisions of the FOIA, the content of the Contract is not Confidential Information and the Supplier hereby gives its consent for UKRI to publish the Contract in its entirety to the general public (but with any Information that is exempt from disclosure in accordance with the FOIA redacted) including any changes to the Contract agreed from time to time. UKRI may consult with the Supplier to inform its decision regarding any redactions but shall have the final decision in its absolute discretion whether any of the content of the Contract is exempt from disclosure in accordance with the provisions of the FOIA.
- 12.4 The Supplier shall not, and shall take reasonable steps to ensure that the Staff shall not, make any press announcement or publicise the Contract or any part of the Contract in any way, except with the prior written consent of UKRI.

13 FREEDOM OF INFORMATION

- 13.1 The Supplier acknowledges that UKRI is subject to the requirements of the FOIA and the EIR and shall:
- (a) provide all necessary assistance and cooperation as reasonably requested by UKRI to enable UKRI to comply with its obligations under the FOIA and the EIR;
 - (b) transfer to UKRI all Requests for Information relating to the Contract that it receives as soon as practicable and in any event within 2 Working Days of receipt;
 - (c) provide UKRI with a copy of all Information belonging to UKRI requested in the Request for Information which is in its possession or control in the form that UKRI requires within 5 Working Days (or such other period as UKRI may reasonably specify) of UKRI's request for such Information; and
 - (d) not respond directly to a Request for Information unless authorised in writing to do so by UKRI.
- 13.2 The Supplier acknowledges that UKRI may be required under the FOIA and the EIR to disclose Information concerning the Supplier or the Goods and/or Services (including commercially sensitive information) without consulting or obtaining consent from the Supplier.
- 13.3 Notwithstanding any other provision in the Contract, UKRI shall be responsible for determining in its absolute discretion whether any Information relating to the Supplier or the Goods is exempt from disclosure in accordance with the FOIA and/or the EIR.

14 PROTECTION OF PERSONAL DATA AND SECURITY OF DATA

- 14.1 In this Clause 14, the terms, "processes", "data controller" and "data processor" shall have the same meanings given to them under Data Protection Legislation.

- 14.2 The Parties acknowledge that for the purposes of Data Protection Legislation, UKRI is the data controller and the Supplier is the data processor of any Personal Data.
- 14.3 The Supplier shall and shall procure that its staff and sub-contractors shall comply with all Data Protection Legislation in relation to any Personal Data processed.
- 14.4 Without limiting Clauses 14.2 and 14.3, the Supplier shall at all times (and shall ensure that at all times its staff):
- (a) process Personal Data only in accordance with the documented instructions received from UKRI and during the Term of this Contract. The Supplier shall immediately inform UKRI if, in the Supplier's opinion, an instruction from UKRI infringes the Data Protection Legislation or any other applicable law;
 - (b) ensure that any person to whom it provides the Personal Data is subject to appropriate confidentiality obligations;
 - (c) disclose any Personal Data only on a need to know basis to staff directly concerned with the provision of the Goods and/or Services;
 - (d) not transfer or direct the transfer of any Personal Data to any third party or process or direct the processing of Personal Data outside of the European Economic Area in each case without UKRI's prior written consent (which consent may be subject to conditions as directed by UKRI);
 - (e) keep all Personal Data confidential, and have in place now and shall on a continuing basis take all reasonable appropriate technical and organisational measures to keep all Personal Data confidential and secure and to protect against unauthorised or unlawful processing, accidental loss, destruction, damage, alteration, disclosure or access;
 - (f) upon request by UKRI, promptly do such other acts in relation to the Personal Data, or any part thereof, as UKRI shall request to enable UKRI to comply with its obligations under the Data Protection Legislation;
 - (g) notify UKRI promptly (and at least within 24 hours) if it receives a request from a Data Subject or a complaint relating to a Data Subject and promptly provide UKRI with all such data, information, cooperation and assistance as is required by UKRI in order to respond to and resolve the request or complaint within any applicable time frames;
 - (h) provide such information and allow for and contribute to audits, including inspections, conducted by UKRI or an auditor mandated by UKRI, as is reasonably necessary to enable UKRI to satisfy itself of the Supplier's compliance with this Clause 14 and the Data Protection Legislation
 - (i) on termination or expiry of this Contract, and at any other time on UKRI's request, either return or destroy (as elected by UKRI) the Personal Data (including all copies of it) and confirm in writing that it has complied with this obligation; and
 - (j) notify UKRI without undue delay on becoming aware of any Personal Data Breach and promptly following notification, provide such data, information and assistance as is required by UKRI in order for UKRI to notify the Personal Data Breach to the Information Commissioner and/or Data Subject(s) and otherwise fulfil its obligations under Data Protection Legislation.

15 LIABILITY

- 15.1 UKRI shall not be responsible for any injury, loss, damage, cost or expense suffered by the Supplier if and to the extent that it is caused by the negligence or wilful misconduct of the Supplier or the Staff or breach by the Supplier of its obligations under the Contract. The Supplier shall not be responsible for any injury, loss, damage, cost or expense suffered by UKRI if and to the extent that it is caused by the negligence or wilful misconduct of UKRI or by breach by UKRI of its obligations under the Contract.
- 15.2 Subject always to clause 15.5 and 15.6 in no event shall either Party be liable to the other Party for any:
- (a) loss of profits;
 - (b) loss of business;
 - (c) loss of revenue;
 - (d) loss of or damage to goodwill;
 - (e) loss of savings (whether anticipated or otherwise); and/or
 - (f) any indirect, special or consequential loss or damage.
- 15.3 Subject always to clause 15.5 and 15.6, the aggregate liability of the Supplier in respect of all defaults, claims, losses or damages howsoever caused, whether arising from breach of the Contract, the supply or failure to supply of the Goods and/or perform the Services, misrepresentation (whether tortious or statutory), tort (including negligence), breach of statutory duty or otherwise shall in no event exceed the Limit of Liability.
- 15.4 Subject to clause 15.5, the aggregate liability of UKRI in respect of all defaults, claims, losses or damages howsoever caused, whether arising from breach of the Contract, misrepresentation (whether tortious or statutory), tort (including negligence), breach of statutory duty or otherwise shall in no event exceed a sum equal to the Charges.
- 15.5 Nothing in the Contract shall be construed to limit or exclude either Party's liability for:
- (a) death or personal injury caused by its negligence or that of its Staff;
 - (b) fraud or fraudulent misrepresentation by it or that of its Staff;
 - (c) breach of any obligation as to title implied by section 12 of the Sale of Goods Act 1979 or section 2 of the Supply of Goods and Services Act 1982; or
 - (d) any other matter which, by law, may not be excluded or limited.
- 15.6 The Supplier's liability under the indemnities in clauses 10.5, 14 and 19.3 shall be unlimited.
- 15.7 The Supplier shall effect and maintain an adequate level of insurance cover in respect of all risks that may be incurred by it in the performance of this Contract. On request from UKRI, the Supplier shall provide UKRI with copies of the insurance policy certificates and details of the cover provided.

16 FORCE MAJEURE

Neither Party shall have any liability under or be deemed to be in breach of the Contract for any delays or failures in performance of the Contract which result from circumstances beyond the reasonable control of the Party affected. Each Party shall promptly notify the

other Party in writing when such circumstances cause a delay or failure in performance and when they cease to do so. If such circumstances continue for a continuous period of more than 30 days, either Party may terminate the Contract by written notice to the other Party.

17 TERMINATION

17.1 UKRI may terminate the Contract in whole or in part at any time before the Goods and/or Services are provided with immediate effect by giving the Supplier written notice, whereupon the Supplier shall discontinue the provision of the Goods and/or Services (in whole or in part as applicable). UKRI shall pay to the Supplier:

- (a) such Charges or that part of the Charges for Goods which have been Delivered to UKRI or, on the deemed date of service of the notice of cancellation, are already in transit and the costs of materials which the Supplier has purchased to fulfil the order for the Goods and which cannot be used for other orders or be returned to the supplier of those materials for a refund; and/or
- (b) such Charges or that part of the Charges for Services provided and a fair and reasonable portion of the Charges for work-in-progress in performing the Services at the time of termination,

but UKRI shall not be liable for any loss of anticipated profits or any consequential loss and the Supplier shall have a duty to mitigate its costs and shall on request provide proof of work-in-progress claimed.

17.2 UKRI may terminate the Contract at any time by notice in writing to the Supplier to take effect on any date falling at least 1 month (or, if the Contract is less than 3 months in duration, at least 10 Working Days) later than the date of service of the relevant notice.

17.3 Without prejudice to any other right or remedy it might have, UKRI may terminate the Contract by written notice to the Supplier with immediate effect if the Supplier:

- (a) (without prejudice to clause 17.3(e)), is in material breach of any obligation under the Contract which is not capable of remedy;
- (b) repeatedly breaches any of the terms and conditions of the Contract in such a manner as to reasonably justify the opinion that its conduct is inconsistent with it having the intention or ability to give effect to the terms and conditions of the Contract;
- (c) is in material breach of any obligation which is capable of remedy, and that breach is not remedied within 30 days of the Supplier receiving notice specifying the breach and requiring it to be remedied;
- (d) undergoes a change of control within the meaning of section 1124 of the Corporation Tax 2010, unless UKRI has given its prior written consent to the change of control or does not raise an objection within 6 months of the Supplier's written notice to UKRI that a change of control has occurred;
- (e) breaches the provisions of clauses 8.2, 12, 13, 14 and 18;
- (f) becomes insolvent, or if an order is made or a resolution is passed for the winding up of the Supplier (other than voluntarily for the purpose of solvent amalgamation or reconstruction), or if an administrator or administrative receiver is appointed in respect of the whole or any part of the Supplier's assets or business, or if the Supplier makes any composition with its creditors or takes or suffers any similar or analogous action (to any of the actions detailed in this clause 17.3) in consequence of debt in any jurisdiction; or

- (g) fails to comply with legal obligations in the fields of environmental, social or labour law.
- 17.4 The Supplier shall notify UKRI as soon as practicable of any change of control as referred to in clause 17.3(d) or any potential such change of control.
- 17.5 In addition to the Supplier's statutory rights, the Supplier may terminate the Contract by written notice to UKRI if UKRI has not paid any undisputed invoice within 90 days of it falling due.
- 17.6 Termination or expiry of the Contract shall be without prejudice to the rights of either Party accrued prior to termination or expiry and shall not affect the continuing rights of the Parties under clauses 2, 3.2, 3.3, 8, 10, 11.1, 12, 13, 14, 15, 17.7, 18.4, 19.3, 20 and 21.9 and any other term or condition of the Contract that either expressly or by implication has effect after termination.
- 17.7 Upon termination or expiry of the Contract, the Supplier shall:
- (a) give all reasonable assistance to UKRI and any incoming supplier of Goods and/or Services; and
 - (b) return all requested documents, information and data to UKRI as soon as reasonably practicable.
- 18 **COMPLIANCE**
- 18.1 The Supplier shall promptly notify UKRI of any health and safety hazards which may arise in connection with the performance of its obligations under the Contract. UKRI shall promptly notify the Supplier of any health and safety hazards which may exist or arise at UKRI's premises and which may affect the Supplier in the performance of its obligations under the Contract.
- 18.2 The Supplier shall:
- (a) comply with the reasonable requirements of UKRI's security arrangements;
 - (b) comply with all UKRI's health and safety measures;
 - (c) notify UKRI immediately in the event of any incident occurring in the performance of its obligations under the Contract on UKRI's premises where that incident causes any personal injury or damage to property which could give rise to personal injury;
 - (d) perform its obligations under the Contract in accordance with all applicable equality law and UKRI's equality and diversity policy as provided to the Supplier from time to time;
 - (e) take all reasonable steps to secure the observance of clause 18.2(d) by all Staff; and
 - (f) supply the Goods and any packaging in accordance with UKRI's environmental policy as provided from time to time.
- 18.3 The Goods shall be packed and marked in a proper manner and in accordance with any instructions specified in the Award Letter, any statutory requirements and any requirements of the carriers. All packaging materials shall be considered non-returnable. The Supplier shall indemnify UKRI against all actions, suits, claims, demands, losses, charges, costs and expenses which UKRI may suffer or incur as a result of, or in connection with, any breach of this clause 18.3.

18.4 If notified by UKRI, the Supplier shall comply with, and shall ensure that its Staff shall comply with, the provisions of:

- (a) the Official Secrets Acts 1911 to 1989; and
- (b) section 182 of the Finance Act 1989.

19 PREVENTION OF FRAUD AND CORRUPTION

19.1 The Supplier shall not offer, give, or agree to give anything, to any person an inducement or reward for doing, refraining from doing, or for having done or refrained from doing, any act in relation to the obtaining or execution of the Contract or for showing or refraining from showing favour or disfavour to any person in relation to the Contract.

19.2 The Supplier shall take all reasonable steps, in accordance with Good Industry Practice, to prevent fraud by the Staff and the Supplier (including its shareholders, members and directors) in connection with the Contract and shall notify UKRI immediately if it has reason to suspect that any fraud has occurred or is occurring or is likely to occur.

19.3 If the Supplier or the Staff engages in conduct prohibited by clause 19.1 or commits fraud in relation to the Contract or any other contract with the Crown (including UKRI) UKRI may:

- (a) terminate the Contract and recover from the Supplier the amount of any loss suffered by UKRI resulting from the termination, including the cost reasonably incurred by UKRI of making other arrangements for the supply of the Goods and/or Services and any additional expenditure incurred by UKRI throughout the remainder of the Contract; or
- (b) recover in full from the Supplier any other loss sustained by UKRI in consequence of any breach of this clause.

20 DISPUTE RESOLUTION

20.1 The Parties shall attempt in good faith to negotiate a settlement to any dispute between them arising out of or in connection with the Contract and such efforts shall involve the escalation of the dispute to an appropriately senior representative of each Party.

20.2 If the dispute cannot be resolved by the Parties within one month of being escalated as referred to in clause 20.1, the dispute may by agreement between the Parties be referred to a neutral adviser or mediator (the "**Mediator**") chosen by agreement between the Parties. All negotiations connected with the dispute shall be conducted in confidence and without prejudice to the rights of the Parties in any further proceedings.

20.3 If the Parties fail to appoint a Mediator within one month, or fail to enter into a written agreement resolving the dispute within one month of the Mediator being appointed, either Party may exercise any remedy it has under applicable law.

21 GENERAL

21.1 Each of the Parties represents and warrants to the other that it has full capacity and authority, and all necessary consents, licences and permissions to enter into and perform its obligations under the Contract, and that the Contract is executed by its duly authorised representative.

21.2 The Supplier warrants and represents that during the Term it shall not accept work from other sources that will in any way impair or affect its ability to provide the Goods and/or Services and comply with the terms of this Contract.

- 21.3 The Supplier must make sure that neither it nor any of its Staff or sub-contractors are placed in a position where there is or may be an actual conflict, or a potential conflict, between their interests or the interests of its Staff or sub-contractors and the Supplier's obligations under this Contract. You must disclose to us the particulars of any conflict of interest that arises.
- 21.4 A person who is not a party to the Contract shall have no right to enforce any of its provisions which, expressly or by implication, confer a benefit on him or her, without the prior written agreement of the Parties.
- 21.5 The Contract cannot be varied except in writing signed by a duly authorised representative of both the Parties.
- 21.6 The Contract contains the whole agreement between the Parties and supersedes and replaces any prior written or oral agreements, representations or understandings between them. The Parties confirm that they have not entered into the Contract on the basis of any representation that is not expressly incorporated into the Contract. Nothing in this clause 21.6 shall exclude liability for fraud or fraudulent misrepresentation.
- 21.7 Any waiver or relaxation either partly, or wholly of any of the terms and conditions of the Contract shall be valid only if it is communicated to the other Party in writing and expressly stated to be a waiver. A waiver of any right or remedy arising from a breach of contract shall not constitute a waiver of any right or remedy arising from any other breach of the Contract.
- 21.8 The Contract shall not constitute or imply any partnership, joint venture, agency, fiduciary relationship or other relationship between the Parties other than the contractual relationship expressly provided for in the Contract. Neither Party shall have, nor represent that it has, any authority to make any commitments on the other Party's behalf.
- 21.9 Except as otherwise expressly provided by the Contract, all remedies available to either Party for breach of the Contract (whether under the Contract, statute or common law) are cumulative and may be exercised concurrently or separately, and the exercise of one remedy shall not be deemed an election of such remedy to the exclusion of other remedies.
- 21.10 If any provision of the Contract is prohibited by law or judged by a court to be unlawful, void or unenforceable, the provision shall, to the extent required, be severed from the Contract and rendered ineffective as far as possible without modifying the remaining provisions of the Contract, and shall not in any way affect any other circumstances of or the validity or enforcement of the Contract.

22 **NOTICES**

- 22.1 Any notice to be given under the Contract shall be in writing and may be served by personal delivery, first class recorded or, subject to clause 22.3, e-mail to the address of the relevant Party set out in the Award Letter, or such other address as that Party may from time to time notify to the other Party in accordance with this clause.
- 22.2 Notices served as above shall be deemed served on the Working Day of delivery provided delivery is before 5.00pm on a Working Day. Otherwise delivery shall be deemed to occur on the next Working Day. An email shall be deemed delivered when sent unless an error message is received.
- 22.3 Notices under clauses 16 and 17 may be served by email only if the original notice is then sent to the recipient by personal delivery or recorded delivery in the manner set out in clause 22.1.

23 GOVERNING LAW AND JURISDICTION

- 23.1 The validity, construction and performance of the Contract, and all contractual and non-contractual matters arising out of it, shall be governed by English law and shall be subject to the exclusive jurisdiction of the English courts to which the Parties submit.

Specification

- 1 The Suppliers shall provide the Goods and/or Services in accordance with this Schedule 2.

Introduction

Innovate UK is committed to rigorous evaluation of all our key programmes, including A4I. The programme will benefit from an independent impact evaluation of our investment in the Analysis for Innovators portfolio.

The aim of the evaluation is to inform ongoing and future improvements of the fund to maximise the value of public funding (in particular, the possibility of future growth of A4I) and demonstrate what the fund delivered for taxpayers and help Innovate UK build the evidence base on effectiveness in a collaborative problem-solving competition.

The evaluation is intended to utilise data from Innovate UK linked to large ONS (Office of National Statistics) datasets on businesses' performance and innovation activity. It's envisaged that these links will be made using the firms' Companies House Registration Numbers (CRNs) and the Inter-Departmental Business Register (IDBR). This evaluation will apply econometric techniques to analyse the impact of Innovate-UK's A4I programme on the turnover, employment, and survival of supported firms. This analysis should also investigate possible effects on the financial performance of supported firms, such as, growth in their total assets. The budget for this work is estimated at £50k (including VAT).

2

Background

Analysis for Innovators (A4I) is a programme that brings together top scientists and experts from a small defined set of special A4I partner organisations (chosen for their unique world-class skills, expertise and cutting-edge facilities) with applicant companies who have challenging measuring and analysis problems to solve.

To date, approximately 210 successful applicants were awarded grants to facilitate their project proposal. The table below shows the number projects per round in receipt of Innovate UK's funding.

Competition Round	Competition Year	Number of projects	Total Award
Round 1	2017/2018	30	£1.06m
Round 3	2018/2019	52	£1.08m
Round 4	2019/2020	33	£1.9m
Round 5	2020/2021	47	£2.3m
Round 6	2021/2022	49	£0.9m

3

4

Aims and Objectives

The aim of the evaluation is to inform ongoing and future improvements of the fund to maximise the value of public funding (in particular, the possibility of future growth of A4I) and demonstrate what the fund delivered for taxpayers and help Innovate UK build the evidence base on effectiveness in a collaborative problem-solving competition.

Requirement

This is a matching/difference in difference study with a relatively small sample of around 200 treated companies.

Empirical Framework

We are anticipating that the contractor will apply the commonly used estimation technique of Difference-in-Differences (DiD). This is a technique used to estimate the difference between the outcomes of two groups – the treated group and the matched control group (counterfactual) – before and after receiving support.

We can use several methods to construct an appropriate substitute for the counterfactual, methods suggested are as follows but there may be others:

- Difference-in-Difference model using Propensity Score Matching (PSM);
- Difference-in-Difference model using nearest neighbour matching;

5

6

Data and information to be used in the evaluation

We suggest that the following are data sources for data linking:

•A4I's Programme Management Data

This dataset is used by IUK to keep track of applications made by companies. It contains information on the company name, the year the company received treatment, the project type and the project status (completed, withdrawn, rejected, etc.).

•FAME (Financial Analysis Made Easy) by Bureau van Dijk

•ONS datasets available through a Microdata Lab or the Secure Research Service (SRS).

Analysis and synthesis

•The bidder is invited to set out proposed approaches to the analysis of data and synthesis of the evidence that are robust, systematic and ensure that all findings and conclusions are grounded in the available evidence. This includes being explicit about the limitations, evidence gaps and uncertainties.

•Where possible, it is anticipated that the successful proposal will make use of one or more appropriate counterfactuals. Proposals should set out the population of any counterfactual that will be used, and why this represents the most appropriate control group(s).

• The evaluation should be undertaken in line with the broad principles set out in the Government's overarching appraisal, evaluation and quality-assurance frameworks as represented by the Green, Magenta and Aqua books.

4. Tender information required

1. An outline of your understanding of the task
2. Your approach to the work including how you will engage with the client during the different stages of the project
3. Your project plan – this needs to be appropriate to the task, and provide clarity and detail on the proposed solution
4. An outline methodology, including a discussion of issues, limitations and risks and how these will be dealt with in the project
5. Your approach to ensuring the project is adequately resourced in line with the contract timescales together with a description of any risks and contingencies
6. Relevant company experience
7. Details of the project team
8. Costs broken down by deliverable and project team with day rates for each role

Deliverable	Due date	Payment points
Cleaned and datalinked dataset for treated group and counterfactual group	1st May 2023	Interim Invoice
Interim Report	31st June 2023	Interim Invoice
Draft Final Report	31st July 2023	

Final Report	31st August 2023	Final Invoice
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The Charges for the Goods and/or Services shall be as set out in this Schedule 3.

The total value of this contract shall not exceed £29,800.00 excluding VAT

Where the Services are to be provided on a time and materials basis, the Charges for those Services will be calculated as follows:

- (a) the charges payable for the Services will be calculated in accordance with the Supplier's day rates as follows:
- (b) the Supplier's day rates for each individual person are calculated on the basis of an eight-hour day worked between such hours and on such days as are agreed by UKRI and the Supplier;
- (c) the Supplier will not be entitled to charge pro-rata for part days without the prior written consent of UKRI;
- (d) the Supplier will ensure that every individual whom it engages to perform the Services completes time sheets recording time spent on the Services and the Supplier will use such time sheets to calculate the charges covered by each invoice and will provide copies of such time sheets to UKRI upon request; and
- (e) the Supplier will invoice UKRI monthly in arrears for its charges for time, as well as any previously agreed expenses and materials for the month concerned calculated as provided in this paragraph 0 and paragraph 0.

[Expenses

UKRI will reimburse the Supplier at cost for all reasonable travel, subsistence and other expenses incurred by individuals engaged by the Supplier in providing the Services to UKRI provided that UKRI's prior written approval is obtained before incurring any such expenses, that all invoices for such expenses are accompanied by valid receipts and provided that the Supplier complies at all times with UKRI's expenses policy from time to time in force.]

Schedule 3 / Supplier Proposal

PS23031 UKRI - Innovate UK Econometric study on A4I
Commercial - In Confidence

1

QUOTATION RESPONSE

6 April 2023

PS23031 UKRI
Innovate UK Econometric study on A4I

XPAND GROUP LIMITED

Unit 1, Weavers Court
Linfield Industrial Estate
Linfield Road
Belfast
BT12 5GH

info@xpand.group

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EXECUTIVE SUMMARY

Xpand Group Ltd will lead and deliver this service, using tools and software that it has developed since 2018 to carry out the dynamic econometric analysis of the A4I programme. These tools have been developed in line with UK government requirements for software available via G-Cloud and other UK government procurement frameworks.

Xpand is an independent, privately owned company with staff and data services based in the UK for the purposes of insurance, UK GDPR and data hosting.

Xpand has established a reputation as an expert provider of high-quality economic development software and consultancy services to both public and private sectors in the UK.

Xpand Group Ltd provides information and software services throughout the UK and offers a software-based data-driven approach for economic impact analysis.

Xpand Group Ltd is able to bring in additional capacity from a strategic partner in order to conduct calls, receive inbound calls from businesses and schedule data collection utilising the Xpand platforms.

The strategic partner is a limited company based in Glasgow with 50 team members, capable of providing call centre capacity on a flexible basis. The strategic partner has experience delivering call centre capacity for UK / Scottish government home heating contracts and services.

Xpand Group Ltd has experience working on government programmes and has access to additional external support services as the 'Xpand Team', and we are pleased to provide this fully compliant quotation.

In this quotation we have demonstrated our subject matter expertise by breaking down the Work Packages and Tasks of the Requirement into a clear sequence of activities. We have made a clear statements approach needed to fulfil those activities. We have made clear statements of the outputs and deliverables from those activities. We have made clear identifications of the assumptions made in defining those activities. This unambiguous statement of the work to be done shows that we know what we are doing.

Xpand Group Ltd has an excellent track record delivering projects to government organisations within the UK, and we believe our combination of subject matter expertise, experience and flexibility will ensure that all objectives and the value-added requirement of the proposed Econometric study will be achieved on time.

INTRODUCTION

This document is a response to the Quotation Request titled “PS23031 UKRI - Innovate UK Econometric study on A4I” issued 31st March 2023.

We understand that Innovate UK has a requirement for a matching/difference in difference study with a relatively small sample of around 200 treated companies.

POINT OF CONTACT

The Project Manager and point of contact for the project will be [REDACTED]

Name:	[REDACTED]	
Position:	Project Manager	
Address:	Xpand Group Ltd Unit 1 - Weavers Court Linfield Industrial Estate, Linfield Road Belfast BT12 5GH	
Telephone:	[REDACTED]	
E-mail:	[REDACTED]	

COMMERCIAL RESPONSE

Firm Price

The Firm Price (ex VAT) cost, based on estimated effort and day rates, excluding T&S is £29,800+VAT.

A maximum [REDACTED] is proposed for T&S.

Proposed Payment Plan

We accept the proposed invoice milestones which are directly linked to the required deliverables.

#	Description	Due	Payment (ex VAT)
1	Cleaned and data linked dataset for treated group and counterfactual group. Assumption: This relates to the provision of the relevant datasets / documentation from Innovate UK. Dependence: Innovate UK provision of the relevant data set on Contract Award. Audit of file by 17th April 2023 - Completeness - Available data Enriched datafile within 3 weeks 8th May 2023 Counterfactual group within 6 weeks 29th May 2023	1 May 2023	[REDACTED]
2	Interim Report	30 June 2023	[REDACTED]
3	Draft Final Report	31 July 2023	[REDACTED]
4	Final Report	31 August 2023	[REDACTED]
		Total	[REDACTED]
	5% Estimated T&S		[REDACTED]

Table 5: Payment Plan

Conflict of Interest

Xpand Group Ltd is a Private Limited Company and we can therefore confirm that we are independent of all suppliers and primes, or other organisations that may have an interest in this project or the supply of items associated with this project.

Where conflicts of interest are identified, Xpand Group Ltd has a well-defined process for handling them by implementing firewalls and ensuring segregation of personnel.

Quotation Validity Period

This tender/quotation is valid for 90 days. Any dates quoted assume commencement of the project by the indicated start date.

1. Outline - Xpand Team Understanding of the Task

Analysis for Innovators (A4I) Fund Background

Analysis for Innovators (A4I) is a programme that brings together top scientists and experts from a small defined set of special A4I partner organisations (chosen for their unique world-class skills, expertise and cutting-edge facilities) with applicant companies who have challenging measuring and analysis problems to solve.

The Analysis for Innovators (A4I) competition is a unique program that pairs applicant companies facing complex measuring and analysis problems with top scientists and experts from a select group of partner organisations chosen for their world-class skills and expertise. Unlike other R&D competitions, A4I focuses on addressing existing industry-wide problems rather than developing new products or techniques.

The program attracts innovative applicants seeking to bring together the best experts to solve complex problems. However, this may result in an increase of representation from academic institutions, which must be accounted for in the analysis. Additionally,

A4I has clear objectives for resolving pre-defined industry problems known at the beginning of each project.

Innovate UK Requirements Outline

To date, approximately 210 successful applicants were awarded grants to facilitate their project proposal. The table below shows the number of projects per round in receipt of Innovate UK's funding.

Round/Competition	Year	Number of projects	Total Award
Round 1	2017/2018	30	£1.06m
Round 3	2018/2019	52	£1.08m
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Round 5	2020/2021	47	£2.3m
Round 6	2021/2022	49	£0.9m

The aim of the evaluation is to inform ongoing and future improvements of the fund to maximise the value of public funding (in particular, the possibility of future growth of A4I) and demonstrate what the fund delivered for taxpayers and help Innovate UK build the evidence base on effectiveness in a collaborative problem-solving competition.

The evaluation is intended to utilise data from Innovate UK linked to large ONS (Office of National Statistics) datasets on businesses' performance and innovation activity. It's envisaged that these links will be made using the firms' Companies House Registration Numbers (CRNs) and the Inter-Departmental Business Register (IDBR).

Analysis Requirements

The data requires a matching/difference in difference study using the following techniques to estimate the difference between the outcomes of two groups, the treated group and the matched control group (counterfactual):

- Difference-in-Differences(DiD) Analysis (before and after receiving support)
- Difference-in-Difference model using Propensity Score Matching (PSM);
- Difference-in-Difference model using nearest neighbour matching

High Level Requirements Outline

1. Secure data from Innovate UK, ONS, Companies House, IDBR
2. Analyse and link the available data held by Innovate UK
3. Secure additional data about participating A4I businesses from external / open / licensed sources
4. Import the datasets into internal Xpand data store / linked by CRN
5. Identify any data gaps
6. Capture the necessary data from the businesses using Xpand data capture platform (Xpand Access / Xpand Insights)
7. Identify and create appropriate control groups
8. Carry out difference in difference analysis against the control groups
 - a. DiD 1 - Pre and Post Project (against same company)
 - b. DiD 2 - Against perceived counterfactual (self-reported)
 - c. DiD 3 - Nearest neighbour analysis
 - d. DiD 4 - Propensity Score Matching (PSM) / Xpand Database
 - e. DiD 5 - Unsuccessful cohort applicants
9. Create individual business report / scorecard based on empirical data and DiD analysis
10. Create dashboards of the programme results
11. Create a report of the outputs
12. Ongoing potential recurring analysis

Deliverables

Treated Dataset - Cleaned, Linked / Matched Business Dataset (linking ONS / IBDR record)

- Initial - Within 3 weeks of receipt of IUK data
 - Ongoing - Interim updated files made available alongside the 25% / 50% / 75% meetings
 - Final Dataset - On project completion alongside final report
-
- Handling and sourcing the gaps in the dataset are in scope of this work where possible
 - Dataset gaps will be identified by the 25% review session by week 6
 - Gaps will be treated by Xpand datasets, Open and Licenced Datasets, Xpand data partners, Innovate UK, contacting the business where appropriate (Email, Phone, Letter)

Assumption : This deliverable relates to the assumptions that Innovate UK will provide cleansed / matched / treated data. Xpand interprets that if the data is being cleansed and available, Xpand will carry out and deliver an audit of the cleansed data on receipt of the data for completeness / delivery by the 1st May 2023.

If the data is not provided within a cleansed or matched machine readable format - Xpand will match and cleanse the data within the first 6 weeks and deliver the files that will be used to Innovate UK.

Control Dataset - Cleaned, Linked / Matched Control / Counterfactual Group Datasets

- Initial - Within 6 weeks of receipt of IUK data as characteristics of the cohort business are required
- Ongoing - Interim control files made available alongside the 25% / 50% / 75% report meetings
- Final - The cohort data that was used for the final report

Proposed Report Outline

An outline of the initial headings will be presented to Innovate UK, for any specific headings to be considered when looking at the data. The feasibility of each proposed heading will be included within the 50% Draft Report meeting (30th June).

(25%) Data Review Session - Week 6

Xpand will present the initial analysis, business profiles and comparison with control groups to enable Innovate UK to sign off the remaining report and confirm that the analysis presentation is as expected.

Within this session Xpand / Innovate UK will agree how to handle exceptional / out of scope data

- What data to be used in its place
- Data audit results
- List of options to secure the data

(50%) Interim Report - Week 10 (30th June 2023)

Headings and findings from the report based on the initial signed off presentation will be completed.

At this point Xpand will present to Innovate UK about which sections they are able to deliver based on the available data - giving a more accurate reflection of the quality of the data.

(75%) Draft Final Report - Review Session - Week 16 (31st July 2023)

- Where additional support or effort is required to capture the final results
- Review about which exceptional data will be handled, where data is not available whether to include or exclude from analysis
- Presentation of the different variations of the comparison of the control groups
- Draft Final Report and Executive Summary

Final Report - Week 20 (31st August 2023)

Finalised report with commentary, executive summary and agreed sections

Supporting Evidence (PDFs for each business)

PDFs of each business econometric analysis completed

Programme Dashboard (Data visualisations for each cohort)

Dashboard / graphs showing the DiD analysis against the control groups for the different

- Cohorts
- Industries
- Collective Results

Interactive Business Dashboard

An interactive dashboard of business records, will enable Innovate UK to individually explore the results of each business including their data, findings, DiD (before and after), comparison against sector average, comparison against nearest neighbour.

This will enable the client to view the data trends against the view of multiple trends.

This will enable the view of individual business, counterfactual and cohort data.

A first version of this will be published on **Week 11**.

Initial Report Outline

The following headings are expected to be the headings that the report will follow:-

1. Executive Summary
2. List of Figures
3. Introduction
4. Data and methodology
5. The data of treated companies
6. Data points and data quality
7. Focus on limited liability companies
8. Control Group - DiD 1 - Pre and Post Project (against same company)
9. Control Group - DiD 2 - Against perceived counterfactual (self-reported)
10. Control Group - DiD 3 - Nearest neighbour analysis
11. Control Group - DiD 4 - Propensity Score Matching (PSM) / Xpand Database
12. Control Group - DiD 5 - Unsuccessful cohort applicants
13. Performance measures and controls
14. Descriptive statistics
15. Empirical approach
16. Results
 - a. Overall results
 - b. Growth of assets
 - c. Growth of sales
 - d. Growth of employment
 - e. Profits
 - f. Assets intangibility
 - g. Survival
17. Sole proprietorships
18. Results by geographical area
19. Results by industry
20. Moderating effects
21. Conclusions

Report Feedback Timeline

- Within the first 6 weeks, Innovate UK will get the option to request specific areas of analysis to be considered within the report and dashboards.
- Within the first 2 months, Xpand will carry out an audit of the available data to identify what can be included within the assessment of the fund, and the quality of the available data.
- Upon 25% of the businesses being assessed - samples of the datasets and individual business analysis scorecards will be provided to innovate UK for a feedback review session to be scheduled.
- Upon 50% of the businesses being assessed - a draft outline of the report will be produced to give an opportunity for further feedback on the approach to be provided and how the data will be separated and arranged for cohort analysis.
- Upon 75% of the businesses being assessed - any missing data after agreed treatment will be highlighted to identify what action will be take, a Draft Final Report and Draft Executive Summary will be produced.
- Upon completion of business assessments, the final report / executive summary will be produced.

Xpand will prepare results and produce a dashboard and report of the results and feedback grouped by:-

- All businesses receiving funding
- Individual Cohorts (rounds)
- Company Ownership Types
- Industry Sectors

Key data points to assess impact on each business

- Turnover / Revenue
- Employment
- Survival
- Financial Performance
- Asset Growth
- Company Name
- Year of funding
- Project Type
- Project Status
- Key points within project reports (Text analysis)

Key Data Sets

Linking to Xpand business record using CRN, company name, registered postcode

- Xpand Business Data Store
- Xpand Investment Database
- Companies House
- IUK Programme Impact Data
- FAME (Financial Analysis Made Easy)
- ONS
- IDBR

2. Your approach to the work including how you will engage with the client during the different stages of the project

Approach

Task 1 - Kickoff Meeting / Requirements Review with Innovate UK

Start Week :1

End Week : 2

Dependencies :

Details : Initial meeting between Xpand and Innovate UK to ensure everyone is aligned on the project goals, requirements, and timelines. This will minimise confusion and avoid any misunderstandings down the road. Agenda could include:-

- Introductions
- Overview
- Requirements Review
- Timeline Review
- Roles and Responsibilities
- Communication Plan
- Next Steps

Task 2 - Agreeing overall report outline, headings and structure (UKRI)

Start Week :1

End Week : 2

Dependencies :

Details : The goal of this task is to establish a clear plan for the report that will guide the writing process and ensure that the final report is well-organised and easy to read. Anticipated discussion topics:-

- Define the purpose of the report
- Identify key sections of the report
- Develop an outline
- Agree an overall structure

Task 3 - Setting up project management area / communication channels / meetings

Start Week :1

End Week : 2

Dependencies :

Details : Establishing the infrastructure and processes that will support effective project management and communication throughout the project lifecycle, including:-

- setting up dedicated project management tools, software, resources, and documentation
- determining the communication channels to be used to inform and update everyone involved e.g. email, Slack, messaging
- scheduling regular meetings with team, Innovate UK, and other stakeholders
- establishing project management processes e.g. risk management, quality control

Task 4 - Setting up data sharing agreements, data processing agreements, contractor agreements, mutual NDA and Terms & Conditions, Required 3rd party agreements (Data Providers / Contractors)

Start Week :1

End Week : 2

Dependencies :

Details : Establishing the legal and contractual frameworks necessary to protect the interests of all parties involved and to ensure that the project can proceed smoothly and without any legal issues. This ensures that everyone is on the same page and that the project can proceed smoothly without any legal issues or misunderstandings.

- Data Sharing Agreements: outlines the terms and conditions under which data will be shared
- Data Processing Agreements: outlines the terms and conditions under which data will be processed
- Contractor Agreements: outlines which contractors and terms and conditions under which they will provide services to the project
- Mutual NDA: outlines the terms and conditions under which confidential information will be shared
- Terms and Conditions: outlines the relationships between the parties, as well as T&Cs for the users of the platform
- Third Party Agreements: terms and conditions necessary to be agreed with by any additional external partners

Task 5 - Agreeing and setting up secure data transfer areas for files between Xpand and Innovate UK

Start Week :1

End Week : 2

Dependencies :

Details : Creating a secure method for transferring files between Xpand and Innovate UK. The goal of this task is to ensure that any sensitive or confidential information is transmitted securely and that the data remains protected throughout the transfer process, reducing the risk of data breaches or other security incidents.

- Agreeing on the data transfer method
- Setting up the secure transfer areas
- Establishing user access controls
- Testing the secure transfer areas

Task 6 - Agreeing digital messaging communications strategy with Innovate UK / partners with businesses (How Xpand will send messages to businesses on behalf of Innovate UK, messaging, branding guidelines)

Content and required legal text

Start Week :1

End Week : 3

Dependencies :

Details : Establishing a clear and effective messaging strategy that aligns with the Innovate UK's branding guidelines and ensures that all communications are consistent and on-brand.

- Defining the messaging objectives
- Identifying the target audience
- Developing the messaging content
- Agreeing on the messaging channels
- Establishing branding guidelines

- Testing and refining the messaging strategy

Task 7 - Discussion and agreeing of control group methodologies

DiD 1 - Pre and Post Project (against same company)

DiD 2 - Against perceived counterfactual (self-reported)

DiD 3 - Nearest neighbour analysis

DiD 4 - Xpand Database (Sample 50 Businesses)

DiD 5 - Unsuccessful cohort applicants

Start Week :1

End Week : 10

Dependencies :

Details : Understanding the pros and cons of each of the 5 methodologies and understanding potential outcomes given the available data and other practical considerations.

Task 8 - Agreeing phone call and video call scripts and terms of engagement

Start Week :4

End Week : 5

Dependencies : 6

Details : Defining the purpose and goals of the call, as well as outlining the topics to be discussed and any necessary preparation that needs to be done beforehand.

Agreeing on the specific terms of engagement for calls, such as the duration, frequency, and scheduling of the calls. This includes deciding on the preferred communication channels, such as video conferencing platforms or phone systems, and establishing guidelines for how participants should behave and communicate during the call.

Task 9 - Setting up data capture platform with agreed branding, communications and terms and conditions

Start Week :4

End Week : 5

Dependencies : 6

Details : Making necessary changes to our data capture platform that adheres to the agreed-upon branding, communication guidelines, and terms and conditions which will allow users to provide data in a structured and organised manner.

- branding and communication guidelines must be clearly defined and agreed upon by the parties
- terms and conditions for using the data capture platform must be clearly defined, including any legal or ethical considerations related to data privacy and security

Task 10 - Receive data from UKRI (Project Data, ONS, IDBR)

Start Week :1

End Week : 3

Dependencies : 4

Details:- establish secure data sharing agreements and data processing agreements
- setting up APIs or obtaining relevant credentials to allow access to data

Task 11 - Conducting audit of available UKRI data (Project Data, ONS, IDBR)

Start Week :2

End Week : 4

Dependencies : 10

Details : Reviewing and assessing the data available from UKRI, including Project Data, Office for National Statistics (ONS), and Inter-Departmental Business Register (IDBR).

- Evaluate the quality, completeness, and relevance of the data for the project. This may involve identifying any gaps or inconsistencies in the data, as well as determining whether the data is suitable for the project's analytical needs.
- Identifying the suitable tools and techniques e.g. data cleaning, data profiling, and data visualisation

Task 12 - Agree data values / questions for business impact tracking - agreeing KPIs

Start Week :2

End Week : 4

Dependencies : 4

Details : Using data collected, the team can develop a set of KPIs that will be used. These KPIs should be specific, measurable, and relevant to the goals and objectives of the project, and should be agreed upon by all relevant stakeholders. This ensures that we are measuring the most relevant and impactful aspects of the project's impact on the business.

Task 13 - Agreeing individual business scorecard report requirements

Start Week :5

End Week : 7

Dependencies : 12

Details:- identify the specific metrics or KPIs that are most relevant for measuring the business's performance

- determine the specific requirements for the report
- deciding on the format and structure of the report, such as the use of charts, graphs, and other visual aids, as well as establishing guidelines for the presentation of the data

Task 14 - Set up questions / data points within the Xpand platform

Start Week :5

End Week : 6

Dependencies : 4

Details:- establishing a set of questions or data points that will be used to collect data

- identify the specific information they wish to collect, this will determine the questions or data points required
- determine the appropriate response options and any necessary validation criteria to ensure the accuracy and reliability of the data collected
- adding questions to platform
- testing questions to ensure accuracy of function and data collection

Task 15 - Cleansing data from UKRI (Project Data, ONS, IDBR)

Start Week :4

End Week : (6) 1st May

Dependencies : 10

Details:- reviewing and refining the data to ensure that it is accurate, complete, and consistent

- use various data management and analysis tools and techniques, such as data cleaning, data profiling, and data visualisation
- if necessary, consult with subject matter experts or technical sources to verify the accuracy and completeness of the data

Task 16 - Importing cleansed data from UKRI (Project Data, ONS, IDBR)

Start Week :5

End Week : 7

Dependencies : 15

Details:- Imported into Xpand's database using data integration tools and techniques whether manually or via APIs

- Data accurately mapped and tagged

Task 17 - Calculate Innovate UK project data - pre / post funding analysis

Start Week :6

End Week : 8

Dependencies : 15

Details:- analysing the impact of an Innovate UK project on a business by comparing data from before and after the project was funded

- comparing the data from before and after the project was funded, the team can identify any changes in the business's performance that can be attributed to the project.
- establishing a baseline for comparison

Task 18 - Agreeing business cohort / funding round analysis methodology and approach

Start Week :8

End Week : 10

Dependencies : 16

Details:- determine the specific goals and objectives of the analysis, as well as the data points that will be used to evaluate the businesses or funding round

- determine the appropriate methodology and approach for analysing the cohort of businesses or funding round
- consider other factors that could impact the analysis, such as sample size, data quality, or the potential for bias in the data
- identify the need to establish controls or other measures to ensure analysis is conducted in a rigorous and reliable manner

Task 19 - Matching business records based on CRN : Enriching the business record data with information from Companies House / Xpand Data Store / R&D / Investment Information

Start Week :5

End Week : 10

Dependencies : 10

Details : Identifying and matching business records based on their company registration number (CRN) and enriching the data with additional information from various sources.

- matching the records to data already collected
- enrichment with additional data includes business structure, ownership, or financial performance

Task 20 - Identifying control groups from the 200 business records

Start Week :5

End Week : 10

Dependencies : 10

Details:- identify a set of criteria that will be used to select the control group, such as size, sector, location, or other relevant factors

- selection process may involve using various data analysis and visualisation tools to identify patterns and trends in the data, as well as consulting with subject matter experts or external data sources to verify the accuracy and completeness of the data
- once the control group has been identified, the project team can then use it to establish a baseline for comparison with the businesses that received funding or support

Task 21 - Sending out surveys to businesses for any missing data

Start Week :7

End Week : 14

Dependencies : 14

Details:- identify the specific data points that are missing or incomplete, such as sales revenue, employee data, or customer feedback

- develop questions / surveys
- ensure businesses understand the purpose of the survey and are willing to participate
- once data is collected we integrate the data into the analysis and reporting

Task 22 - Follow up communications with businesses

Start Week :9

End Week : 16

Dependencies : 21

Details:- provide updates, answer questions, and address any issues or concerns that may arise with business via the platform, but can also be carried out via email, phone or video conferencing

Task 23 - 25% business report overview (Data Review)

Meeting with UKRI to present the data

Start Week :6

End Week : 6

Dependencies : 11

Details:- once relevant data compiled, reviewed and analysed this will be presented to UKRI to present the data

- report will provide an overview of the findings, highlighting any areas of particular interest or concern
- discussion of findings, feedback undertaken and confirming way forward

Task 24 - Business scorecard development and demonstration

Start Week :5

End Week : 10

Dependencies : 13

Details:- developing a scorecard or dashboard that presents key metrics and indicators

- once relevant metrics / KPIs established, a scorecard will be developed with feedback from UKRI
- demonstration of scorecard undertaken with review of the data, discussion of any insights or trends

Task 25 - Business Level Analysis (200 records)

Start Week :5

End Week : 19

Dependencies : 12

Details:- cleaning and analysing the data collected from the 200 businesses involved in the project to identify patterns and trends

- analysis will be undertaken using a variety of tools including machine learning algorithms
- final results will be presented with a visualisation

Task 26 - Report text analysis / analysis of reports and text completed by each business

Start Week :7

End Week : 10

Dependencies : 19

Details : The process of analysing the written reports and other text-based materials submitted by each business involved.

- using tools and techniques to evaluate the content and identify any patterns or trends that may be useful
- analysis may involve various techniques, such as natural language processing, sentiment analysis, or topic modelling, to identify common themes or patterns

Task 27 - Create a report dashboard for each business

Start Week :5

End Week : 10

Dependencies : 19

Details:- dashboards that presents key metrics and indicators of the impact on individual businesses

- dashboard may include visualisations such as charts, graphs, or tables, as well as written descriptions or narratives that provide additional context and insights

Task 28 - Create a PDF report for each business

Start Week :11

End Week : 20

Dependencies : 27

Details:- a comprehensive report that provides an overview of the business, highlighting any areas of particular interest or concern

- visualisations such as charts, graphs, or tables to present the data in a clear and concise format
- analysis can include impact of funding on business and recommendations for future actions

Task 29 - 50% business report overview (Interim Report)

Start Week :9

End Week : (10) 30th June

Dependencies : 24

Details:- reviewing the project's progress at the halfway point and presenting an overview of the findings

- prepare an interim report that provides an overview of the findings
- meet with UKRI to present the interim report and discuss the findings
- review of the data, as well as a discussion of any recommendations or actions that may be necessary
- UKRI will also have the opportunity to ask questions or provide feedback on the report

Task 30 - Scheduling calls for any required assisted data capture

Start Week :9

End Week : 19

Dependencies : 25

Details:- scheduling calls or meetings with businesses to help them with any aspects of data capture that they may be struggling with

- identify any businesses that may require assistance. This may include businesses that are experiencing technical difficulties or require additional support or guidance to complete the questions.
- calls or meetings scheduled to provide the necessary assistance.
- during the calls, Xpand may also provide additional guidance or training on how to use the platform
- the calls may also provide an opportunity for Xpand to collect feedback from the businesses on how to improve the process and make it more user-friendly

Task 31 - Create a dashboard of the cohort results

Start Week :11

End Week : 19

Dependencies : 27

Details:- developing a dashboard that presents key metrics and indicators of the funding impact on the cohort of businesses involved

- dashboard can be used to develop insights and recommendations that can be used to inform key decision-making processes, such as identifying areas for improvement, optimising resource allocation, or developing targeted interventions to support the businesses involved

Task 32 - 75% business report overview (Draft Final Report)

Start Week :16

End Week : (16) 31st July

Dependencies : 30

Details:- reviewing the project's progress at the 75% mark and presenting a draft final report to UKRI for feedback

- draft final report that provides an overview of the findings, highlighting any areas of particular interest or concern
- meeting to present the draft final report and discuss the findings
- discussion of any recommendations or actions that may be necessary to achieve the project's objectives
- UKRI will have the opportunity to ask questions or provide feedback on the report.
- At this point, a draft executive summary will be produced and available

Task 33 - Client follow up campaign to secure last 25% of data (Calls, Email, Post)

Start Week :15

End Week : 20

Dependencies : 30

Details:- contacting businesses that have not yet completed the questions to encourage them to submit the remaining data

- identify the businesses that have not yet completed the questions
- develop a follow-up campaign that includes a combination of phone calls, emails, and video conferences to encourage the businesses to submit the remaining data
- messages may be tailored to the specific needs and concerns of each business
- during the follow-up campaign, Xpand may also provide additional guidance or support to help the businesses complete the questions (e.g. technical support, training, or other resources to address any issues or concerns).

Task 34 - Create impact uplift report and dashboard

Start Week :11

End Week : 19

Dependencies : 24

Details:- data collected and analysed will be developed into an impact uplift report and dashboard to present the findings of the data analysis

- will also provide insights and recommendations that can be used to inform key decision-making processes, such as identifying areas for improvement, optimising resource allocation, or developing targeted interventions to support the businesses involved

Task 35 - 100% business report overview (Final Report)

Start Week :18

End Week : (20) 31st Aug 2023

Dependencies : 31

Details:- reviewing the project's progress at the end of the data capture process and presenting a final report to UKRI that summarises the findings

- final report that provides an overview of the findings, highlighting any areas of particular interest or concern. The final report will be presented in a format as agreed with UKRI at the start of this project.
- meeting to present the final report and discuss the findings. This may involve a detailed review of the data, as well as a discussion of any recommendations or actions that may be necessary to achieve the project's objectives.
- UKRI will also have the opportunity to ask questions or provide feedback on the report.

Task 36 - Ongoing evaluation framework (Optional)

Start Week :17

End Week : 20

Dependencies : 31

Details:- identify the key indicators and metrics that will be used for this task

- develop a framework for collecting and analysing the data on an ongoing basis
- ongoing evaluation framework may also include a mechanism for continuous improvement, allowing the project team to make adjustments to the project plan based on the ongoing data analysis and stakeholder feedback

Task 37 - (Optional) DiD : Business cohort analysis / Comparing cohort vs cohort

Start Week :11

End Week : 20

Dependencies : 31

Details:- conducting a Difference-in-Differences (DiD) analysis on the intervention data to compare the impact of the intervention on different cohorts of businesses

- identify the relevant cohorts to compare, such as businesses that received the intervention at different times or in different regions
- compile and clean the data collected from the businesses
- DiD analysis will then be conducted to compare the impact of the project on the different cohorts
- using statistical methods to control for other factors that may affect the outcomes, such as changes in the market or industry trends
- results of the DiD analysis will then be presented in a report or dashboard, highlighting any differences or similarities in the impact of the project on the different cohorts

Task 38 - DiD 1 - Pre and Post Project (against same company)

Start Week :7

End Week : 19

Dependencies : 21

Details:- conducting a Difference-in-Differences (DiD) analysis on the intervention data to compare the impact of the intervention on the same company before and after the intervention

- compile and clean the data collected from the same company
- DiD analysis will then be conducted to compare the impact of the project on the same company before and after the project intervention
- using statistical methods to control for other factors that may affect the outcomes, such as changes in the market or industry trends
- results of the DiD analysis will then be presented in a report or dashboard, highlighting any differences or similarities in the impact of the project on the same company before and after the project intervention

Task 39 - DiD 2 - Against perceived counterfactual (self-reported)

Start Week :7

End Week : 19

Dependencies : 21

Details:- conducting a Difference-in-Differences (DiD) analysis on the project data to compare the impact of intervention on businesses against their own perceived counterfactual (what would have happened to them in the absence of the intervention)

- collect and analyse data from businesses that received the intervention, as well as data from a control group of businesses that did not receive the intervention
- compile and clean the data collected from the businesses
- DiD analysis will then be conducted to compare the impact of the project on the businesses against their own perceived counterfactual
- may involve using self-reported data from the businesses to estimate what would have happened to them in the absence of the project intervention
- results of the DiD analysis will then be presented in a report or dashboard, highlighting any differences or similarities in the impact of the project on the businesses against their own perceived counterfactual

Task 40 - DiD 3 - Nearest neighbour analysis

Start Week :4

End Week : 19

Dependencies : 10

Details:- conducting a Difference-in-Differences (DiD) analysis on the intervention data using a nearest neighbour approach to identify the most similar businesses in the control group for comparison with the intervention group

- compile and clean the data collected from the businesses
- identify the intervention group and control group of businesses for the analysis
- nearest neighbour approach involves identifying the most similar businesses in the control group to the intervention group based on a set of criteria such as business size, industry, location, and other relevant factors. These similar businesses will then be used as the comparison group for the DiD analysis.
- DiD analysis will then be conducted to compare the impact of the project on the intervention group against the most similar businesses in the control group. This may involve using statistical methods to control for other factors that may affect the outcomes, such as changes in the market or industry trends.
- results of the DiD analysis will then be presented in a report or dashboard, highlighting any differences or similarities in the impact of the project on the intervention group and the most similar businesses in the

control group

Task 41 - DiD 4 - Xpand Database (Sample 50 Businesses)

Start Week :4

End Week : 19

Dependencies : 10

Details:- conducting a Difference-in-Differences (DiD) analysis on a sample of 50 businesses from the project's own database to compare the impact of the intervention on these businesses before and after the intervention

- compile and clean the data collected from the sample of 50 businesses
- DiD analysis will then be conducted to compare the impact of the intervention on the sample of 50 businesses before and after the intervention. This may involve using statistical methods to control for other factors that may affect the outcomes, such as changes in the market or industry trends.
- results of the DiD analysis will then be presented in a report or dashboard, highlighting any differences or similarities in the impact of the intervention on the sample of 50 businesses before and after the intervention

Task 42 - DiD 5 - Unsuccessful cohort applicants

Start Week :4

End Week : 10

Dependencies : 10

Details:- conducting a Difference-in-Differences (DiD) analysis on the intervention data to compare the impact of the intervention on businesses that were unsuccessful in their application to participate in the intervention, against businesses that were successful

- compile and clean the data collected from the businesses
- identify the group of businesses that were unsuccessful in their application to participate in the intervention and compare them to the businesses that were successful
- DiD analysis will then be conducted to compare the impact of the intervention on the businesses that were unsuccessful in their application against those that were successful. This may involve using statistical methods to control for other factors that may affect the outcomes, such as changes in the market or industry trends.
- results of the DiD analysis will then be presented in a report or dashboard, highlighting any differences or similarities in the impact of the intervention on the unsuccessful and successful businesses

Task 43 - Sector Analysis : Complete Data Set

Start Week :11

End Week : 20

Dependencies : 38,39,40,41

Details:- analysing the complete data set collected by the Xpand to identify trends, patterns, and insights within a specific sector or industry

- conduct various analyses on the data set, such as descriptive statistics, regression analysis, or other statistical methods to identify trends and patterns
- results of the sector analysis will be presented in a report or dashboard, highlighting any key findings, insights, or recommendations for the sector or industry

Task 44 - Overall Uplift Cohort vs Control Groups

Start Week :15

End Week : 20

Dependencies : 38,39,40,41

Details:- comparing the performance of the intervention group (i.e., the businesses that received support or funding) to that of the control group (i.e., the businesses that did not receive support or funding) to determine the overall impact of the intervention on the cohort of businesses involved

- conduct a comparison of the intervention group and the control group to determine the overall uplift of the cohort of businesses involved
- results of the comparison will be presented in a report or dashboard, highlighting any key findings, insights, or recommendations

Task 45 - Report : Business Level Analysis

Start Week :9

End Week : 20

Dependencies : 27

Details:- producing a comprehensive report that analyses the performance of individual businesses involved in the intervention

- conduct a detailed analysis of each business's performance, comparing their results before and after the intervention
- report may include visualisations such as charts, graphs, or tables to represent the data in a clear and concise manner

Task 46 - Report : Round Analysis

Start Week :9

End Week : 20

Dependencies : 27

Details:- producing a comprehensive report that analyses the performance of the intervention in different funding rounds or cohorts

- compile and clean the data collected from the businesses in each funding round or cohort
- conduct a detailed analysis of each funding round or cohort's performance, comparing their results before and after the intervention
- may also include case studies or success stories to highlight the impact of the project on different funding rounds or cohorts

Task 47 - Report : Industry Level Analysis

Start Week :9

End Week : 20

Dependencies : 27

Details:- producing a comprehensive report that analyses the performance of the intervention in a specific industry or sector

- conduct a detailed analysis of the industry or sector's performance, comparing their results before and after the intervention
- may also include case studies or success stories to highlight the impact of the intervention on individual businesses within the industry or sector

Task 48 - Report : Company Type Analysis

Start Week :9

End Week : 20

Dependencies : 27

Details:- producing a comprehensive report that analyses the performance of the intervention in different types of businesses or companies

- compile and clean the data collected from the businesses in each company type
- conduct a detailed analysis of each company type's performance, comparing their results before and after the intervention
- may also include case studies or success stories to highlight the impact of the project on different types of businesses or companies

Engagement with UKRI

Xpand will set up a weekly project call - there will be an open invitation for all delivery partners to attend for updates. The time is held so that Xpand and the client can make their time available to cover points as needed and stakeholders can be brought in for updates.

Xpand will use this time to report against:-

- Provided project plan activities
- Number of companies that assessments have been completed
- Live results of the evaluation visible on the monitoring and evaluation dashboard
- Updates to the Risk Register / Assumptions Log

Innovate UK will need to attend the following sessions and provide input at the following stages:-

- 0% Kickoff session - w/c 17th April 2023
- Engagement planning session - w/c 27th March 2023
- 25% Data Review - w/c 29th May 2023
- 50% Interim Report (Feasibility) - w/c 30th June 2023
- 75% Final data gathering - w/c 7th August 2023
- 100% Report completion - w/c 21st August 2023

Sessions will last 1.5 - 2.5 hours, and will be scheduled in week 1 of the project.

Risk Mitigation Session - 25% Data Review Session Outline

A data review meeting will be scheduled week commencing 22nd May 2023 (Week 6) to identify critical data for analysis, address potential data gaps, and manage risks associated with data quality, availability, and processing. By working closely with Innovate UK, Xpand aims to ensure accurate and reliable analysis results.

Identifying Critical Data:

During the 25% data review session, Xpand will collaborate with Innovate UK to identify and agree upon the critical data required for the analysis. This collaborative approach ensures the necessary data is available for carrying out a comprehensive analysis and addressing specific report headings or requests from Innovate UK.

Handling Data Gaps:

Innovate UK and Xpand will discuss and agree upon strategies for handling data gaps based on the initial data audit and assessment. The agreed-upon approach will cover sourcing missing data and determining the course of action in case the data remains unavailable.

Risk Management:

The data review session will address risks related to data quality, availability, and processing based on the initial assessments. Both parties will work together to update the risk register and discuss mitigation strategies for identified risks.

Ongoing Risk Register Review:

While the risk register will be updated continuously, it will be updated and reviewed during the data review session. This ensures that any efforts to mitigate further risks are agreed upon by both parties and implemented in a timely manner.

By conducting a thorough data review session, Xpand and Innovate UK can collaborate effectively to ensure the availability of critical data, manage data gaps, and mitigate risks associated with data quality and processing resulting in accurate and reliable analysis outcomes.

Engagement with Businesses

- Agreeing with Innovate UK the emails, contacts, content, branding that businesses / organisations will experience coming from Xpand on the behalf Innovate UK for the completion of the analysis
- Business data will be added into the Xpand business engagement and evaluation platform to prepopulate responses where they are available, to simplify the data capture for project and programme participants
- Businesses will be surveyed to get the latest information and additional data points that are required
- Sourcing additional information and questions as agreed by Innovate UK within the engagement planning session
- Email campaign to prompt data entry and collection
- Email reminders to businesses to complete their entry
- Incentivisation of data entry using business funding database
- Phone calls to businesses to prompt data entry where email has been unsuccessful
- Phone calls to support data entry / completion where this not possible

3. Your project plan – this needs to be appropriate to the task, and provide clarity and detail on the proposed solution

Gantt Chart

See Appendix 1.

Tasks

ID	Task	Sector	Start	End
1	Kickoff Meeting / Requirements Review with Innovate UK	Admin	1	2
2	Agreeing overall report outline, headings and structure (UKRI)	Report	1	2
3	Setting up project management area / communication channels / meetings	Admin	1	2
4	Setting up data sharing agreements, data processing agreements, contractor agreements, mutual NDA and Terms & Conditions, Required 3rd party agreements (Data Providers / Contractors)	Legal	1	2
5	Agreeing and setting up secure data transfer areas for files between Xpand and Innovate UK	Admin	1	2
6	Agreeing digital messaging communications strategy with Innovate UK / partners with businesses (How Xpand will send messages to businesses on behalf of Innovate UK, messaging, branding guidelines) Content and required legal text	Admin	1	3
7	Discussion and agreeing of control group methodologies DiD 1 - Pre and Post Project (against same company) DiD 2 - Against perceived counterfactual (self-reported) DiD 3 - Nearest neighbour analysis DiD 4 - Xpand Database (Sample 50 Businesses) DiD 5 - Unsuccessful cohort applicants	Admin	1	10
8	Agreeing phone call and video call scripts and terms of engagement	Admin	4	5
9	Setting up data capture platform with agreed branding, communications and terms and conditions	Data Capture	4	5
10	Receive data from UKRI (Project Data, ONS, IDBR)	Data Audit	1	3
11	Conducting audit of available UKRI data (Project Data, ONS, IDBR)	Data Audit	2	4

12	Agree data values / questions for business impact tracking - agreeing KPIs	Data Audit	2	4
13	Agreeing individual business scorecard report requirements	Report	5	7
14	Set up questions / data points within the Xpand platform	Data Capture	5	6
15	Cleansing data from UKRI (Project Data, ONS, IDBR)	Data Cleansing	4	(6) 1st May
16	Importing cleansed data from UKRI (Project Data, ONS, IDBR)	Data Cleansing	5	7
17	Calculate Innovate UK project data - pre / post funding analysis	Data Cleansing	6	8
18	Agreeing business cohort / funding round analysis methodology and approach	Report	8	10
19	Matching business records based on CRN : Enriching the business record data with information from Companies House / Xpand Data Store / R&D / Investment Information	Data Cleansing	5	10
20	Identifying control groups from the 200 business records	Control	5	10
21	Sending out surveys to businesses for any missing data	Data Capture	7	14
22	Follow up communications with businesses	Data Capture	9	16
23	25% business report overview (Data Review) Meeting with UKRI to present the data	Data Analysis	6	6
24	Business scorecard development and demonstration	Data Analysis	5	10
25	Business Level Analysis (200 records)	Data Analysis	5	19
26	Report text analysis / analysis of reports and text completed by each business	Data Analysis	7	10
27	Create a report dashboard for each business	Results Dashboard	5	10
28	Create a PDF report for each business	Results Dashboard	11	20
29	50% business report overview (Interim Report)	Data Analysis	9	(10) 30th June
30	Scheduling calls for any required assisted data capture	Data Capture	9	19
31	Create a dashboard of the cohort results	Results Dashboard	11	19
32	75% business report overview (Draft Final Report)	Data Analysis	16	(16) 31st July
33	Client follow up campaign to secure last 25% of data (Calls, Email, Post)	Data Capture	15	20
34	Create impact uplift report and dashboard	Report	11	19
35	100% business report overview (Final Report)	Report	18	(20) 31st

				Aug 2023
36	Ongoing evaluation framework (Optional)	Report	17	20
37	(Optional) DiD : Business cohort analysis / Comparing cohort vs cohort	Control	11	20
38	DiD 1 - Pre and Post Project (against same company)	Control	7	19
39	DiD 2 - Against perceived counterfactual (self-reported)	Control	7	19
40	DiD 3 - Nearest neighbour analysis	Control	4	19
41	DiD 4 - Xpand Database (Sample 50 Businesses)	Control	4	19
42	DiD 5 - Unsuccessful cohort applicants	Control	4	10
43	Sector Analysis : Complete Data Set	Report	11	20
44	Overall Uplift Cohort vs Control Groups	Report	15	20
45	Report : Business Level Analysis	Report	9	20
46	Report : Round Analysis	Report	9	20
47	Report : Industry Level Analysis	Report	9	20
48	Report : Company Type Analysis	Report	9	20

4. An outline methodology, including a discussion of issues, limitations and risks and how these will be dealt with in the project

Equipment / Software Used:

Xpand Software Platform

The Xpand platform is utilised by local and national government agencies, as well as academic teams, for secure and GDPR compliant data sharing. Developed in accordance with government guidelines on security, data handling, and application development best practices, Xpand provides reliable and efficient data management solutions. The platform has been successfully deployed for capturing data from various programme beneficiaries and applicants, ensuring ease of data removal post-analysis.

The software can also be procured through government procurement frameworks including G-Cloud 13. The software is licensed for its intended purpose and is readily available for ongoing procurement through the UK government-backed and assured framework.

The software will be used by Xpand, therefore no licences are required for this project.

ICO Registration:

Xpand is registered with the Information Commissioner's Office (ICO) and maintains proper insurance and data handling processes. The company will establish the terms and conditions for data processing and handling in compliance with all relevant regulations.

Data Retention and Deletion:

In accordance with Annex A, Xpand will remove and destroy all data at the end of the contract. The client will have the option to store files for further analysis using Xpand's dashboards and automatic econometric analysis tools. All raw data will be deleted, and any printed materials will be securely destroyed upon project completion. Dashboards will be decommissioned per Innovate UK's request, with high-level results remaining accessible without raw data files. A notice of deletion will be sent to all partners.

Capturing Data

Xpand Access - Business engagement tool used to capture information at various stages of an organisations journey pre and post receipt of support. The application incentivises accurate data capture, by rewarding businesses with information surrounding further funding opportunities and events which are relevant to their specific industry and location.

The application is used for statistical data capturing, utilising a library of over 500 different pre-existing evaluation, benchmarking and baseline questions.

Xpand Resources Database - Xpand holds an automatically updated database of different funding, investment and financing opportunities. This information is used to incentivise and reward accurate data capture.

Xpand Insights - Programme management software used to support the design, delivery and evaluation of programmes and projects backed by public sector organisations.

Xpand Business Codes (XCODES) - Xpand has developed an industry code analysis tool which maps 12k industry analysis codes to 220 main industry headings, utilising keywords and sector descriptions to identify the sector that a company operates from in a programmatic way.

Xpand Question Framework - Through various research projects analysing the question frameworks of over 300 economic development agencies throughout the UK and EU to be able track economic, quantitative and qualitative data points.

Cleansing / Treating / Matching Data

Xpand Business Record - Xpand holds a database of UK registered and unregistered companies, included within this database is a central schema and scripts, which are capable of bringing in and linking additional data sources, joining data based on company name, location and CRN.

Xpand Data Store - Xpand owns scripts developed in Python, Go, Ruby which are capable of importing / scraping, bringing in, tracking and mapping different data sets. Cleansing the data, mapping the characteristics and making the data available for analysis against the business record and via the Xpand reporting dashboards and records. Additional scripts for data import can usually be developed between 5 - 15 working days depending on the complexity of the sources.

Xpand Business Database - Xpand holds a database of UK companies which it has adapted to support sector analysis and evaluations. Bringing in business data, financial information, investment information and R&D activities.

Xpand Investment / R&D Database - Xpand holds databases on investment data, R&D activity, business financial activities, which will be utilised to show how businesses have performed historically and going forward.

Reporting / Visualising Results

Xpand Dashboard - Xpand has developed dashboard tools which include charts, graphs, data tables, maps, cluster maps. These dashboards can be made available to specific team members and used to interact with the data in different ways when work has been completed. These can be published or made private to the organisation / select businesses.

Technology Stack Overview

The Xpand products are available via G-Cloud 13 procurement platform. These have been built in line with technical requirements suitable for projects involving local government, national government and academic institutions.

Main technology stack includes

- PostgreSQL, PostGIS, Python, GoLang, React, Node.js, Ruby on Rails, Redis
- Data is hosted on Heroku within UK-based servers
- Authentication is managed via Auth0

Issues

Academic Institution Backed Projects - The nature of academic institutions company registration and financial reporting means that as a larger entity, reported figures will not reflect the specific innovation activity that has been carried out as part of this project, for any spin out projects due to the large number of innovation and development projects which they carry out.

Therefore it is advised to substitute the large academic institute for a smaller entity, industry code and uplift to a sector comparable and similar to the project definition or created entity as a result of the project, in order to measure the unit / spin out / collaboration rather than tracking the organisation as if it were an educational establishment.

The control group should also reflect the development and project team, specifically down to the department level where appropriate.

Collaboration Projects - Due to the collaborative nature of the A4I projects, it is anticipated that the partners involved will all require some form of tracking and impact assessment against the project, which will then need to be fed back into the evaluation of the project across the collaborative partners.

It would be this cumulative impact that would need to be reported. Therefore each company involved will need to be evaluated against a control company to show the comparable result across all partners.

This would be based on the level of resources and effort that each partner has contributed to the project - and would provide results for each partner individually and collectively to reflect collaborative projects.

Company 1 - University

Company 2 - Technology Provider

Company 3 - Managed services company

Created Spin Out - Data Platform SaaS

Project Details - Building data platform, with a distributed team

Limitations of Data / Risks

An audit will be conducted on the data to identify the strengths and weaknesses and availability of the datasets to identify how many of the 221 businesses have suitable data.

Once treated and matched, an additional audit will be conducted to identify the level of availability of the data.

Where key data is missing for the analysis, this can be requested from companies via the Xpand data capture platform.

Key data points include:

Data	Innovate UK	Xpand	Available Publicly
Turnover / Revenue	Limited IFS Information	Source from entity	Occasionally (25%)
Employment	Limited IFS Information	Source from entity	Often (50%)
Financial Performance	Limited IFS Information	Source from entity	Usually (90%)
Survival	Can provide	Source from entity	Always (100%)
Sector	Should be available (Within Text as well as reported)	Can source from report text, where industry code not suitable	Usually (80%)
Year of funding	Limited IFS Information	Can source	Always (100%)
Key project outcomes	Should provide	Source from Innovate UK data	No
Asset growth	Limited IFS Information	Can source	Usually (80%)
Company Name	Should provide	Can source	Always (100%)
Company Number	Should provide	Can source	Always (100%)
Project Type	Will provide	No	No
Project Status	Will provide	Can source	No

Considerations

Turnover is a self reported figure within accounts, therefore will need to be available within the Innovate UK project data.

Estimated turnover figures are available within the FAME / Xpand database and can be substituted where the figure is unavailable to import.

Total employment figures are available within 60% of online reported accounts, however ideally the data will be sourced from the Innovate UK reported data or captured by Xpand.

Control Group Creation

In order to create an adequate side-by-side nearest neighbour control group Xpand will need the following data in order to create the data for DiD analysis.

Industry Code - An accurate business industry code is **essential** in order to identify a similar nearest neighbour / relevant created record for propensity.

Project Location Data - Accurate project location data will **preferably** guide the selection of suitable candidates for nearest neighbour analysis but will not be conclusive.

Financial Data - All companies selected for the DiD analysis will require complete financial data, and linked records to be available.

Incomplete data sets / Records to be excluded

The ability to complete individual business assessments based on the availability of data will be highlighted in the interim report and the 50% data review conducted by Xpand.

It will be decided by Xpand and Innovate UK the level of engagement that will be utilised to attempt to complete the dataset where business or industry information is unavailable.

If not enough data exists at the point of completing the final draft of the report, it will be confirmed with Innovate UK that this company will be excluded from the A4I overall analysis.

Dissolved Companies

Companies who have failed to report their figures or are at risk of being struck off will no longer be under any obligation to provide any feedback or further data on their financial activities. It will be recorded that the company is in this state and appropriate values will be captured to ensure no impact upon the like for like comparison.

The failure rate of the created record will be referenced.

Survival rates

Xpand has an up to date calculated survival rate of similar companies based on their sector which will be used to create a DiD analysis to compare the survival rates of the companies on the A4I programme against a control group.

Dormant Companies

Where companies are inactive, there is a high risk that they will be unwilling to report their latest activities where the results are negative, or their legal responsibilities are neglected.

Companies with poor performance are often the hardest to track, which is why Xpand has built in capacity to contact the user for the purpose of evaluation via phone.

At the final stage of the analysis, Innovate UK will have the opportunity to decide whether they are looking to send out letters to the organisation actively encouraging their involvement with details where they can book a call or follow up with an Xpand agent.

Considerations for Evaluating the Impact of Innovate UK's A4I Programme

Turnover Data:

Turnover is a critical data point for the analysis, and it is not an essential self-reported requirement within company accounts. Therefore, it is essential to ensure that turnover figures are available within the Innovate UK project data. Estimated turnover figures are available within the FAME/Xpand database, and they can be substituted where the figure is unavailable.

Control Group Creation:

To create an adequate side-by-side nearest neighbour control group, Xpand will need the following data to conduct the DiD analysis:

1. Industry Code: Accurate industry codes are essential to identify a similar nearest neighbour/relevant record for propensity.
2. Project Location Data: Accurate project location data will guide the selection of suitable candidates for nearest neighbour analysis.
3. Financial Data: All companies selected for the DiD analysis require complete financial data, and all companies included in the analysis must have a complete record.

Incomplete Data Sets/Records:

The ability to complete individual business assessments based on the availability of data will be highlighted in the interim report and the 50% data review conducted by Xpand. If not enough data exists at the point of completing the final draft of the report, it will be confirmed with Innovate UK that the company will be excluded from the A4I overall analysis.

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Conclusion:

The considerations outlined in this document are crucial for the accurate evaluation of the impact of the A4I program. It is essential to ensure that complete and accurate data is available for all businesses included in the analysis. This will enable a comprehensive evaluation of the program's effectiveness and support future decision-making processes.

Data Cleansing / Matching / Validation

Xpand will treat and match the data from multiple sources to build a complete record of the businesses who have completed the A4I programme. These will be linked using the CRN number and stored within the Xpand Business Record database for the purposes of the evaluation.

Data sources include but are not limited to:-

- Data points within Companies House / UKRI
- Xpand Question data
- FAME / Xpand Database - Funding and financing information
- Innovate UK - Company reports
- Xpand Investment database
- Xpand R&D database
- Company / project social media / websites
- Surveys via Xpand Platform
- Innovate UK - IFS Project Data
- ONS - Business performance and innovation activity
- IDBR - Inter-Departmental Business Register

Control Group Evidence Creation

Proposed approaches to the analysis of data

Xpand will carry out multiple styles of analysis on the data, utilising different comparison control groups using:-

- Xpand company database
- Xpand business survival rate database
- Xpand nearest neighbour generator
- Xpand average company characteristics data generator
- Data provided by Innovate UK
- DiD Analysis techniques

Method	Description
Difference in Difference Pre / Post Project Analysis	<p>Using the data provided by Innovate UK and company databases pre-project and captured post project by Xpand and within the Xpand company database to provide data on the increase/decrease.</p> <p>This will be set up, so that this can be rapidly automatically recreated or built upon with future assessments, capturing data points in the future.</p>
Different in Difference Comparing actual impact data against self-reported impact	Using self-reported information from organisations about the level of jobs, revenue and relevant metrics based on whether they had not received the funding. Using this self-reported data to generate evidence of the uplift where no data is available.
Difference in Difference Nearest neighbour	<p>Using the Xpand nearest neighbour data service to identify the closest matched company based on: Sector, Company Age, Financial Data, Location</p> <p>(Ordered by strongest match criteria) Comparing the performance against this company</p>
Difference in Difference Propensity Score Matching	Xpand has generated a database of different company characteristics which can be used to generate an average company to match the profile of project participants. To compare side by side as a comparison of the company changes.
Difference in Difference Unsuccessful applicants for the fund	Using publicly available information about the cohort of unsuccessful applicants who applied for the A4I fund.

Methodology 1 : Pre and Post Project Completion Analysis using Difference in Difference (DiD) Method

1. Define the key agreed data points to be analysed before, during and after the intervention:
 - Jobs
 - Investment
 - Revenue
 - R&D applications
 - Survival
 - Asset growth
2. Identify and gather available data sources from Innovate UK and Xpand company database, and use Xpand software tools to capture information from businesses where data is unavailable.
3. Create a business record from the available datasets and pre-populate into the Xpand engagement platform to pre-register companies.
4. Send out surveys to companies to validate sourced data and capture new data. Engage businesses to encourage the submission of data and completion of required surveys.
5. Using the Xpand data model, map the different data points against the different time periods (Year -1, Year 0, Year 1, Year 2, Year 3) for each business.
6. Implement the DiD method to compare the data points before and after the intervention to capture the uplift data for individual companies.
7. Ability to capture the ongoing growth/decline of these data points on an ongoing basis to report the differences automatically.
8. Generate a reporting dashboard as an interactive business record and export the information as a PDF for reporting purposes for each business.
9. Report to Innovate UK where data is unavailable or incomplete, to provide alternative methods of calculating the impact for that particular company.
10. Break the reporting dashboard into different industry sectors, regions and rounds to demonstrate the individual business improvement.

This methodology aims to provide a systematic approach to analysing the impact of interventions on businesses over time. The DiD method allows for comparison of the same business before and after the intervention, enabling a more accurate measurement of the impact. The reporting dashboard allows for easy visualisation of the data and identification of trends and patterns.

Methodology 2 : Comparison of Actual and Self-Reported Impact Data

Introduction:

This methodology outlines how Xpand will compare the actual impact data with business self-reported impact data for the A4I programme. The aim is to assess the effectiveness of the A4I programme in supporting businesses and achieving the expected outcomes of job creation, investment, survival, and related R&D activity.

Data Collection:

1. **Extracting Available Data:** Xpand will extract available data from the Innovate UK project management platform IFS to identify whether any self-reported data exists regarding the levels of anticipated growth/decline if the business had not undertaken the A4I intervention.
2. **Self-Reported Data Collection:** Xpand will survey businesses about their perceived levels of jobs, investment, survival, and related R&D activity as to whether this would have gone ahead had the business not received support.

Data Comparison:

1. **Compare Perceived vs Actual Impact:** The difference between the perceived impact had the company not received support and the actual impact evidenced by the actual numbers of jobs, investment, survival, and related R&D activity will be compared.
2. **Identify Discrepancies:** Where there are significant differences between the perceived and actual impact data, Xpand will investigate the reasons for these discrepancies, such as incorrect reporting, delays in project delivery, or external factors beyond the control of the business.

Example Questions for Self-Reported Impact Data:

1. Company Profiling
 - Nature of company
 - Size of company
2. Partnerships
 - Which types of organisations were partnering before the project?
 - Which types of organisations partnered during the project?
 - Which types of organisations partnered after the project?
 - Have the partners worked with each other before?
 - What capabilities did each partner bring to the project
3. Jobs:
 - How many jobs would you have created if you had not received funding from the A4I programme?
 - Which roles were created specifically for the project?
 - How many roles were working on the project?
 - What percentage of their time did they spend working on the project?
 - Did the roles exist before the project started?
 - Do these roles still exist within the company?
 - How many of these roles would still have existed if the support had not been provided?
4. Investment:
 - How much investment would you have made if you had not received funding from the A4I programme?
 - Which specific areas of the project received investment?
 - What is the expected return on investment?
5. Survival:
 - What is the expected survival rate of the project without the A4I programme?
 - What factors could have led to the project's failure?
6. R&D Activity:
 - What R&D Activity has been conducted as a result of A4i
 - How much R&D activity would have been conducted without the A4I programme?
 - What specific R&D activities were conducted as part of the project?
 - What is the expected impact of the R&D activities on the business?
 - Will more R&D be conducted as a result of participation in A4i
 - Which disciplines were utilised within this project?
 - Has your team worked with the types of partner before the project?
 - Has your organisation worked with this type of team before the project
 - Did the project bring together partners who have not had the opportunity to work with each other before?
 - How likely are you to work with this type of team after the project?
 - What are the barriers to this?

7. Resolving the challenge

- What was the challenge
- Did the project team resolve the challenge
- What is being done to resolve the challenge as a result of the project
- What is the ongoing impact of resolving this challenge

8. Financial Benefits

- What type and scale of financial benefits are companies reporting?

9. Additional Benefits

- Additional benefits and spill-overs outside the main scope of A4I?

Conclusion:

The comparison of actual and self-reported impact data is critical to evaluate the effectiveness of the A4I programme in achieving its objectives. The methodology outlined in this document will provide a systematic approach to collecting and analysing data, enabling Xpand to identify any discrepancies and investigate the reasons behind them.

The example questions for self-reported impact data will enable Xpand to collect comprehensive and accurate data from businesses.

Methodology 3 : Nearest Neighbour Analysis Using Difference in Difference (DiD)

Introduction:

This methodology outlines how Xpand will conduct a Nearest Neighbour Analysis using the Difference in Difference (DiD) method for the A4I programme. The aim is to evaluate the effectiveness of the A4I programme in achieving its objectives by comparing the impact of participating businesses with a nearest neighbour dataset.

Data Collection:

1. **Identification of Nearest Neighbour Dataset:** Xpand will identify a nearest neighbour dataset for each participating business on the A4I programme to track the differences in impact results.
2. **Nearest Neighbour Database Creation:** The Xpand nearest neighbour database will find a company with a full dataset for comparison that didn't receive funding on Companies House based on the following criteria:
 - Industry Sector (SIC Code / Xpand Industry Codes)
 - Best Competitor Analysis
 - Month/Year that the company was established
 - Company profile size
 - Number of staff
 - Location - Postcode, Radius, Council Region
3. **Best Match Identification:** Xpand will find the best match for each company on Companies House and other available data sources (Xpand Data Service). This will be used as a direct company comparison to identify the differences in growth between the two businesses based on the agreed and available data points.

Data Comparison:

1. **Comparison of Actual Data:** Xpand will compare the actual data of participating businesses with their nearest neighbour dataset using the DiD method. This will enable a more accurate measurement of the impact of the A4I programme by comparing the same business before and after the intervention.
2. **Comparison of Impact Results:** Xpand will track the differences in impact results between the participating businesses and their nearest neighbour dataset for each of the agreed and available datapoints, such as job creation, investment, survival, and related R&D activity.
3. **Identification of Factors:** Xpand will investigate the factors behind any differences in impact results to identify the reasons for the success or failure of the A4I programme in achieving its objectives.

Conclusion:

The Nearest Neighbour Analysis using the DiD method is an effective way to evaluate the impact of the A4I programme. The methodology outlined in this document will provide a systematic approach to collecting and analysing data, enabling Xpand to identify any differences in impact results and investigate the factors behind them. By comparing participating businesses with their nearest neighbour dataset, the A4I programme's success or failure in achieving its objectives can be accurately measured.

Methodology 4 : Propensity Score Matching Using Difference in Difference (DiD) Method

Introduction:

This methodology outlines how Xpand will conduct a Propensity Score Matching using the Difference in Difference (DiD) method for the A4I programme. The aim is to evaluate the effectiveness of the A4I programme in achieving its objectives by comparing the impact of participating businesses with a simulated matched comparison business.

Data Collection:

1. **Company Database Creation:** Xpand owns a database of typical company profiles based on the following characteristics:
 - Industry Sector (SIC Code / Xpand Industry Codes)
 - Month/Year that the company was established
 - Company profile size
 - Number of staff
 - Location - Postcode, Radius, Council Region
2. **Average Company Profile Dataset Creation:** This database will be used to generate an average company profile dataset based on the similar characteristics of the organisations directly involved in the A4I programme.
3. **Matched Company Creation:** Each participating company will have a matched company created using the Xpand company dataset. The sample of data that will be used to create the simulated matched comparison business will be made of 30-50 businesses who have complete datasets available within the company database to ensure the completeness of the comparison.

Data Comparison:

1. **Comparison of Actual Data:** Xpand will compare the actual data of participating businesses with their matched company using the DiD method. This will enable a more accurate measurement of the impact of the A4I programme by comparing the same business before and after the intervention.
2. **Propensity Score Matching:** Xpand would use the average company characteristic as the control against each individual company and then compare the results and uplift for each A4I project using the Propensity Score Matching method.
3. **Identification of Factors:** Xpand will investigate the factors behind any differences in impact results to identify the reasons for the success or failure of the A4I programme in achieving its objectives.

Conclusion:

The Propensity Score Matching using the DiD method is an effective way to evaluate the impact of the A4I programme. The methodology outlined in this document will provide a systematic approach to collecting and analysing data, enabling Xpand to identify any differences in impact results and investigate the factors behind them. By comparing participating businesses with their simulated matched comparison business, the A4I programme's success or failure in achieving its objectives can be accurately measured.

Methodology 5 : Difference in Difference (DiD) Method Using Unsuccessful Companies as Control Group

Introduction:

This methodology outlines how Xpand will conduct a Difference in Difference (DiD) method for the A4I programme using unsuccessful companies as a control group. The aim is to evaluate the effectiveness of the A4I programme in achieving its objectives by comparing the impact of participating businesses with a control group of companies that did not receive the A4I funding.

Data Collection:

1. **Generation of Unsuccessful Cohort:** Xpand will generate a cohort of businesses who were unsuccessful for the funding using the A4I application data from the Innovate UK application process.
2. **Publicly Available Information:** Using the Companies Registration Number (CRN) from the unsuccessful companies, Xpand will source publicly available information to create an appropriate control dataset of the change of the companies that did not receive the A4I funding during the same time period.
3. **Dataset Sources:** Xpand will use the following datasets for this analysis:
 - Xpand Investment database
 - Xpand Company Database
 - Xpand R&D Funding Database
 - Innovate UK project data
 - ONS Data
 - IDBR Datasets

Data Comparison:

1. **Comparison of Actual Data:** Xpand will compare the actual data of participating businesses with their control group using the DiD method. This will enable a more accurate measurement of the impact of the A4I programme by comparing the same business before and after the intervention.
2. **Comparison of Impact Results:** Xpand will track the differences in impact results between the participating businesses and their control group for each of the agreed and available data points, such as job creation, investment, survival, and related R&D activity.
3. **Identification of Factors:** Xpand will investigate the factors behind any differences in impact results to identify the reasons for the success or failure of the A4I programme in achieving its objectives.

Conclusion:

Using unsuccessful companies as a control group is an effective way to evaluate the impact of the A4I programme. The methodology outlined in this document will provide a systematic approach to collecting and analysing data, enabling Xpand to identify any differences in impact results and investigate the factors behind them. By comparing participating businesses with their control group, the A4I programme's success or failure in achieving its objectives can be accurately measured. It is not recommended to survey these companies, but it is an option that is available for a small sample set.

Methodology: Analysis to be Carried out for Each Participant Combining Different Analysis Results

Introduction:

This methodology outlines how Xpand will analyse the impact of the A4I programme for each participant by combining different analysis results. The aim is to provide a comprehensive evaluation of the effectiveness of the A4I programme in achieving its objectives.

Data Collection:

1. **Data Cleansing and Matching:** Xpand will receive data from Innovate UK, which will be cleansed and matched to additional datasets held by Xpand.
2. **Tracking Pre, During, and Post Datasets:** Using the available matched datasets, Xpand will track and map the pre, during, and post datasets of the participant receiving support.
3. **Surveying Participants:** The participant will be surveyed to ascertain the level of perceived growth they would have achieved without the provided support, to compare the perceived results against the evidenced results.

Data Comparison Options Available:

1. **Nearest Neighbour Analysis:** Xpand will find a nearest industry neighbour using the Xpand nearest neighbour data service. Using Industry Code, Location, Date Founded, Financial Profile, and Business Size, Xpand will find a control datapoint to compare the growth of the two organisations.
2. **Propensity Score Matching Analysis:** Xpand will use the Xpand companies database to source the average stats of a large cohort of companies within the database with similar features. Using Industry Code, Location, Date Founded, Financial Profile, and Business Size, Xpand will find a group.
3. **Comparison Results:** Xpand will gather the comparison results of the actual growth, perceived growth, nearest neighbour, generated company using Propensity Score Matching, average performance of those who did not receive the funding to create a list of different comparisons to see how the business performed against multiple factors.
4. **Comparison Against Unsuccessful Applicants:** Xpand will also compare against those who applied for the funding who were unsuccessful as a separate cohort.

Dashboard:

1. **Business Dashboard:** This dataset will be available via a dashboard for each business, creating a business scorecard that can be explored for each business to dig deeper into the available data to form conclusions. Each business's data and scorecard will be exported into a 2-page PDF, which will be included as a supporting evidence appendix.
2. **Programme Data Dashboard:** A dashboard of the overall cohort results, including the DiD analysis, will be made available through the dashboard in an exportable format. The data within the dashboard will be able to be split by round, industry, and geographic area.

Conclusion:

Combining different analysis results for each participant will provide a comprehensive evaluation of the effectiveness of the A4I programme in achieving its objectives. The methodology outlined in this document will provide a systematic approach to collecting and analysing data, enabling Xpand to identify any differences in impact results and investigate the factors behind them.

The dashboard will provide a user-friendly interface for exploring the available data, while the overall report will provide insights into the effectiveness of the A4I programme.

5. Your approach to ensuring the project is adequately resourced in line with the contract timescales together with a description of any risks and contingencies

Xpand is proud of its diverse team and mix of competencies; with combined decades of experience having worked on a number of research/feasibility and collaborative projects.

Team Resourcing

Taking into account the tasks and associated effort required for this 5-month project, Xpand has identified the following available resources to ensure that Xpand has the necessary capacity :-

- Application Development: 3 FTE
- Data Science Resources: 2 FTE
- Business Engagement: 4 FTE

Management Team

The management team will include a Project Manager/Business Analyst, Product Designer, and Project Officer who will work together to coordinate the team and project tasks.

The Project Manager and Project Officer will be the primary points of contact with UKRI at all times. UKRI will have contact with other members of Xpand's team where appropriate and necessary within the requirements of the project. At all times there should be a focus on clear and transparent communication between Xpand and UKRI.

Project Management

The Project Manager will lead weekly planning meetings with the management team.

A risk register will be developed with risks categorised as per a Risk Matrix. This Risk Register will be reviewed as part of the weekly management team planning meetings.

Regular meetings/calls with key collaborators, partners, and stakeholders will be undertaken at least once a fortnight to update upon progress.

A tasklist and Gantt Chart will be agreed with reasonable timescales so that delivery of outputs against targets can be measured as well as the use of timesheets to ensure the effective and diligent use of resources.

All actions taken will be documented, checked against the tasklist, and adjusted where necessary on a frequent basis.

Further, Xpand has previously co-founded a contractor network in Northern Ireland with the support of Invest NI. This contractor network provides Xpand with access to additional talent should the need arise or where there is a shortage in the team resources available.

Risks

A risk register will be developed and maintained to anticipate and mitigate any potential risks to the project. Each individual risk will have a severity assigned to it based on a Risk Matrix. Reviews of this risk register shall be carried out regularly both internally within Xpand's team as well as with the client to ensure open and transparent communication between the parties.

Risks can include:

- **Restricted access to necessary data**

Mitigation: Early identification and arranging access to the data required will allow reduction in any delay and risk of not being able to access necessary data. Substantial engagement plan to be developed with support from UKRI will allow Xpand to collect additional data from the businesses.

- **Slippage in timeframes leading to later conclusion of tasks / project**

Mitigation: Xpand has evaluated the effort required for this project and identified individuals for each necessary role. Xpand has access to additional talent/resources, if the need arises, who can be quickly brought on to the project.

- **Data Security**

Mitigation: The platform is hosted on recognised secure cloud services with proven track records/documentated good practice; together with strict access control (including 2 Factor Authentication) with industry standard secure infrastructure allows Xpand to mitigate cyber security risks. Data Protection Impact Assessment carried out with no to limited personal data collected where possible. All data will be collected, stored, and managed in line with the Data Protection Act 2018 and the UK GDPR.

- **Lack of Engagement**

Mitigation: There is a risk that there is low engagement from businesses and stakeholders. Ensuring the content, design, UI and experience is transparent and functional for users. Developing an engagement plan with Innovate UK. Xpand will utilise its own team to connect with businesses to encourage engagement using multiple methods to follow up including via digital means (email, messaging) or telephone.

Deviation to Project

If Xpand considers there should be a deviation or variance required to the work plan and its implementation (including timescales) Xpand's Project Manager will contact UKRI notifying them of the requirement either vocally or in writing. If the parties are in agreement to the variance the details shall be agreed within 5 working days of initial notification.

Regular reports shall be made to UKRI with an update on the progress of the project, with the regularity of these reports to be agreed during the initiation meeting. These reports (to include monitoring reports) can be produced to coincide with a scheduled meeting ensuring use of time is productive and effective.

Mitigating Future Risk

This platform will improve programme management which is beneficial to engaging programme teams/businesses.

The project will not suffer from geographical factors.

Xpand's platform is hosted on recognised secure cloud services with proven track records/documentated good practice; together with strict access control with industry standard secure infrastructure allows Xpand to mitigate cyber security risks.

Regulatory Requirements

GDPR - Personal data collected via the platform will be limited to personal email / home addresses of any individuals signing up to the platform as an unregistered business where no other organisational contact information is available.

Vulnerable data subjects will not be engaged.

This and other GDPR risks are carefully assessed with a Data Protection Impact and Privacy Impact Assessment carried out at the start of the project in order to identify/mitigate any risks.

Xpand is registered with the ICO.

6. Relevant company experience

Xpand offers a software-based data-driven approach for economic impact analysis, developed through 5 years of research and automation. The company has implemented the UKRI question framework into its application and has developed scalable software that can handle UKRI requirements cost-effectively. Xpand is already working with local and national government teams, academic teams, and engaging with businesses for this type of statistical data capture.

Xpand releases new software features regularly to its existing customers and manages the SAAS solution based on Green and Magenta book processes. The application is capable of tracking multiple data points and different types of impact, with a complete end-to-end funding and programme management suite of applications.

The Data Lab - Community engagement / Feedback

- Development of a community focused platform with bespoke branding and resources / information focused/tailored to users
- Development of resources database with a focus on Scotland
- Extensive workshops conducted to understand requirements which informed product development roadmap
- Detailed feedback workshops undertaken and processes developed

NMDDC Council - Newry, Mourne and Down District Council appointed Xpand Group to develop a technical options appraisal for an Innovation Hub as part of the Belfast Region City Deal Digital and Innovation Pillar. Specifically:-

- To define what the concepts for the Innovation hub could be (including equipment required, resources required, key users, stakeholders/partners to be involved).
- The identification of feasible projects or approaches (with indicative costs clearly assigned) for the implementation of this regional hub.
- To develop the options to identify a sufficient level of use in the development of the physical Innovation hub.

Belfast City Council - Multiple Engagement Projects

- Xpand has undertaken a number of projects with Belfast City Council including:-
 - Smart District Engagement - measuring the economic impact of Belfast's Investments
 - CovidConnectNI - a matchmaking platform for organisations in need of and those with resources to share during the covid health crisis
 - FinTech Engagement (Access to Finance) - mapping the FinTech sector, focusing on SMEs
- Each project utilised Xpand's platform, engaging with the council teams to workshop, understand and develop their requirements.
- Marketing and dissemination of the projects undertaken, with the council supporting engagement activities.

Advice Direct Scotland - Xpand has supported Advice Direct Scotland in monitoring and evaluating the heating grants issued on behalf of the Scottish Government. This project aimed to understand the reasons behind the need for such grants and the impact of timely support, providing crucial insights during the energy crisis. The results of the evaluation helped identify the most vulnerable and in-need individuals, as well as key themes and areas of concern.

Department of Finance NI - Transport data assessment

Xpand carried out analysis of 300gb of transport data in order to build baseline transport and mobility models for projects relating to Belfast City Council's Smart District. The project with Belfast City Council developed an analytics dashboard for transport and mobility datasets, this enabled users to understand the transport and citizen mobility based on location, transport and time period over a 10 year period.

EIT Digital - Xpand developed best practices for how impact can be tracked programmatically using available datasets. Inadequate access to key economic information is crucial to deliver effective interventions. The Xpand platform unlocks urban economies by making key insights easily accessible. The project embedded Xpand software into Local / National government agencies for testing.

The platform is an easy-to-use multi-lingual data-driven platform which simplifies and accelerates the analysis of urban economic metrics and utilises advanced geo-analysis tools to deliver highly targeted and actionable information.

The platform utilises real-time data from open, licensed and private sources and is delivered as a customised SAAS solution for each agency with GDPR privacy designed into each deployment.

Innovate UK - Smart Grant - Access to Finance

Banks and governments were struggling to get up-to-date information on SME Survival to deliver urgent support. Xpand built a SAAS product to track the economic impact, survival and support required by SME communities.

The economic and societal response to the rapidly changing crisis had highlighted the need for effective solutions that could be quickly deployed by local/national economic development support teams (government teams/banks), to track the economic impact of COVID-19 and to issue funds and start support programmes of support for SMEs/Academic/NGO teams.

The software also enabled teams to deploy programmes quickly, allowing them to design, deliver and evaluate the help and support programmes that they manage, and in response to COVID-19, track the impact of the crisis on SME survival and matchmake resources - all of which could be done on a real-time basis.

7. Project team

1. [REDACTED] - Project Manager

[REDACTED] is a programme and project manager with an extensive experience of working in both public and private sectors, having previously worked with clients in the Department of Finance, Belfast City Council, University of Edinburgh, and other organisations in the UK. He has a demonstrable track record of leading successful programmes, ensuring projects are delivered to time, cost, and quality criteria. [REDACTED] has an excellent background in best practice programme management, analysis, and controls, having successfully managed large scale complex research programmes within the public sector.

PROJECT TASKS

- Platform communication
- Client engagement
- Product management

KEY SKILLS

- Project Management
- Programme Management
- Risk Management & Change Management
- Customer Relationship Management
- Business Development

ACADEMIC/PROFESSIONAL QUALIFICATIONS

- BA Computer Science and Music - Queen's University Belfast
-

2. [REDACTED] - Business Economic Analyst

[REDACTED] brings extensive experience in public and private sector roles including programme manager, project manager, business analyst. He has been involved in R&D, innovation, product development, business analysis, and large-scale collaborations having previously worked with the South Eastern Regional College, Fujitsu, and Oracle.

PROJECT TASKS

- Set up the data analysis
- Manage the project teams
- Set up questions and platform

KEY SKILLS

- Project Management
- Programme Management
- Risk Management & Change Management
- Customer Relationship Management
- Business Development

ACADEMIC/PROFESSIONAL QUALIFICATIONS

- BSC Computing and Information Systems - Anglia Ruskin University (1st)
 - NVQ Level 5 - Management and Leadership Qualification - SERC
-

3. [REDACTED] - Client Engagement

[REDACTED] background in client support as well as project management and implementation within Xpand as well as her background in the legal sector allows her to bring new insights to the company. Outside of Xpand, [REDACTED] has experience as a Chief Financial Officer and Chief of Staff.

With Xpand [REDACTED] has carried out extensive engagement work with clients and stakeholders as well as research, testing, strategic planning, project management and financial reporting.

PROJECT TASKS

- Client form completion
- Conducting evaluation calls
- Project administration

KEY SKILLS

- Active communication
 - Relationship-building
 - Customer service
 - Conflict resolution
 - Collaboration
 - Follow-up and follow-through
-

4. [REDACTED] - Data Analyst

[REDACTED] is a detail-oriented data analyst with a Masters in Mathematics and Theoretical Physics who joined Xpand in 2022. He has experience in python programming, algorithmic programming, data analytics, and machine learning. [REDACTED] is proficient in using tools such as SQL, R, and Python to analyse large datasets, and he has worked with predictive models, clustering, classification, and regression analysis to help organisations make data-driven decisions. Additionally, he is an excellent communicator and collaborator who can translate complex data insights into actionable recommendations.

PROJECT TASKS

- Analysis of results
- Data cleansing
- Report writing / AI analysis

KEY SKILLS

- Strong analytical skills
- Proficient in using data analytics tools and technologies
- Understanding of statistical concepts

- Ability to translate data insights into actionable recommendations
- Effective communication and collaboration skills.

ACADEMIC/PROFESSIONAL QUALIFICATIONS

- MPhys (Hons) Mathematics and Theoretical Physics (First Class)
-

5. [REDACTED] - Data Scientist

[REDACTED] is a talented data scientist with a background in Mathematics and Theoretical Physics. She is skilled in using programming languages such as Python, R, and SQL to analyse large data sets and create visualisations that help stakeholders understand complex data insights. Additionally, [REDACTED] is knowledgeable in machine learning techniques and has experience in working with predictive models, clustering, classification, and regression analysis to help organisations make data-driven decisions. She is also an excellent communicator and collaborator, always willing to work with cross-functional teams to achieve desired outcomes.

PROJECT TASKS

- Analysis of results
- Statistics
- Data cleansing
- Report writing / AI analysis
- Developing data model and process for carrying out the different forms of DiD analysis

KEY SKILLS

- Strong analytical skills
- Proficient in multiple technical languages including Python and Fortran 77
- Knowledgeable in machine learning techniques
- Ability to create compelling data visualisations
- Effective communication and collaboration skills

ACADEMIC/PROFESSIONAL QUALIFICATIONS

- MPhys Mathematics and Theoretical Physics (First)
-

6. [REDACTED] - Application Developer

[REDACTED] is highly skilled with over 15 years of experience in system integration and automation within a large-scale multi-user heterogeneous environment. He possesses advanced knowledge and understanding of cyber security within a complex public institution and has a flexible and responsive approach to customer requests while also maintaining compliance within a secure infrastructure. [REDACTED] has a strong command of various programming languages such as Python, C/C++ and Ansible, as well as expertise in implementing continuous integration and deployment, container technologies, and system monitoring. He is a highly motivated problem-solver with the ability to troubleshoot performance and compatibility issues using various tools.

PROJECT TASKS

- Technical architecture
- Business database management
- Data Architecture

KEY SKILLS

- Proficiency in programming languages
- Familiarity with development tools and frameworks
- Ability to write clean, maintainable, and efficient code
- Understanding of software development methodologies
- Strong problem-solving and debugging skills

ACADEMIC/PROFESSIONAL QUALIFICATIONS

- BA Computer Science
-

PARTNERS

Xpand works with data suppliers to provide access to additional datasets:

- Equifax
- University of Edinburgh

Xpand also has access to additional contractors across Northern Ireland and Scotland

SCALING THE SOLUTION

Xpand works with a managed service third party for business engagement in Glasgow, who will be able to support the scaling of these requests. These teams can handle inbound and outbound calls.

The team handles large volume calls on behalf of the Scottish Government and has worked with Xpand on projects surrounding home and business heating grant evaluations.

8. Costs

Broken down by deliverable and project team, with day rates for each role

Deliverable	Due Date	Payment Points
<p>Cleaned and datalinked dataset for treated group and counterfactual group*</p> <p>Assumption: This relates to the provision of the relevant datasets / documentation from Innovate UK</p> <p>Audit of file by 1st May 2023 carried out by Xpand</p> <ul style="list-style-type: none"> - Completeness - Available data <p>Enriched datafile within 3 weeks 15th May 2023</p> <p>Counterfactual group within 6 weeks 5th June 2023</p>	1st May 2023	Interim Invoice
Interim Report	30th June 2023	Interim Invoice
Draft Final Report	31st July 2023	
Final Report	31st August 2023	Final Invoice

Team

Role	Day Rate	Days	Total
Project Manager			
Data Scientist / Analyst			
Client Engagement			
Application Developer			
Business Economic Analyst			
Total			£29,800

Total

£29,800 + VAT (£35,760 inc. VAT)

Timescales

The timescales of this Service requirement are:

Start date:	17/04/2023
End date:	31/08/2023

APPENDIX 1

GANTT CHART

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

Schedule 4

Transfer of Personnel

Definitions

The following additional definitions shall apply in this Schedule 4:

"Employees" means the individuals who are engaged in or assigned prior to the Transfer Date by UKRI, any UKRI Group Company or any Previous Supplier in the provision of services which are identical or substantially similar to any of the Services;

"Expected Transferring Employees" means those Staff who are reasonably expected by the Supplier to be a Transferring Employee;

"Future Service Provider" means any person who provides services which are identical or substantially similar to any of the Services to UKRI (directly or indirectly) following the termination or expiry of this Contract or the termination or expiry of the provision of any of the Services by the Supplier;

"Previous Supplier" means any person who is or has been, in the period up to the Transfer Date, responsible for providing to UKRI (directly or indirectly) services that are to be replaced by or are substantially similar to any of the Services;

"Sub-Contractor" means any person, including any Supplier Group Company, to whom the provision of any of the Services may be sub-contracted by the Supplier;

"Subsequent Transfer Date" means the date on which responsibility for the provision of the Services, or any part of the Services, transfers from the Supplier to UKRI or a Future Service Provider;

"Supplier Group Company" means any company which is a subsidiary, subsidiary undertaking or holding company of the Supplier or any subsidiary or subsidiary undertaking of any such holding company (within the meaning of the Companies Act 2006);

"Transfer" means the transfer of responsibility for the provision of the Services from UKRI or a Previous Supplier to the Supplier;

"Transfer Date" means the date of Transfer;

"Transferring Employee" means an individual whose contract of employment has effect from and after the Subsequent Transfer Date, by virtue of the operation of TUPE, as if originally made between such person and UKRI or a Future Service Provider;

"UKRI Group Company" means any company which is a subsidiary, subsidiary undertaking or holding company of UKRI or any subsidiary or subsidiary undertaking of any such holding company (within the meaning of the Companies Act 2006).

1 EMPLOYEES

Relevant Transfer

- 1.1 UKRI and the Supplier agree that the Transfer will give rise to a "relevant transfer" within the meaning of TUPE and that the respective contracts of employment between UKRI, any UKRI Group Company or any Previous Supplier and the Employees shall have effect from

and after the Transfer Date as if originally made between the Supplier (or relevant Sub-Contractor) and the Employees (save insofar as they relate to provisions of an occupational pension scheme relating to benefits for old age, invalidity or survivors within Regulation 10 of TUPE).

Emoluments

- 1.2 All wages, salaries, bonus and commission payments, contributions to pension schemes, entitlement to holiday pay and any other emoluments (whether monetary or otherwise), tax and national insurance contributions relating to the Employees shall be paid or borne by UKRI, any UKRI Group Company or the Previous Supplier (as the case may be) in relation to the period up to the Transfer Date (and UKRI shall procure such payment by the Previous Supplier) and by the Supplier or relevant Sub-Contractor thereafter, and all necessary apportionments shall be made.
- 1.3 Within 28 days after receiving written notice from UKRI of the relevant amounts, the Supplier shall pay to UKRI (or, as directed by UKRI, to any UKRI Group Company or any Previous Supplier) a sum equal to the outstanding balance as at the Transfer Date of any loan, salary advance or other indebtedness of any Employee due to UKRI (or any UKRI Group Company or any Previous Supplier) immediately prior to the Transfer Date and the rights and liabilities in respect of such loans, salary advances or indebtedness shall transfer from UKRI (or any UKRI Group Company or any Previous Supplier) to the Supplier on the Transfer Date.

Compliance and Indemnities

- 1.4 As soon as reasonably practicable after the date of this Contract, the Supplier shall provide UKRI with such information as is necessary to enable UKRI, any UKRI Group Company or a Previous Supplier to comply with its or their obligations under Regulation 13 of TUPE.
- 1.5 UKRI shall deliver to the Employees a statement (in a form to be agreed with the Supplier or, in the absence of such agreement, as reasonably determined by UKRI) regarding the proposed transfer of their employment to the Supplier (or relevant Sub-Contractor) on the Transfer Date.
- 1.6 UKRI shall indemnify and keep indemnified the Supplier against all and any costs, expenses, liabilities, damages, and losses arising out of or in connection with any claim, demand, action or proceeding which is made or brought against the Supplier in relation to:
 - (a) the employment of any Employee in the period prior to the Transfer Date (to the extent that clause 1.7(c) does not apply); or
 - (b) UKRI's (or any Previous Supplier's) failure or alleged failure to comply with its obligations under Regulation 13 of TUPE, save to the extent that any such failure

or alleged failure is as a result of or in consequence of a failure by the Supplier to comply with its obligations under Regulation 13(4) of TUPE or clause 1.4 above.

- 1.7 The Supplier shall indemnify and keep indemnified UKRI (for itself and on behalf of any UKRI Group Company and any Previous Supplier) against all and any costs, expenses, liabilities, damages and losses arising out of or in connection with any claim, demand, action or proceeding which is made or brought:
- (a) by any Employee in relation to any act or omission of the Supplier (or any Sub-Contractor) occurring or arising at any time and/or in relation to any events or circumstances relating to the employment or termination of employment of any Employee occurring or arising on or after the Transfer Date;
 - (b) in relation to any failure or alleged failure of the Supplier (or any Sub-Supplier) to comply with its or their obligations under Regulation 13 of TUPE;
 - (c) in relation to any substantial change made or proposed by the Supplier (or any Sub-Contractor) in the terms and conditions of employment or working conditions of any of the Employees, or any individual who would have been an Employee but whose employment terminated prior to the Transfer Date, where that change is to the detriment of such Employee(s) or such individual(s).
- 1.8 If a claim or allegation is made by any person who is not an Employee (a "**Non-Disclosed Employee**") that his contract of employment has or should have effect as if originally made between himself and the Contractor (or a Sub-Contractor) by virtue of the operation or alleged operation of TUPE:
- (a) the Supplier shall notify UKRI in writing as soon as reasonably practicable of any such claim or allegation and the Supplier shall then allow UKRI (or any UKRI Group Company or any Previous Supplier) a period of ten working days to consult with any such Non-Disclosed Employee concerning his claim or allegation;
 - (b) the Supplier shall give (and shall procure that any relevant Sub-Contractor shall give) to UKRI (or any UKRI Group Company or any Previous Supplier) such co-operation or assistance as UKRI (or any UKRI Group Company or Previous Supplier) may reasonably require;
 - (c) if, following the period of 10 working days referred to in clause (a), any Non-Disclosed Employee continues to assert that his contract of employment has or should have effect as if originally made between himself and the Supplier (or a Sub-Contractor), the Supplier (or Sub-Contractor) may, within a further period of 20 working days (or such other period as may be agreed in writing between UKRI and

the Supplier), serve notice to terminate the employment or alleged employment of such Non-Disclosed Employee; and

- (d) subject to the Supplier's (or any relevant Sub-Contractor's) compliance with this clause 1.8, UKRI shall indemnify and keep indemnified the Supplier against all and any costs, expenses, liabilities, damages and losses arising out of or in connection with any claim, demand, action or proceeding which is made or brought by or on behalf of any such Non-Disclosed Employee at any time arising out of or in connection with:
 - (i) the employment, alleged employment, or termination of the employment or alleged employment, of any such Non-Disclosed Employee but excluding any costs, expenses, liabilities, damages and losses for unfair dismissal or unlawful discrimination and provided that the Supplier (or relevant Sub-Contractor) shall use all reasonable endeavours to mitigate the amount of any such costs, expenses, liabilities, damages and losses; and
 - (ii) the failure or alleged failure of UKRI (or any Previous Supplier) to comply with its obligations under Regulation 13 of TUPE in respect of any such Non-Disclosed Employee.

1.9 The Supplier acknowledges and agrees that UKRI, any UKRI Group Company and any Previous Supplier have complied with its or their obligations under Regulation 11 of TUPE to notify the Supplier (or any Sub-Contractor) of employee liability information and that this Contract provides sufficient protection in relation to the provision of information concerning the Employees and that it would not be just or equitable for any compensation to be paid by UKRI for any breach of such obligation.

1.10 The Supplier shall indemnify and keep indemnified UKRI (for itself, any UKRI Group Company and any Previous Supplier) against all and any costs, expenses, liabilities, damages, and losses arising out of or in connection with any complaint made by the Supplier (or any Sub-Contractor) against UKRI (or any UKRI Group Company or any Previous Supplier) under Regulation 12 of TUPE.

2 EXIT PROVISIONS

Employee Information

2.1 During the period of twelve months preceding the expiry of this Contract, or at any time after UKRI or the Supplier (or any Sub-Contractor) has given notice to terminate this Contract or

notice to cease the provision of some of the Services, or at any time after the Supplier (or any Sub-Contractor) has actually ceased to provide any of the Services:

- (a) the Supplier shall promptly, upon UKRI's reasonable request, disclose to UKRI details of the name, number, age, terms and conditions of employment, proportion of time spent in the provision of the Services, employment history (including disciplinary or grievance issues) and such other information as UKRI may reasonably require in relation to any Staff;
- (b) UKRI shall be entitled to pass on any information provided to it pursuant to (a) to any person intending to tender or tendering for any contract for the provision of services that are the same or similar to the Services, and UKRI shall be entitled to rely upon and warrant the accuracy of any such information to any Future Service Provider, and the Supplier shall indemnify and keep indemnified UKRI (for itself and any UKRI Group Company and any Future Service Provider) against all and any costs, expenses, liabilities, damages and losses arising out of or in connection with any failure by the Supplier to provide accurate information under this clause; and
- (c) the Supplier shall not and, if relevant, shall procure that any Sub-Contractor shall not, vary the terms and conditions of employment or engagement of any Staff or redeploy, replace or dismiss any Staff, or employ or engage any additional individual in the provision of the Services, without the prior written consent of UKRI.

Emoluments

- 2.2 All wages, salaries, bonus and commission payments, contributions to pension schemes, entitlement to holiday pay and any other emoluments (whether monetary or otherwise), tax and national insurance contributions relating to the Transferring Employees shall be paid or borne by the Supplier (or Sub-Contractor) in relation to the period after the Transfer Date but before the Subsequent Transfer Date (and the Supplier shall procure such payment by any Sub-Contractor) and by UKRI or relevant Future Service Provider thereafter (and UKRI shall procure such payment by any Future Service Provider), and all necessary apportionments shall be made.

Compliance and Indemnities

- 2.3 The Supplier shall and/or, if relevant, shall procure that any Sub-Contractor shall:
- (a) comply with its or their obligations to inform and consult the Expected Transferring Employees pursuant to Regulation 13 of TUPE;
 - (b) use reasonable endeavours to agree with UKRI or a Future Service Provider, and deliver to the Expected Transferring Employees prior to the Subsequent Transfer

Date, a suitable joint statement regarding the proposed transfer of their employment to UKRI or a Future Service Provider on the Subsequent Transfer Date; and

- (c) give employees of UKRI or a Future Service Provider such access to the Expected Transferring Employees prior to the Subsequent Transfer Date as UKRI or a Future Service Provider may reasonably require for the purposes of consultation or of effecting an efficient transfer of the Services and Transferring Employees with effect from the Subsequent Transfer Date.

2.4 The Supplier shall indemnify and keep indemnified UKRI (for itself, any UKRI Group Company and/or any relevant Future Service Provider) against all and any costs, expenses, liabilities, damages and losses arising out of or in connection with any claim, demand, action or proceeding which is made or brought:

- (a) by any Transferring Employee in relation to any act of omission of the Supplier (or any Supplier Group Company or Sub-Contractor) occurring or arising during the period on or after the Transfer Date but up to and including the Subsequent Transfer Date and/or in relation to any events or circumstances relating to the employment or termination of employment of any Transferring Employee occurring or arising during the period on or after the Transfer Date but up to and including the Subsequent Transfer Date;
- (b) in relation to the Supplier's (or any Supplier Group Company or Sub-Contractor's) failure or alleged failure to comply with its or their obligations under Regulation 13 of TUPE, save to the extent that any such failure or alleged failure is as a result of or in consequence of a failure by UKRI or any Future Service Provider to comply with its obligations under Regulation 13(4) of TUPE; or
- (c) by any person who is not a Transferring Employee (a **"Non-Disclosed Transferring Employee"**) and which is made by virtue of the operation or alleged operation of TUPE and relates to circumstances or events occurring or arising at any time after the Transfer Date, whether before or after the Subsequent Transfer Date, in relation to or arising out of any such Non-Disclosed Transferring Employee's employment, alleged employment, dismissal or alleged dismissal.

2.5 UKRI shall indemnify and keep indemnified the Supplier against all and any costs, expenses, liabilities, damages and losses arising out of or in connection with any claim, demand, action or proceeding which is made or brought by or on behalf of any Transferring Employee against the Supplier:

- (a) in relation to the employment or termination of employment of any Transferring Employee after the Subsequent Transfer Date; or
- (b) in relation to any failure or alleged failure of UKRI or a Future Service Provider to comply with its or their obligations under Regulation 13(4) of TUPE, save to the extent that any such failure or alleged failure is as a result of or in consequence of the Supplier's (or any relevant Sub-Contractor's) failure to provide UKRI or Future Service Provider with sufficient information about the Transferring Employees to enable UKRI or Future Service Provider to comply with Regulation 13(4) of TUPE.