Discovery

* + **Type 1: Research Discovery (Size: Large)**

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A research discovery is a substantial piece of research investigation and evidence gathering. It applies to complex issues that fall within but is not limited to, a ‘Life Event’.

* + - * **Action:** in-depth research into the subject matter. Capability uplift of an external team (where applicable), co-design, collaboration and outreach. Embed evidential design rigour, apply quantitative and qualitative research and evidence.
			* **Deliverable:** A research discovery document with findings and next steps actions. Report on evidence and findings. Suggested areas to develop further through a Design Discovery
			* **Outcome:** At the end of this discovery. Time will be taken to draw up a ‘Project Roadmap’. The roadmap builds on the project scope document and details all the operational requirements to meet the outcomes defined and agreed on from the research discovery.
	+ **Type 2: Design Discovery (Size: Large)**

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* + Design discovery focuses on developing and testing possible solutions. It addresses the feasibility, capability and usability of a testable product or service. It can be a standalone product/service or a product/service that has emerged from work undertaken in the Research Discovery phase. Like all work in the Lab, its delivered using Agile SCRUM sprints.

Design Discovery has four distinct stages:

1. Design Scope

2. Problem Definition

3. Problem Validation

4. Solution Validation

For a product / service to be designed and built within the Lab it must pass through the four design stages. A stage-gate acts a failsafe at the end of each stage where the team assesses the design before further progress is committed to. User experience design and research testing is extensively required at each point.

* **Action:**
1. Design Scope - Suggested concepts are scoped for design feasibility
2. Problem Definition - An evidenced problem is defined that can be designed for
3. Problem Validation - Is the design problem meeting the wider project needs?
4. Solution Validation - what are the design solutions, user testing to validate them
	* + - **Deliverables:**
5. Design scope - A design brief for the design team to work from
6. Problem Definition - Design Problem or Problem Statements
7. Problem Validation - Evidencing of the design approach to meet the problem space (UX research)
8. Solution Validation - Lo-fi testing and validation of the solutions proposed (UX)
* **Outcome:**
On conclusion of a design Discovery a clear design approach has been formulated and a prototype can be green lite to proceed.

## Research Discovery - (type 1)

This is made up of two phases of design work - understand and refine.

### Understand

This is broad and shallow research on a topic area.

**What this might look like:**

Workshops

Meetings

Field research

Audience/stakeholder mapping

High level Journey mapping

Current state service analysis

Market and trend research

Literature review

Desk research

Gap analysis

Designing research tools

Gather and share information

Testing with specialists?

Analysis/synthesis of research findings

Identify assumptions

Prioritisation

Identify constraints

**Outputs:**

Inception deck and lean canvas

Information published describing the outcomes and next steps of the work along with a blog post. Likely to include:

Areas for further research

Potential audiences

Assumption validation

Stories

Maps

Data - qual/quant

Trends/market including existing players

**Outcomes:**

Insights into pain points and opportunities for further research.

Options for ways forward

Clarity on what and who needs to be involved next

Validation on what they know vs don’t

Backlog of research

**Relationship activities:**

At the end of this phase of work the agency(s), lab team and others options and an approach for the future.They all know if they need to do more of this phase or can it progress to the next. Activities include:

* Manage expectations of what this phase delivers ie broad and shallow research in the area of interest
* Understand if the path forward is within the remit of the lab and its vision and goals
* Update SIRG and SWIG to ensure mandate is kept

**Decision Requirements for Understand (**[**Gate 3**](https://docs.google.com/spreadsheets/d/1slYLI1EdXlDjjnJFgrvKj8SrBVqjK4zNWoPDgheRHDg/edit?usp=sharing)**):**

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| **Decision requirements** | **Description** |
| Who needs to make the decision? Who’s accountable | * Service Integration Lead
* Agency Sponsor(s).This could be the SWIG member for the relevant agency(s) or a senior responsible owner or a combination of both of them.
 |
| What are they deciding? | Out of the list of possible options for further research that the team have identified during its research and synthesis activities, which one(s) should be progressed to the next phase of detailed research. The alternative is a decision to cease the work here if either the work has fulfilled the agency(s) goals or there is no will to proceed.  |
| Why do they need to make this decision? | To give:* Clarity on what and who needs to be involved next phase of work,
* Understand if the path forward is within the remit of the lab and its vision and goals
 |
| How do they make the decision? What do they need? | Product Owner along with the research team demonstrate a:* Shareable synthesis of the primary and secondary research done
* Story that describes the scope and definition of problem/opportunity and value the team is targeting with its recommendation
* Plan for next steps for either the ‘refine’ phase or design discovery

Lab leads along with product owner assess the initiative: * Does it still align to work programme for the relevant year?
* Does it still have a senior sponsor pushing the work? Do they have resources (people and funding) to do the work?
* Are all necessary agencies and lab in agreement to proceed based on scope of the recommendation?
* Is there capacity in the lab team to allocate a team to progress?
* Is there still a priority for this work?
 |
| Actions associated with decision | **If yes** - Product Owner makes contact with the initiative’s contact person, sponsor, SIRG member with outcome and manages their expectations plus those of DIA leadership (eg Darryl, Karl). * **A paper is published describing the outcomes and next steps of the work along with a blog post.**
* Product owner, process lead, scrum master sets up scoping session to kick of next phase of work.
* Lab product owner starts assembling lab team including logistic support.

**If no** - Lab Integration Lead and product owner makes contacts with necessary people from agency(s) to advise why the initiative can’t be done with the lab at this time.A paper is published describing the outcomes and next steps of the work along with a blog post. |

### Refine

Narrow and deep research into a specific issue. What is the problem, who is experiencing it and when is it happening.

**What this might look like:**

Workshops

Meetings

Market analysis

User stories, Archetypes, personas

Deep dive research

Blueprints

Cause analysis

Reframe problems

Taxonomies

Value proposition

Analytics (data crunching)

Experiment design/planning

Hypothesis development

Analysis/synthesis of research findings

Surveys (baseline)

**Outputs:**

Inception deck and lean canvas

Demonstration (ie could be a presentation, report) that likely describes:

A shareable synthesis of the primary and secondary research done

A story that describes the scope and definition of backlog of the opportunities/problems identified

The causal factors

The hypothesis and assumptions that have been validated or eliminated during the work

Specific problem/discreet problem defined

Concise and well evidenced insights

The value the team is targeting with its recommendation on what should be done next and what are the key measures for success/impact

Plan for next steps for the ‘project roadmap’ and ‘design discovery’ that likely describes:

Design brief/challenge

Design principles specific to context, audience.

**Outcomes:**

Defined problem areas, Deeper understanding of who is affected and when they occur

Prioritisation of problems

Resources required for ideation

Scope set for ideation and co-design (design for today vs 5 years)

Alignment with agency/lab goals and remit

Backlog of work

**Relationship activities:**

For agency(s) and lab team to have a clear understanding of a specific problem to design for - a clear definition of scope. They all know if they need to do more of this phase or can it progress to the next. Activities include:

* Manage expectations of what this phase delivers ie narrow and deep dive research into a specific issue eg what is the problem, who is experiencing it, when is it happening.
* Understand if the path forward is within the remit of the lab and its vision and goals
* Update SIRG and SWIG to ensure mandate is kept

**Decision requirements for Refine (**[**Gate 4**](https://docs.google.com/spreadsheets/d/1slYLI1EdXlDjjnJFgrvKj8SrBVqjK4zNWoPDgheRHDg/edit?usp=sharing)**):**

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| **Decision requirements** | **Description** |
| Who needs to make the decision? Who’s accountable | * Service Integration Lead
* Agency Sponsor(s).This could be the SWIG member for the relevant agency(s) or a senior responsible owner or a combination of both of them.
 |
| What are they deciding? | Out of the list of possible opportunities/problems for design and development that the team have identified during its refined research and synthesis activities, which one should be progressed to the next phase ‘design discovery’. The alternative is a decision to cease the work here if either the work has fulfilled the agency(s) goals or there is no will to proceed.  |
| Why do they need to make this decision? | To give:* Prioritisation and approval the opportunity/problem that will progress
 |
| How do they make the decision? What do they need? | Product Owner along with the research team **demonstrate**:* A shareable synthesis of the primary and secondary research done
* A story that describes the scope and definition of backlog of the opportunities/problems identified
* The causal factors
* The hypothesis and assumptions that have been validated or eliminated during the work
* The value the team is targeting with its recommendation on what should be done next
* Plan for next steps for the ‘project roadmap’ and ‘design discovery’

Lab leads along with product owner assess the initiative: * Does it still align to work programme for the relevant year?
* Does it still have a senior sponsor pushing the work? Do they have resources (people and funding) to do the work?
* Are all necessary agencies and lab in agreement to proceed based on scope of the recommendation?
* Is there capacity in the lab team to allocate a team to progress?
* Is there still a priority for this work?
 |
| Actions associated with decision | **If yes** - Product Owner makes contact with the initiative’s contact person, sponsor, SIRG member with outcome and manages their expectations plus those of DIA leadership (eg Darryl, Karl).Information published describing the outcomes and next steps of the work along with a blog post. **If no** - Lab Integration Lead and product owner makes contacts with necessary people from agency(s) to advise why the initiative can’t be done with the lab at this time.Information published describing the outcomes and next steps of the work along with a blog post. |

**Decision Requirements for Project Roadmap (**[**Gate 5**](https://docs.google.com/spreadsheets/d/1slYLI1EdXlDjjnJFgrvKj8SrBVqjK4zNWoPDgheRHDg/edit?usp=sharing)**):**

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| **Decision requirements** | **Description** |
| Who needs to make the decision? Who’s accountable | * Service Integration Lead
* Agency Sponsor(s).This could be the SWIG member for the relevant agency(s) or a senior responsible owner or a combination of both of them.
 |
| What are they deciding? | * To approve resources (ie people and funding) that continues work with the identified opportunity/problem into a design discovery.
* To get an understanding of what a long term view of what the work could be (eg a value stream of that continues deliver on the backlog after the first opportunity/problem is completed)
 |
| Why do they need to make this decision? | To get:* Understanding on how the collective piece of work and its components contributes to the goals that all parties have for it eg *what are collective goals we have for the life event*
* Clarity on what and who needs to be involved next phase of work
* Understand if the path forward is within the remit of the lab and its vision and goals
 |
| How do they make the decision? What do they need? | Product Owner is responsible for developing a **project roadmap**. The roadmap builds on the project scope document and details all the operational requirements to meet the outcomes defined and agreed in from the research discovery. |
| Actions associated with decision | Product Owner and process lead start the design brief |

## Design Discovery - (type 2)

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During this discovery the following design work occurs; concept generation/adaption, prototyping and testing of ideas.

**What this might look like:**

UI Wireframing

Roleplay

Scenario building

Service blueprint

Surveys

User testing

Co-design workshops

SWOT analysis (decision matrix)

Options analysis

Design patterns

Moodboards

Testing competitors

Logic flows

Technical constraints

Feature mapping

Schematic flow diagrams

QA systems

System integration testing

Function testing

Repositories

Dependencies

front/back end management

Platforms

Services, hosting

**Outputs:**

Design brief

Inception deck and Lean canvas for all phases

A brief recommendations paper at the end of problem definition, problem validation and solution validation (see note in decision requirements)

Blueprints

Technical user stories

Prototypes (lo-fi/interactive)

Visuals

Testing results

MVP

Evaluation framework

Design roadmap

Design language

Runbook (pilot instructions/training)

**Outcomes:**

Tangible, interactive concepts that can be built from

Backlog of work

Understanding if the MVP is viable, desirable, feasible and can be continued vs stopped

**Relationship activities:**

For agency(s) and lab team to have a clear understanding of the tangible concepts that can be built and tested. Activities include:

* Manage expectations that this is all about concept generation, adaptation, prototyping and testing
* Check in regularly that senior leaders are informed and the work aligns with their expectations - manage expectations that their initial idea might be replaced by something better or ceased depending on the evidence.
* Understand if the path forward is within the remit of the lab and its vision and goals
* Update SIRG and SWIG to ensure mandate is kept

**Decision requirements:**

**Design Brief (**[**Gate 6**](https://docs.google.com/spreadsheets/d/1slYLI1EdXlDjjnJFgrvKj8SrBVqjK4zNWoPDgheRHDg/edit?usp=sharing)**)**

Suggested concepts are scoped for design feasibility

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| **Decision requirements** | **Description** |
| Who needs to make the decision? Who’s accountable | * Service Integration Lead
* Agency Sponsor(s).This could be the SWIG member for the relevant agency(s) or a senior responsible owner or a combination of both of them.
 |
| What are they deciding? | Approval of the scope of work that will be explored through the four phases of the design discovery.  |
| Why do they need to make this decision? | To:* Get clarity on what and who needs to be involved
* Understand if the path forward is within the remit of the lab and its vision and goals
* Approval that the work can begin
 |
| How do they make the decision? What do they need? | Product Owner and Process lead create a design brief that demonstrates: * The agency(s) involved and what they are trying to achieve
* The scope of the work
* The target audience(s) for the work
* How does this work differ from what other might be doing?

Lab leads along with product owner assess the initiative: * Are all necessary agencies and lab in agreement to proceed based on scope of the recommendation?
* Is there capacity in the lab team to allocate a team to progress?
 |
| Actions associated with decision | **If yes** - Product Owner makes contact with the initiative’s contact person, sponsor, SIRG member with outcome and manages their expectations plus those of DIA leadership (eg Darryl, Karl). * A brief is published with a blog post promoting the work.
* Product owner, process lead, scrum master sets up scoping session to kick of next phase of work.
* Lab product owner starts assembling lab team including logistic support.

**If no** - Lab Integration Lead and product owner makes contacts with necessary people from agency(s) to advise why the initiative can’t be done with the lab at this time.A paper is published describing the outcomes and next steps of the work along with a blog post. |

**Problem Definition (**[**Gate 7**](https://docs.google.com/spreadsheets/d/1slYLI1EdXlDjjnJFgrvKj8SrBVqjK4zNWoPDgheRHDg/edit?usp=sharing)**)**

Problem Definition - *An evidenced problem is defined that can be designed for*

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| **Decision requirements** | **Description** |
| Who needs to make the decision? Who’s accountable | * Service Integration Lead
* Agency Sponsor(s).This could be the SWIG member for the relevant agency(s) or a senior responsible owner or a combination of both of them.
 |
| What are they deciding? | Is there enough evidence to determine if the problem should continue to be validated or should the team pivot and choose another opportunity/problem from the backlog to explore further.  |
| Why do they need to make this decision? | To fulfill the intent of the project (see project roadmap) and the collective goals we have for it, does the problem help deliver on making life better for users? We don’t want to continue working on a problem that has minimal impact on what we are trying to achieve.  |
| How do they make the decision? What do they need? | Product Owner and Process lead prepare a **brief recommendations paper** that describes: * Shareable synthesis of the research done
* The potential causal factors
* The Design Problem or Problem Statements
* Recommendation (ie continue or pivot)
 |
| Actions associated with decision | **If yes** - Product Owner makes contact with the initiative’s contact person, sponsor, SIRG member with outcome and manages their expectations plus those of DIA leadership (eg Darryl, Karl). Team continue work. **If pivot** - Lab Integration Lead and Product owner contact with the initiative’s contact person, sponsor, SIRG member with outcome and manages their expectations plus those of DIA leadership (eg Darryl, Karl). Product owner, process lead and scrum master prepare team to pivot and start another design brief. Information is published describing the outcomes and next steps of the work along with a blog post. |

**Problem Validation (**[**Gate 8**](https://docs.google.com/spreadsheets/d/1slYLI1EdXlDjjnJFgrvKj8SrBVqjK4zNWoPDgheRHDg/edit?usp=sharing)**)**

Problem Validation - *Is the design problem meeting the wider project needs?*

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| **Decision requirements** | **Description** |
| Who needs to make the decision? Who’s accountable | * Service Integration Lead
* Agency Sponsor(s).This could be the SWIG member for the relevant agency(s) or a senior responsible owner or a combination of both of them.
 |
| What are they deciding? | Is the problem validated with users and key stakeholders? Have the team collected sufficient evidence to determine if solutions should be created to mitigate the problem or should the team pivot and choose another opportunity/problem from the backlog to explore? |
| Why do they need to make this decision? | To fulfill the intent of the project (see project roadmap) and the collective goals we have for it, does the problem help deliver on making life better for users? We don’t want to continue working on a problem that has minimal impact on what we are trying to achieve. |
| How do they make the decision? What do they need? | Product Owner and Process lead prepare a **brief recommendations paper** that describes: * Evidencing of the design approach to validate the problem space (ie UX research and validated learning)
* The tests used to validate causal factors and identify potential (ie hypotheses developed and prioritised, validation plan for each hypothesis)
* Validation conclusion for each hypothesis
* Recommendation (ie continue or pivot)
 |
| Actions associated with decision | **If yes** - Product Owner makes contact with the initiative’s contact person, sponsor, SIRG member with outcome and manages their expectations plus those of DIA leadership (eg Darryl, Karl). Team continue work. **If pivot** - Lab Integration Lead and Product owner contact with the initiative’s contact person, sponsor, SIRG member with outcome and manages their expectations plus those of DIA leadership (eg Darryl, Karl). Product owner, process lead and scrum master prepare team to pivot and start another design brief. Information is published describing the outcomes and next steps of the work along with a blog post. |

**Solution Validation (**[**Gate 9**](https://docs.google.com/spreadsheets/d/1slYLI1EdXlDjjnJFgrvKj8SrBVqjK4zNWoPDgheRHDg/edit?usp=sharing)**)**

Solution Validation - *what are the design solutions, user testing to validate them*

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| **Decision requirements** | **Description** |
| Who needs to make the decision? Who’s accountable | * Service Integration Lead
* Agency Sponsor(s).This could be the SWIG member for the relevant agency(s) or a senior responsible owner or a combination of both of them.
 |
| What are they deciding? | On conclusion of a Design Discovery a clear design approach has been formulated and a prototype has the green light to proceed. Alternatively, does prototype(s) indicate a different approach is needed and a pivot is required? |
| Why do they need to make this decision? | To fulfill the intent of the project (see project roadmap) and the collective goals we have for it, does the **solution(s)** help deliver on making life better for users? We don’t want to continue working on a **solution(s)** that has minimal impact on what we are trying to achieve. |
| How do they make the decision? What do they need? | Product Owner and Process lead prepare **a brief recommendations paper** that describes: * Evidencing of the design approach that mitigates the problem space (Lo-fi testing and validation of the solutions proposed ie UX research)
* Have a range of interventions been considered *(ie Direct Intervention, Indirect Intervention, Policy Change, System Change, Process Change, Cross-Government)*
* Validation conclusion for the solution(s)
* Recommendation (ie continue or pivot)
 |
| Actions associated with decision | **If yes** - Product Owner makes contact with the initiative’s contact person, sponsor, SIRG member with outcome and manages their expectations plus those of DIA leadership (eg Darryl, Karl). * Information is published describing the outcomes and next steps of the work along with a blog post.
* Lab leads, product owner, process lead, scrum master sets up scoping session to kick of next phase of work.
* Lab product owner starts assembling lab team including logistic support.

**If pivot** - Lab Integration Lead and Product owner contact with the initiative’s contact person, sponsor, SIRG member with outcome and manages their expectations plus those of DIA leadership (eg Darryl, Karl). Product owner, process lead and scrum master prepare team to pivot and start another design brief etc. Information is published describing the outcomes and next steps of the work (ie pivot or stop) along with a blog post. |