

Evaluation of the Northern Ireland Public Sector Innovation Lab

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Evaluation of the Northern Ireland Public Sector Innovation Lab

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Northern Ireland Innovation Lab

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1.0

Executive Summary

The Northern Ireland Public Sector Innovation Lab aims to improve public services and policy by creating a safe space to co-create ideas, test prototypes and refine concepts with citizens, civil servants and stakeholders.

It was established in April 2014 by the then Minister for Finance within the Public Sector Reform Division of the Department of Finance. From June 2014 to June 2016, the Lab led 18 projects focused on a wide range of service and policy challenges. The challenges ranged from improving the use of data analytics within the government and reviewing business rates to encouraging people to pay court fines and optimising how patients manage their medication. It is testimony to the Lab's success that it has been able to embark on such a diverse and ambitious portfolio of projects and gained endorsement from a range of departments.

In September 2016, an evaluation was commissioned of the Lab's activities as well as its governance including its leadership, operating model, methods and capacity. This was carried out by PDR (the International Design and Research Centre at Cardiff Metropolitan University) and based on 30 interviews with Lab staff, the wider Northern Ireland Civil Service (NICS) and external stakeholders.

As a result, four impact case studies have been developed. For example, although there are multiple factors at work, an investment of £60,000 in the Lab's Medicines Optimisation project could result in cost savings of over £20 million per annum. Consequently, a series of recommendations have been made to capitalise on the Lab's expertise, achieve further impact and secure additional support from stakeholders.

Even commissioning such an evaluation makes the Lab unique amongst its counterparts as there are few assessments of the performance of Labs.

Worldwide there are over 100 Policy Labs, approximately 65 of these are in Europe and in the UK alone there are 10 Labs. Policy Labs are multidisciplinary teams developing public services and policies using innovative methods to engage citizens at multiple stages of the development process. Broadly, there are currently three main funding models for Policy Labs in Europe:

[Sponsorship model](#) (such as MindLab in Denmark)

[Cost recovery model](#) (such as the UK Policy Lab)

[Commercial model](#) (such as the PDR User-Centred Design Lab)

In the sponsorship model, income is predominantly derived from a 'top slice' of government funding (potentially across multiple departments). In the cost recovery model, the Lab services other government departments charging for projects on a not-for-profit basis. In the commercial model, income is spread across public, private and collaborative sources secured competitively. In its current form, the Northern Ireland Innovation Lab constitutes a sponsorship model where the Department of Finance bears the full cost of the team. Furthermore, there is an emerging fourth model, which can be considered a hybrid combining sponsorship, commercial income and collaborative funding such as public private partnerships, knowledge exchange initiatives and European funding.

The strength of the Lab lies in the experimental way that the operating model has developed organically through a continuous learning process. For example, the initial format for projects,

composing of an intensive four-day workshop, has changed in response to user needs to a longer-term strategic engagement. A further example of this would be that in the early days the departmental 'Sponsor' for projects would only be involved in setting the challenge and receiving the concepts and not in the ideas generation. Overtime, the methods have diversified from an initial focus only on design to now incorporating behavioural insights and system dynamics modelling. With more tools in the toolbox, the Lab has generated a number of 'quick wins' through behavioural insights, more strategic interventions using design and has introduced a "genuinely new way of doing business" with system dynamics modelling.

The most significant weakness is that initially the Lab did not have a mandate to see projects through to implementation. At the outset, projects focused on the first three stages of the design process including analysing user needs (Discover), reframing the challenges (Define) and generating ideas with stakeholders (Develop). However, latterly the Lab has shifted emphasis towards prototyping and implementation (Deliver). This is fundamental because without the implementation Lab activities can have a negative effect on participants by raising expectations.

"A Lab is not a Lab unless it is testing. Otherwise it is just a forum for ideas." Senior Civil Servant, Department of Finance

Emerging from its experimental phase, it is now timely for the Lab to consolidate and enter a new stage of governance. However, if any transition is undertaken too quickly it will jeopardise the somewhat fragile modus operandi of the Lab. The Lab is still in its infancy and in the absence of concerted marketing efforts in the

past two years, more should now be done to position the Lab as a bastion of public sector innovation within the NICS. Although there is significant need for its expertise there is not necessarily the corresponding demand from the departments particularly in the context of constricted budgets. In the longer-term the Lab could move to a commercial model; however, in the shorter-term a model combining sponsorship and collaborative funding would be most effective. In this scenario, the core activities of the Lab would be underwritten by sponsorship providing it with a clear mandate to service departments retaining its unique status as a 'safe space' to innovate. This would also allow the Lab to top up its income through collaborative initiatives in the UK and abroad. Securing sponsorship from all nine Northern Ireland Departments, or even a selected number of departments, will require the Lab to outline its unique selling point and produce a clear service offering.

In a very tangible way, the Lab is already contributing to two significant NICS agendas – the Programme for Government (PfG) and engaging citizens and stakeholders in quality public consultation. These two aspects are the Lab's unique selling points. The PfG encourages collaboration and the Innovation Lab is ideally placed to broker constructive dialogue between departments helping them to achieve PfG priorities. It can also significantly enhance citizen involvement in policy development. At present, public consultation can be perceived as little more than a 'tick box' exercise lacking in quality and meaningful public engagement.

"One of the problems we have in policy development is direct citizen engagement. Involving citizens in the policy process is standard practice but we do not necessarily achieve quality

citizen engagement. Our desired representative user groups find it difficult to participate in the formalised consultation meetings we usually hold. The methods used by the Lab have transformed our collaboration with citizens and stakeholders to genuinely co-create policy and services; not just tick a box.”

Project Sponsor, Department of Health

Indeed, the Lab was highlighted within the 2016 review of governance in Northern Ireland by the Organisation for Economic Cooperation and Development (OECD). The OECD recommended to make more use of the Lab and to support it to “develop its full potential through departmental ownership, skills development, active user and sponsor-department participation in lab sessions, and impact measurement.” These are pivotal times for the public sector and more than ever there is a need for innovation with citizens for citizens.

The Northern Ireland Public Sector Innovation Lab is uniquely positioned to drive more transparent and inclusive public decision-making. The Lab has considerable added value both in monetary terms evident from the return on investment figures cited in the case studies and also through its transformation of the interface between the NICS and the public.

[Dr Anna Whicher, Head of Design Policy](#)
PDR (International Design and Research Centre)

2.0

Context

Policy Labs are multidisciplinary teams developing public services and policies using innovative methods to engage citizens at multiple stages of the development process. These Policy Labs use a range of innovation methods such as Design, Behavioural Insights, Systems Thinking, Lean, Ethnography, Co-creation, Digital and Data Science, among others¹. As Christian Bason (former Director of MindLab) observes, although policy is formulated in the name of public demand, by not involving citizens effectively in the process there has been a damaging loss of confidence in policy-making².

A recent mapping of Policy Labs commissioned by the EU Policy Lab reveals a growing number of Policy Labs in Europe and particularly in the UK³. Furthermore, in October 2016, the European Commission Joint Research Centre (JRC) instigated an informal network of Policy Labs at the inaugural 'Labs Connections' conference in Brussels. Regardless of 'Brexit', fundamentally, the challenges to public sector reform in the UK are echoed across Europe and international cooperation will be as pertinent once article 'Article 50' is triggered as it was prior to the referendum:

"The world is changing very rapidly and institutions have a hard time coping. To cope, we must work on decision-making procedures, citizen participation, digitalisation, design and be agile in our thinking. In a resource constrained environment we have to focus on creativity and innovation." Kristalina Georgieva, European Commission Vice-President for Budget and Human Resources, speaking at the Lab Connections Conference, Brussels 17.10.16

“We have to open up decision-making procedures to get innovative ideas into policy. The birth of Policy Labs at national, regional and local levels is a valuable part of this process. The EU Policy Lab has now been operating for a year and a half. Creating a network of Policy Labs is a revolution in the public sector reform agenda.” *Tibor Navracsics, European Commissioner for Education, Culture, Youth and Sport, Lab Connections 17.10.16*

The Northern Ireland Public Sector Innovation Lab was established in April 2014 by the Minister for Finance and located within the Public Sector Reform Division of the Department of Finance. The achievements of the Lab have been considerable and there is further opportunity to consolidate its activities and governance to achieve greater impact in the future. This report builds on the recommendations put forward by the Organisation for Economic Cooperation and Development (OECD) to make better use of the Lab and to support it to ‘develop its full potential.’⁴

2.1 Policy Labs across Europe

Worldwide there are over 100 Policy Labs⁵, approximately 65 of these are in Europe and in the UK alone there are 10 Labs⁶. An increasing number of these are at multiple levels of governance across the UK, for example within the councils for Shropshire, Kent, Surrey and Leeds; the Scottish Government Ingage Team as well as the UK Policy Lab and the Trade Design Lab (formerly UK Trade and Investments Ideas Lab). Broadly, there are three main funding models for Policy Labs across Europe:

- [Sponsorship model](#) (such as MindLab in Denmark)
- [Cost recovery model](#) (such as the UK Policy Lab)
- [Commercial model](#) (such as PDR's User-Centred Design Lab)

It should also be acknowledged that the distinctions between these three models are blurring and no model fully fits within a single category (see table 1). Furthermore, there is an emerging fourth model, which can be considered a hybrid combining sponsorship, commercial income and collaborative funding such as public private partnerships, knowledge exchange initiatives and European funding. This model is currently hypothetical and not operated by an existing Lab at present.

“Let’s forget the McDonald’s vision for Labs. They are all different depending on the local culture. There is no blueprint.”

*Stephane Vincent, Director, 27e Region in France,
Lab Connections 18.10.16*

Examples of the classic sponsorship model would include MindLab in Denmark (80% financed by three central government departments and one local municipality but also with 20% commercial income) and the UK Policy Lab in its first year of operations (jointly financed by 17 central government departments). However, now in its third year of operations, the UK Policy Lab has successfully transitioned to a cost recovery model servicing the departments on a not-for-profit basis. An example of a fully commercial model would be the PDR User-centred Design Lab (UCD Lab) with income from public sources (including Welsh Government and Central Government Framework contracts), private and public sector consulting and collaborative funding won competitively.

The hypothetical hybrid model spreads income across multiple sources including sponsorship, commercial and collaborative funding. Each model has its associated strengths and weaknesses (see table 2).

Table 1: Operating models for Lab and Innovation centres across Europe

Name of Lab	Sponsorship	Commercial	Collaborative Funding
MindLab (2002)	80%	20%	0%
Policy Lab (2014)	0%	100%	0%
PDR UCD Lab (2010)	0%	100%	0%
Hybrid Model (Hypothetical)	40%	30%	30%

Table 2: Strengths and weaknesses of operating models for policy labs and innovation centres

Model	Strengths	Weaknesses
Sponsorship	Clear mandate to service government departments.	Reliant on stable and continuous source of funding within a shifting political environment.
Cost-Recovery	Flexibility to service a range of clients.	Requires expertise across business development, marketing and finance.
Commercial	Flexibility to service a range of clients.	Requires leadership and expertise across business development, bid writing, marketing and finance.
Hybrid	Risk spread among multiple income sources.	Requires leadership and expertise across business development, bid writing, marketing and finance.

The Sponsorship Model

The Sponsorship Model hinges on the regular renewal of a contract across multiple government departments (often annually across central government). For example, the activities of MindLab are sponsored 80% by three central government departments and one local municipality with 20% of activities funded through external commercial activities.⁷ This means the MindLab model can be considered predominantly a sponsorship model with elements of a commercial model. In this model, examples of commercial activity would include servicing non-sponsorship departments, international knowledge transfer activities (such as training programmes) and ad hoc conference fees. With the sponsorship model there is a risk that if key sponsors withdraw their support that the Lab will close its doors or be spun out of government. For example, the Behavioural Insights Team established in 2010 by the Coalition Government within the UK Cabinet Office was spun out in 2014. It is now a limited company jointly owned by the Cabinet Office, Nesta and its employees.⁸ The advantage of a Lab being spun out is the flexibility of operations but equally, from within government, a unit arguably has more effective access to the levers of power.

The Cost Recovery Model

The Cost Recovery Model hinges on a highly effective and efficient work programme and continuous pipeline of projects as well as crucially a strong reputation. The UK Policy Lab was initially sponsored by 17 central government departments, who contributed in cash or kind to the Lab's year one budget of £350,000. This budget covered staff salaries, project costs and consultancy. In the second year, the Lab asked for a smaller contribution from departments, but began charging for some

projects. The total budget in the second year was just under £450,000.⁹ The Lab is now in its third year and having generated significant demand, it has moved to a cost recovery model charging departments for projects on a not-for-profit basis. As part of this cost recovery model, Policy Lab factors in running costs such as outreach work and training sessions. Policy Lab no longer charges a levy, but departments may contribute in kind, such as through free or subsidised secondments as a development opportunity for their staff. The Lab does not receive core funding from other sources, but generates some income in speaker fees and workshop facilitation mainly from international Labs and events. Through promotional efforts, Policy Lab has created a strong profile lending credibility to its work, which has subsequently generated significant demand for its services in the UK and even abroad. Where a Lab operates a cost recovery model internally servicing other government departments it demonstrates that it is in demand but it can be difficult to reach out to those teams that are less convinced in the first place. However, this model also affords a relative freedom and flexibility to pursue high value, strategic projects.

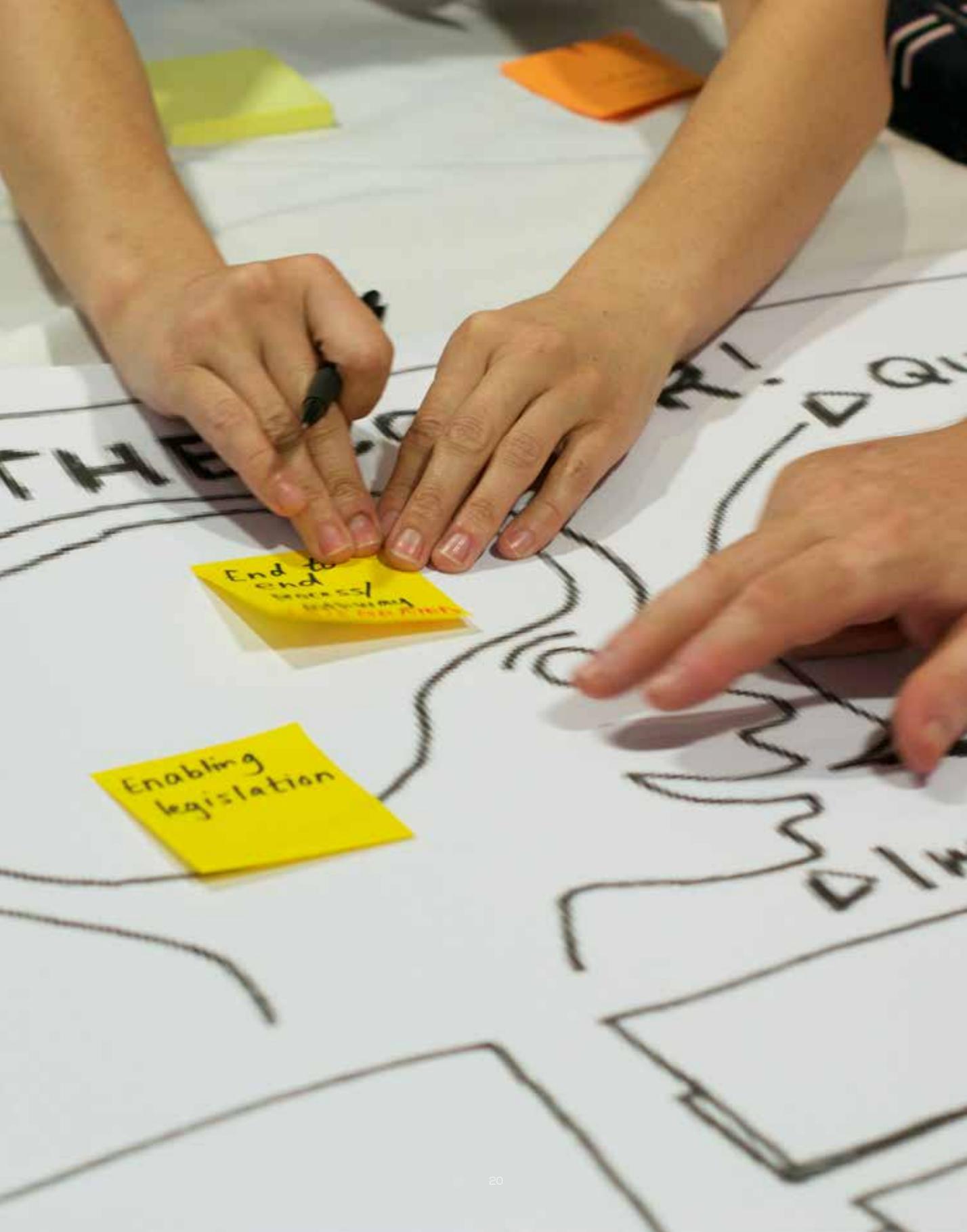
The Commercial Model

The Commercial Model is based on a financial model where all income is commercial but may be spread across multiple sources. In the case of the PDR UCD Lab, income is secured from government framework contracts, from both public and private sector consulting as well as collaborative funding (such as public-private funding, research contracts, knowledge exchange projects and European funding) all won competitively. This involves the support of a Business Development Manager, Marketing Manager, Bid Development Manager and Finance

Manager as well as Directors. PDR has a four year contract with the Welsh Government called the 'Welsh Design Advisory Service' and is also part of the UK Government's 'Digital Specialist Framework' providing Lab services across the UK public sector. Furthermore, PDR consults commercially on public and private sector innovation projects and undertakes a large number of collaborative projects such as knowledge transfer initiatives and European funded projects. Income generated from three sources minimises the risks when contracts reach their conclusions; however, again it requires effective leadership and an efficient project pipeline as well as significant marketing efforts to manage peaks and troughs.

The Hybrid Model

The Hybrid Model is a hypothetical model based on the idea of generating income from multiple sources within the public domain. Conceptually the model is underwritten by sponsorship but possibly from a smaller number of departments (such as three to five). The sponsor departments might be guaranteed a certain number of projects per year. Income is then topped up from commercially servicing departments that are not providing sponsorship. A Lab would work with non-sponsor departments on a project by project basis. Finally, funding is also generated from collaborative sources such as public-private partnerships, knowledge transfer activities and European funding. This model is based on the notion that the future is collaborative and that collaboration must be sought beyond our own organisational walls.



End to end process

Enabling legislation

2.2 Northern Ireland Public Sector Innovation Lab

The Innovation Lab aims to improve public services and policy by creating a safe space to co-create ideas, test prototypes and refine concepts with citizens and civil servants. It was established in April 2014 by the then Minister for Finance within the Public Sector Reform Division of the Department of Finance.

“The then Minister of Finance was very focused on public sector reform and best practices from abroad. We visited MindLab in Denmark and Helsinki Design Lab and subsequently the political decision was taken to establish the Northern Ireland Public Sector Innovation Lab. We knew we were biting off a lot. We aimed to have a regional Lab that would deal with operational issues as well as the more strategic policy-related matters. We weren’t quite sure about the look and feel of the Lab.”

Senior Civil Servant, Department of Finance

After two years of operation it was deemed timely to conduct an independent evaluation to assess the Lab’s effectiveness and to surface recommendations to help shape the operating model to address the challenges arising from the new Programme for Government, further decreases in budgets and ‘Brexit’. Following a call for tender, PDR (the International Design and Research Centre at Cardiff Metropolitan University) was commissioned to perform an evaluation of the Lab’s activities as well as its governance including its leadership, operating model, methods and capacity.

The evaluation focused on the following questions:

- How effective has Governance and Leadership of the Innovation Lab been?
- How does the Business Model of the Lab align with best practice?
- How innovative has the Lab been?
- How has the Lab performed to date?

The assessment was carried out based on 30 interviews with Lab staff, the wider NICS and external stakeholders. As a result, four impact case studies and an analysis of the strengths and weaknesses of the above aspects of the Lab have been developed. Consequently, a series of recommendations have been made to capitalise on the Lab's expertise, achieve further impact and secure additional support from stakeholders.

The operating model for the Innovation Lab has developed organically through an experimental phase over two years. In that time, the Lab has led 18 projects focused on a wide range of service and policy challenges. The projects ranged from improving the use of data analytics within the government and reviewing business rates to encouraging people to pay court fines and optimising how patients manage their medication. Now the Lab is facing a new set of challenges including demonstrating impact and sustaining momentum.

“Initially the Lab was a team without a portfolio. We have built up a wide-ranging portfolio in two years. We have expanded our toolkit to include design, behavioural insights and system dynamics modelling. They are three methods we will need to refine. To date we have done a significant amount of ideas generation but not much prototyping and testing, which is what we need to move into.”

Senior Civil Servant, Department of Finance

The Lab has been an incredibly successful incubator of ideas. From a team without a portfolio, the Lab has blazed a trail across a number of key government services demonstrating that it has the expertise and capacity to deal with incredibly thorny public sector challenges such as enforcement of court fines, meeting EU regulations, pooling government resources in shared services, developing an internal NICS recognition scheme and creating meaningful insight in a data void. The success lies in the high degree of autonomy within a performance framework afforded to the Lab meaning it has developed a broad experience base.

It is also crucial to acknowledge the unique civil and political context, shaped by more than 30 years of unrest, in which the Northern Ireland public sector is functioning. During the ‘Troubles’, policy-making was dominated by senior civil servants from Westminster and unelected quangos (quasi-autonomous nongovernmental organisations), which gained disproportionate influence and increased the democratic deficit.¹⁰ Quangos still play a substantial role in the medley of government departments, agencies, non-departmental public bodies and local authorities, which form the public administration in Northern Ireland. The whole system is often referred to as ‘both cumbersome and piecemeal’.¹¹ Even since the 1998 Belfast

Agreement, the cornerstone of Northern Ireland's governance, the country has experienced regular periods of constitutional and institutional crisis and dysfunction, making the arrangements fragile and precarious. The power-sharing arrangements of the mandatory coalition, while being a foundation for peace, have institutionalised complexity in decision-making.¹²

"Innovation is desperately needed in Northern Ireland. We do bureaucracy and risk-aversion like nobody else in the UK. We have particular issues with the legacy of civil service being managed by accountants who measure inputs not outcomes."

Deputy Principal, Department of Economy

The recent review of public governance in Northern Ireland by OECD pinpointed these specific arrangements as an impediment to effective development and delivery of public services. The Lab must operate in this complicated political environment. Potentially, in the longer-term the Lab has an opportunity to cut through this complexity by fostering collaboration, but at present is limited by the status quo rather than disrupting it.

2.3 OECD Recommendations

From 2014 to 2016, the Northern Ireland Executive commissioned the OECD to conduct the first strategic review of public sector reform in Northern Ireland. The review involved more than 300 people and made 30 recommendations related to the quality of public services for citizens and value for money in three thematic areas.¹³

- Improving strategic approaches;
- Improving operational delivery of services to citizens and businesses;
- Improving engagement with people.

The Innovation Lab, with its inclusive, collaborative methods focused on citizens, could play a major role in harnessing innovation to make improvements in all of these three areas. It was in fact one of the OECD recommendations to make better use of the Lab and to support it to *“develop its full potential through departmental ownership, skills development, active user and sponsor-department participation in lab sessions, and impact measurement”*.¹⁴

“We need to infect the public sector with innovation. There are both top-down and bottom-up approaches. Design and Big Data are under used opportunities. They can actively engage citizens in co-creation. [...] It is important where you position a Lab. If you put it at the centre of the administration you put it close to the levers that influence processes.”

Edwin Lau, Head of the Public Sector Reform Division, OECD, Lab Connections 18.10.16

The OECD report highlights the Lab as an *'impressive example of how the government is nurturing innovation in the public sector'*.¹⁵ The main conclusions from the OECD report on the Lab hinge on the funding structure (distributing the cost of the Lab across all department budgets), up-skilling the civil service and measuring the Lab's impact using indicators. Each of these points will be dealt with in turn as part of this evaluation report. In short, for the OECD, the Lab is an effective vehicle for rethinking public service and policy delivery with a greater focus on openness, transparency and accountability.

2.4 Programme for Government

The Programme for Government (PfG) 2016–2021 is the highest level strategic document of the Northern Ireland Executive. It sets out the priorities that will be pursued in the current Assembly mandate, and the most significant actions that will be taken to address them.¹⁶ The PfG encourages collaboration across multiple Departments and the Innovation Lab is ideally placed to broker constructive dialogue between the Departments helping them to achieve PfG priorities and enhance citizen involvement in policy development. These are pivotal times for the public sector and more than ever there is a need for innovation with citizens for citizens. The Northern Ireland Public Sector Innovation Lab is uniquely positioned to drive more transparent and inclusive public decision-making from inside out.

Demonstrating value for money and cost savings from the Lab activities is extremely important, particularly given the Lab's position within the Department of Finance; however, the impact of the Lab extends way beyond such performance indicators and



much of the added value is from brokerage and inclusivity and thus is more difficult to measure. This dimension of the Innovation Lab should not be undervalued simply because it cannot be quantified.

“The advantages of the Lab are more qualitative than quantitative. I couldn’t put a value on it.”

Project Sponsor, Department for Communities

“The Innovation Lab is very much about creative, conceptual thinking and it is difficult to monetarise and put value on those more intangible benefits. The Lab was great because we wouldn’t get all these people in one room and get them to agree on something, but to measure that – it is a challenge.”

Project Sponsor, Department of Finance

Very often by the time a policy progresses to public consultation, the trajectory is already set and limited changes are made. However, citizens and stakeholders should be involved in every stage of the policy process from user-needs analysis, problem definition, ideas generation, testing, up-scaling and evaluation. The Lab is already a conduit for these practices and there is a real opportunity to capitalise on its potential to realise the Programme of Government and achieve quality public engagement.

3.0

Lab Activities

From 2014 to 2016, the Lab led 18 projects focused on service and policy challenges (see table 3) with a budget of approximately £540,000 (see table 4). It is testimony to the Northern Ireland Innovation Lab's success that it has embarked on such a diverse portfolio of projects. Both the Northern Ireland Innovation Lab and the UK Policy Lab were established in April 2014 but we should not be tempted to draw parallels between the two as their missions and operating environments are different. In two years, the UK Policy Lab led twelve large projects and involved 4,000 civil servants in projects, workshops and training with a budget of approximately £800,000.¹⁷ This provides context but this should not be considered a direct comparison because all Labs operate different models at different scales and have different interpretations of implementation.

At the outset, the main method adopted by the Innovation Lab for projects was design. Design is an approach to problem-solving that departs from an analysis of user needs and involves users in jointly developing and testing solutions.

"We started off with just design, which I have come to realise is central to the Lab. But at the time I did not fully appreciate what design could do. Seeing design in action changed my mind. Designers can ask questions in very different ways. The notion of fully exploring the challenge and not jumping to solutions in a traditional linear way is very valuable. We have a much more diverse skills set now."

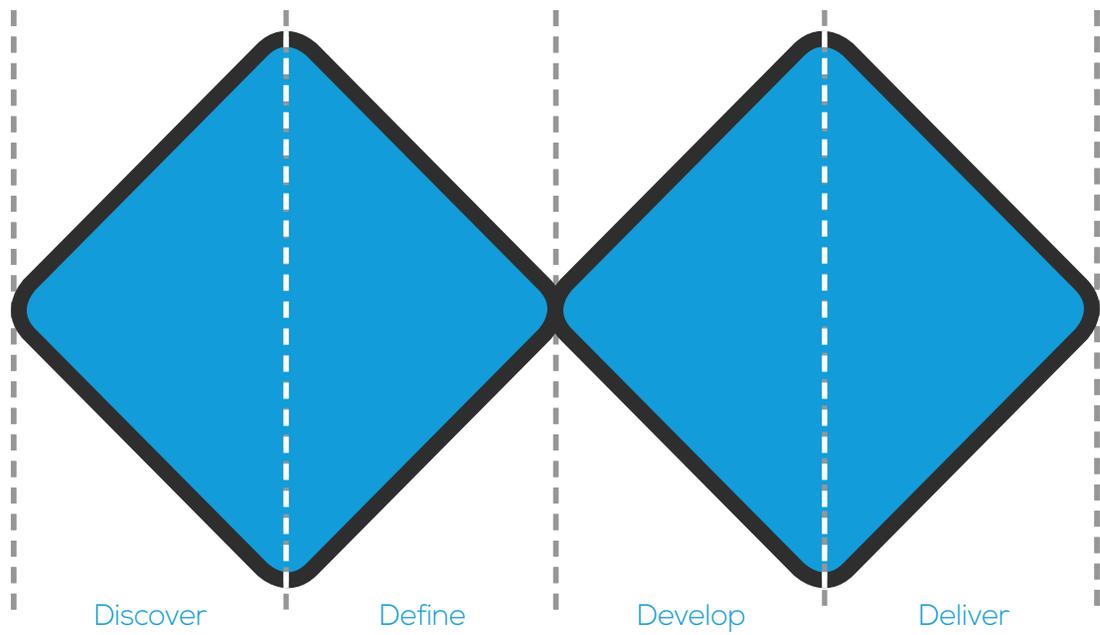
Senior Civil Servant, Department of Finance

The Double Diamond, attributed to the Design Council, is commonly used as a framework by Policy Labs for public sector innovation projects based on iterative phases of divergent and convergent thinking (see figure 1). The Double Diamond process is based on four stages: Discover (analysing user needs), Define (reframing the challenges), Develop (generating ideas with stakeholders) and Deliver (prototyping and implementing solutions). At the outset, the focus of the Lab was on analysing user needs (Discover), reframing the challenges (Define) and generating ideas with stakeholders (Develop) and not on implementation (Deliver).

At the outset, the Lab focused less on implementation as this was not seen within their remit or authority – since implementation decisions were seen as being for Project Sponsors working within the governance and accountability mechanisms within their own Department. However, in the second year this changed to place a greater focus on implementation. Using design processes and engaging with people’s lived experiences of public services compelled the Lab to push for a change in its remit to ensure implementation.

Of the 18 projects, nine projects progressed to implementation (note that four projects are still live at the time of publication and highly likely to be implemented). Although a 50% progression rate to implementation may not sound successful; in fact, in the context of experimental Labs operating in a highly exploratory environment this should be considered highly successful. The average value per Lab is around £30,000 and there is no real difference between the cost of projects that progressed to implementation and those that did not because the Lab does not bear the cost of the implementation stage. It is not possible to

Figure 1: Double Diamond Design Process



benchmark this progression rate against other Labs as Labs have different definitions of implementation and different operating environments depending on the scale of the Labs. Informally, one Lab has indicated that the progression rate to implementation is around a quarter. On another note, a lack of implementation and evaluation were highlighted as severe shortcomings of most Labs at the Lab Connections Conference.

“Most Labs focus on re-framing the challenge at the front end of the development process. Labs tend to focus less on implementation and embedding the methods in the wider government. There are benefits to the quick wins but the more strategic wins are through longer-term implementation and systems change. There is also a data gap in evaluating the effectiveness of Labs.”

Jesper Christiansen, Senior Programme Manager at Nesta (formerly at MindLab), Lab Connections 18.10.16

It should be acknowledged that the lead time for implementation in a policy cycle can be over a year, which further reinforces the success level of the NI Innovation Lab. It is perhaps necessary at this point to qualify ‘implementation’. At a policy level, among other Labs, implementation is considered when recommendations made in Lab projects directly inform political decisions. Based on this logic, the NI Innovation Lab has been able to influence both policy and service changes. For example, in the Regulatory Impact Assessment project the Lab addressed the question - How do we improve the quality of RIAs to deliver better policy and therefore growth? The lab made 14 recommendations that should substantially improve the quality of Impact Assessments completed in Northern Ireland, and support the improvement of the regulatory environment in Northern Ireland. Most of these recommendations were adopted into the DETI Business Red Tape

Review. Therefore this is categorised as implementation in a policy context.

It should also be emphasised that the Innovation Lab is a so-called 'safe space' to innovate and that with innovation comes failure. In this context, failure should not have the negative connotation usually associated with the public sector realm. The Innovation Lab represents a dedicated space to experiment and ascertaining what does not work can be as valuable as ascertaining what does work. Too often in the public sector, initiatives progress to small scale pilots at which stage failure comes at a greater cost. Competences in experimenting, prototyping and testing do not exist widely or coherently within the civil service.

"We use a four-stage design process - Explore, Experiment, Experience, Expand. Our projects work well when we go straight into prototyping. To show impact, we need to start testing early. Policy is not static." Cat Drew, Senior Policy Advisor, UK Policy Lab, Lab Connections 18.10.16

Of the 18 projects, 15 used design methods, two used behavioural insights and one used system dynamics modelling (see table 3). The average cost of a project is around £30,000 with the behavioural insights projects costing around £8,600. As such these projects can be considered as having a better return on investment although these tend to be less strategic in scope. The four case studies that have been selected represent these different approaches to tackling projects. The Dementia project is an example of combining design and system dynamics modelling methods. There are opportunities to select future projects where there is a possibility of combining all three methods for greater effect.

These methods play different roles at the various stages of the development process. Design is an effective method for the initial stages of projects including user insight gathering, reframing the challenges, idea generation and prototyping. Behavioural insights represent a robust method for testing different options through randomised control trials. System dynamics modelling can enable policy-makers to understand both where the tipping and leverage points are within a complex system and also to cost a range of different policy options.

There are synergies between a design process and a policy process and a range of innovation methods can be applied to the different stages of the policy or service development process (see figure 2). The capability in system dynamics modelling is unique to the Innovation Lab and therefore a key differentiating element for Northern Ireland.

Figure 2:
Stages of the development process and corresponding methods.



Table 3: Overview of projects

No.	Title	Method	Summary	Department
1	Regulatory Impact Assessment	Design	Improving the quality of Impact Assessments and supporting the improvement of the regulatory environment in Northern Ireland.	Department for the Economy
2	Banking Services	Design	Shaping the procurement of a new banking services contract for the public sector.	Department of Finance
3	Procurement	Design	Stimulating ideas on how the procurement infrastructure could be better utilised to increase the procurement of innovative solutions.	Department of Finance
4	Reward and Recognition	Design	Developing methods of reward and recognition for NICS staff, taking account of accompanying economic pressures.	Department of Employment and Learning
5	Data Analytics	Design	Building a business case for developing data analytics capability and developing an action plan.	Department of Finance
6	Realising Savings from Procurement	Design	Developing recommendations to enable a shift from being budget-driven to savings-driven.	Department of Finance
7	Shared Services	Design	Proposing changes to the Enterprise Shared Services (HR, IT and Finance) to create shared services for the entire NI public sector.	Department of Finance
8	Non-Domestic Rates	Design	Understanding of challenges of the taxation system for businesses and proposing actions to improve business rates.	Department of Finance
9	Dementia 1	Design	Exploring the question 'What should Dementia services look like in NI in 10, 20 and 30 years' time?' from a systemic perspective.	Department of Health

No.	Title	Method	Summary	Department
10	NICS Travel Services	Design	Developing recommendations for procuring a collective travel service.	Department of Finance
11	Benefit Uptake	Behavioural Insights	Revising the wording in letters to increase social security benefit uptake and trialling.	Department for Communities
12	Voluntary Sector Funding	Design	Developing recommendations for the Voluntary Sector Strategy.	Department for Communities
13	Waste	Design	Generating ideas to increase the quantity of recyclable waste collected by Councils.	Department of Agriculture, Environment and Rural Affairs
14	Court Fines	Behavioural Insights	Exploring new ideas for increasing collection of court fines.	Department of Justice
15	Rent Arrears	Design	Developing new letters that encourage people to take action on rent arrears.	Department for Communities
16	Dementia 2	System Dynamics	Understanding the cost of dementia care through system dynamics modelling.	Department of Health
17	Medicine Optimisation	Design	Supporting the transition from the Quality Framework for Medicines Optimisation to implementation to ensure that people gain the best possible outcomes from their medicines.	Department of Health
18	Debt Services	Design	Exploring the Cross Cutting Reform Project on the centralisation of NICS debt book with recommendations for next steps.	Department of Finance

liveability

recycling

maternity



Table 4: Projects progressing to implementation and costs*

No.	Title	Discover	Define	Develop	Deliver	Cost*
1	Regulation	✓	✓	✓	✓	£28,000
2	Banking Services	✓	✓	✓	✓	£11,2000
3	Procurement	✓	✓	✓		£28,000
4	Reward and Recognition	✓	✓	✓		£28,000
5	Data Analytics	✓	✓	✓	✓	£34,000
6	Realising Savings from Procurement	✓	✓	✓		£8,600
7	Shared Services	✓	✓	✓	✓	£34,000
8	Non-Domestic Rates	✓	✓	✓	✓	£34,000
9	Dementia 1	✓	✓	✓		£85,000
10	NICS Travel Services	✓	✓	✓		£8,600
11	Benefit Uptake	✓	✓	✓	✓	£8,600
12	Voluntary Sector Funding	✓	✓	✓	✓	£34,000
13	Waste	✓	✓	✓	Live	£60,000
14	Court Fines	✓	✓	✓	Live	£8,600
15	Rent Arrears	✓	✓	✓	✓	£8,600
16	Dementia 2	✓	✓	✓	Live	£15,000
17	Medicine Optimisation	✓	✓	✓	✓	£60,000
18	Debt Services	✓	✓	✓	Live	£45,000
					Total	£539,200

*Costs listed are estimates based on staff time and external expertise. For live projects the costs are reflective of investments to September 2016.

3.2 Case Studies

Four impact case studies have been developed on the Medicines Optimisation, Waste Management, Benefits Uptake and Dementia projects. The projects have been selected based on their processes and outcomes and differing 'stories' and lessons learnt.

The projects on Medicines Optimisation and Waste Management adopted design methods. Design is an approach to problem-solving that departs from an analysis of user needs and involves users in jointly developing and testing solutions. The project on Benefits Uptake employed behavioural insights and conducted randomised control trials to improve response rates to government correspondence. Behavioural insights combine behavioural economics and psychology to make incremental changes to government services and policies based on citizens' experiences. The Dementia project employed system dynamics modelling to forecast the impact of multiple policy options. System dynamics modelling is an approach to understanding the interactions between elements of complex systems using computer algorithms to examine how variables affect each other over time. The interviews with project Sponsors and participants focused on how the topic was identified and how the Lab was able to narrow down the scope of the challenge. In all four cases, the Sponsor was approached by the Head of the Innovation Lab.

The Sponsors have reported a general lack of awareness of the Lab and its activities in their Departments and the wider NICS. The case studies have been selected to represent a cross-section of the type of impact that the differing innovation methods can deliver including brokering new collaborations

between stakeholders, actively involving citizens and stakeholders in co-creating services and policies as well as potential cost savings in an attempt to assess value for money.

3.2.1 Design

The two projects adopting design methods (Medicine Optimisation and Waste Management) each cost approximately £60,000 including less for external design consultants. These projects took place in the second year and subsequently have benefited from the Lab fine tuning project processes.

For example, as a result of intense capacity building the Lab was able to lead these design projects using internal expertise. The impact of these design projects has been on a larger scale than the other methods. For example, two recommendations from the Medicines Optimisation related to medication reviews are in the process of implementation. The expected outcomes include positive impact on the length of hospital stay, readmission rates, Medicines Administration Error rates, Risk Adjusted Mortality Index and medicines cost per head. Early estimations for full deployment of the service in Northern Ireland would indicate potential efficiencies in the region of £20 million per annum.

Although there are multiple factors at work, an investment of £60,000 in the Lab's Medicines Optimisation project could result in cost savings of over £20 million. These results have only been captured latterly and it is important to build evaluation into the process from the outset.

3.2.2 Behavioural Insights

The Lab was able to broaden its base of expertise and develop capacity for behavioural insights applied to the Benefits Uptake and Court Fines projects. These two projects, representing the first opportunities to put behavioural insights into practice, are examples of 'quick wins' as the interventions have been smaller (such as restructuring government correspondence) and have cost approximately £8,600. In the Benefits Uptake project, the money for social security is annually managed expenditure meaning if it is not spent, it is returned to the Treasury and cannot be reallocated elsewhere.

The randomised control trials took place in 2016 doubling the response rate on the previous year. The new letters will be rolled out to 33,000 people next year meaning they could be on average £65 a week better off. The same process was used in a project on Court Fines with the Department of Justice. Three different layouts and different wording for the notification letters were tested in a randomised control trial in October 2016.

The behavioural insights projects have yielded tangible results more quickly than the design and system dynamics modelling projects. These small scale and relatively straightforward interventions can have an important impact, as the project on benefits uptake demonstrates. It is valuable for the Lab to be able to demonstrate real impact in a relatively short space of time. This kind of intervention has an important place alongside the larger more strategic projects. Arguably, it is important to have a number of nudge projects running alongside the larger projects as this helps to spread the risk given that not all projects are certain to succeed.



What are the opportunities doing things better?

"Although the pilot has not been completed yet, we are already seeing promising results and therefore progressing with the new layouts in all documentation issued within the new fine collection and enforcement service that we are introducing. The work with the Lab has influenced it significantly. We could immediately see the benefits of even the look and feel of the new documents."

Project Sponsor, Department of Justice

3.2.3 System Dynamics Modelling

The Dementia project perhaps has the most lessons to impart as a process. This project took place in the early days of the Lab's existence and taking on the complexities of the healthcare system in a large scale project was perhaps naïve; nevertheless, the exposure to this rapid learning experience has led to a unique triumph. The project was initially a design project with the task of horizon scanning future trends and good practices for dementia services in 2030, 2040 and 2050. Design is all about reframing the challenges. As part of this, the Lab discovered that far from looking into the future, the current system requires a major overhaul. As such, the Lab became focused on what they perceived to be the more apparent and pressing issues that demanded a massive change to the current dementia service. This highlights a tension between the insights generated by the Lab and the brief from the Sponsor.

According to the project Sponsor:

“Speaking candidly the workshop wholly failed to answer the question set. Essentially they provided an inventory of the problems in the current system, which we already know with exquisite precision. However, the added-value was honing in on one specific issue, which was the lack of data we have on dementia to forecast the impact of different policy options.”

Project Sponsor, Department of Health

The above is reflective not of the Lab's failure but of the misunderstanding of the role of the Lab and its licence to take a step back from issues and analyse them in a much wider setting. This disjointedness between the Lab process and the Sponsor's expectations must be tackled through a clearer explanation of the purpose of the Lab. Subsequently, the Lab progressed to tackling the more contained issue of the lack of data on dementia for Northern Ireland and took on an external expert with unique skills in system dynamics modelling. System dynamics modelling is an approach to understanding the interactions between elements of complex systems using computer algorithms to examine how variables affect each other over time.

"Using System Dynamics Modelling we can identify tipping points that have a snowball effect within the system. We can also identify leverage points, which are power drivers within the system. Solving the problems associated with the tipping points are transformative for cost savings and patient outcomes."

System Dynamics Modelling Expert, Innovation Lab

"The System Dynamics Model is tremendous. It helped us to specifically pinpoint something we were not doing well – training carers. We have now embarked on a programme to implement carers training. If you intervene early you save further down the line. In theory, this could save millions. The System Dynamics Model is a genuinely new way of doing business and we will now apply it to aspects of the Programme for Government."

Project Sponsor, Department of Health

The skills in system dynamics modelling are totally unique to the Northern Ireland Innovation Lab and arguably provide a competitive edge to Lab activities both over other services within NICS and over other Labs. The Dementia model has been given to the Health and Social Care Board to simulate the impact of other policy interventions. From an initial perceived failure by the Sponsor, the Lab was able to completely turn the project around to resourcefully provide an outcome that has genuinely resulted in innovation in the NICS. This is precisely the idea of the Lab but the lesson to be learnt is in managing expectations all-round.

The Dementia case study combined more than one innovation method. In future the Lab could look to combine all three methods within a project where appropriate. As the Lab has become more confident, the later projects are all on track to progress to implementation whereas the earlier projects were at risk of non-implementation due to the experimental nature of the Lab processes and operations. However, this natural learning curve is a vital part of the capacity building process of the Lab. In all four cases, the project Sponsor was adamant that they would be very happy to work with the Lab again.



3.2.4

Medicines Optimisation

Using design to improve
the patient experience

Challenge

With an aging population and a rising number of people with long term conditions demand for medicines is high in Northern Ireland and around 40 million items are issued under free prescription every year costing almost £0.5 billion. However, evidence shows that people are not gaining the optimal outcomes from their medicines, resulting in poorer than expected health outcomes for individuals and waste and pressure on health services. For example there is evidence that between a half and a third of medicines prescribed for long term conditions are not taken as recommended.¹⁸

About 58 tonnes of medicines, of an estimated value of £6.6 million, were returned to community pharmacies as waste in 2015. Disposal of unused medicines then generates an additional cost of £420,000.¹⁹ Furthermore, on average around 3-6% of hospital admissions are due to the adverse effects of medicines^{20,21,22} and this can increase up to almost 30% in elderly people who are taking more medicines and are more susceptible to their adverse effects.²³

“There is an increased prevalence of long-term conditions in our ageing population and it is not uncommon for people to take 10 or more medicines a day. For these individuals managing their medicines can become a burden. Appropriate use of multiple medicines and poor adherence are big issues.”

Project Sponsor, Department of Health

In March 2016, the Department of Health launched a Medicines Optimisation Quality Framework (MOQF). Medicines Optimisation is defined by the National Institute for Health and Care Excellence (NICE) as 'a person-centred approach to safe and effective medicines use to ensure that people gain the best possible outcomes from their medicines'.²⁴ The MOQF aims to ensure that people gain the best possible outcomes from their medicines each time they are prescribed, supplied and administered and highlights the importance of co-creation and personal and public involvement to support improvement. Effective patient involvement is a fundamental aspect of the Framework. The Framework introduces three new quality standards focused on the patient experience:

- Safer prescribing with patient involvement
- Better information about medicines
- Supporting adherence and independence

The Department of Health (DoH) called on the expertise of the Lab to focus on the transition from the policy framework to implementation. Specifically, the DoH and the Lab wanted to understand how to put patients at the centre of the medicines prescribing process and enable them to take ownership of their treatment and medication. By focusing on the patient experience, the goal was to help patients improve their outcomes, take their medicines correctly, avoid taking unnecessary medicines, reduce medicine wastage and improve medication safety.

provide an experience which is unique to the individual
start to feel unwell to starting medication

LINK WITH
G+V SECTOR
+ Charity sector

interactive
technology
App

Video
audio
tape

USE COMMUNITY
NAVIGATION
PROCESS

APPS +
TECHNOLOGY
BEHAVIOUR CHANGE

OLD &
NEW

AGES
BE ACCENTU-
ATED AS
REQUIRED.

“What became apparent to us was that the success of the policy hinged on how we could influence change. There is so much going on already in health. Health and social care professionals are all incredibly busy people. Everyone is 100% occupied and feels that they are doing their best. Therefore introducing new thinking and change is difficult. To do this, we realised we had to involve the public, involve wider stakeholders and involve delivery bodies in co-creating change and the design methods offered by the Lab were a perfect fit.”
Project Sponsor, Department of Health

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What The Lab Did

The Lab adopted the Double Diamond to frame the project activities including gathering user insight (Discover), defining the challenge (Define) and generating and refining ideas (Develop). As part of the Discover phase, Lab staff spent two months conducting interviews with 12 patients on their experiences from diagnosis through to medication as well as attending two patient support group meetings in an observational capacity involving 23 people.

“Recently I’ve been prescribed some new medication. I know the doctor’s time is limited but it would be great to be told exactly what the medication is for, possible side effects, non-compatibility with existing medication, and to have some choice in deciding whether or not all the medication is essential. Side effects can sometimes be too unpleasant to tolerate.”

Participant in patient support group meeting

“I have been taking prescribed drugs constantly for the past 33 years. I was pretty shocked when first told I would have to take drugs every day. I was 21. Meds and the routine of taking them did not belong to the life I was living or had imagined. There are drugs I cannot take because they will adversely interact with drugs already prescribed.” *Participant in patient support group meeting*

“Medicines can be very beneficial but the problems are when they are overprescribed and the patient becomes allergic and then sometimes people are given a medicine with side effects and another medicine to counter that side effect.” *Community pharmacist speaking at a patient support group meeting*

The insight generated from the user insights was translated into a series of storyboards visualising how diverse experiences can be. This step also involved researching past, present and upcoming initiatives concerning medicines optimisation to identify good practices.

“The notion of ‘patient stories’ was different language for us. I was really impressed by how the team had managed to capture the patient stories and the way they had been visualised. The stories really brought home to me the implications of our policies and services for individuals as opposed to case numbers. The creative methods used by the Innovation Team to communicate and engage with stakeholders both before and during the workshop were widely praised by participants. Holding the workshop at the start of the implementation planning phase of policy development supported public involvement and co-creation at an early stage.” *Project Sponsor, Department of Health*

The subsequent Define and Develop phases took place in a four day workshop with approximately 60 people including patients, healthcare professionals, the Department of Health and third sector representatives. Based on the insights and storyboards, the participants mapped typical patient journeys to identify gaps in the medicine prescribing service. It was apparent that there were distinct differences between how the Department of Health

and the service delivery bodies perceived the stages of patient journeys and the feedback from patients as to what actually happened or did not happen at those stages. These gaps formed the basis for the design challenge (Define).

At the most fundamental level, the design challenge focused on how the system can provide an experience that is unique to the individual and consistent across their interactions with various medical services from when they start to feel unwell to ensuring they are prescribed the correct medication and from enabling them to manage their medication to fit with their lifestyle through to finishing their medication.

“The attention that the Innovation Team gave to understanding the challenge through the service design process enabled a consensus to be reached on the big issues for consideration. The Lab provided the time to explore one big issue in a protected space without prejudice to pre-determined outcomes.”

Project Sponsor, Department of Health

Based on the user insights, good practices and design challenge, the participants co-created a series of ideas ranging from short-term wins to longer-term systemic changes (Develop). Through a refinement process involving identifying desirability, feasible and viable solutions, five ideas were selected for further development and low-fidelity prototyping:

- 1: Medicine Review at Community Pharmacy,
- 2: Patient Clinical Review,
- 3: Family Carer Training Plan,
- 4: Increased Utilisation of other Healthcare Professionals,
- 5: Good Morning Call Service and Dedicated Medicines page on NI Direct.

It was apparent that the key leverage points within the system focused on medication reviews as part of an integrated solution aligning activity in general practice, community pharmacy and hospital settings. The prototypes included a role-play, a training plan, a 3D decision wheel and a service map. As part of the workshop, the concepts were deconstructed and reconstructed, refined and ultimately validated by the participants and Sponsor.

Outcome

The outcome of the project can be considered in terms of both qualitative and quantitative benefits to the patients, service delivery bodies and Sponsor. Involving patients in the policy development process is standard practice but traditional public consultations can exclude those potentially in the best position to provide feedback. Design methods can contribute to more constructive and inclusive patient engagement in the policy process.

“When we talk about medication we have a lot of jargon like poly-pharmacy, compliance and adherence included in the consultation, which can alienate patients from the process. The patient stories, the Lab activities and the Lab outputs really cut through that jargon for patients participating in the process. It has made me really re-think the mode of public consultation.”

Project Sponsor, Department of Health

“I am very glad to see this kind of work taking place as for many years I have thought that patients are never or rarely consulted about how their medication affects them. Many older patients are on multiple meds which may slow them down so much they are unable to exercise or take adequate care of themselves. I know that my husband was very depressed by this but was never

asked how the tablets affected his sense of wellbeing.”

Participant in a patient support group meeting

The project has stimulated an on-going dialogue and strengthened the relationship between a number of crucial players in the healthcare system. Representatives from these organisations were involved at every stage of the process ensuring joined up thinking between the policy vision and policy implementation. In essence, it has altered the role of the service delivery bodies from merely critiquing a fully formed concept to co-creating the concept for implementation. The Lab discussions have also spawned new collaborations among these stakeholders and fostered a greater sense of transparency between the organisations.

As a result of the Lab’s project, two recommendations relating to medication reviews have informed a Department of Health business case. The business case seeks support for a three year initiative to scope, test and scale up a clinical medication review service at population level aligning activity in general practice, community pharmacy and hospital settings. Expected outcomes include positive impact on the length of hospital stay, readmission rates, Medicines Administration Error rates, Risk Adjusted Mortality Index and medicines cost per head. These impacts can be quantified and based on a meta-analysis of recently published pharmacy ‘invest to save’ reports reveal cash savings of £2-4 per £1 invested.

Early estimations for full deployment of the service in Northern Ireland would indicate potential efficiencies in the region of £20 million per annum. Although there are multiple factors at work, an investment of £60,000 in the Lab’s Medicines Optimisation project could result in cost savings of over £20 million.



“The Innovation Lab provided a unique opportunity to build co-creation and public involvement into the start of the policy implementation planning process. The Lab team built strong links with stakeholders in the Health and Social Care Board, Patient Client Council, Community and Health Development Network and Belfast Healthy Cities. I believe that these will be of lasting benefit to the Department for policy implementation.”

Project Sponsor, Department of Health

3.2.5

Waste Management

Implementing EU waste
policy in Northern Ireland

Challenge

An average citizen on Northern Ireland produces almost half of tonne of household waste each year.²⁵ Only 43.6% of that waste was recycled (including preparing for reuse and composting) in 2014. Although the recycling rate is on steady growth since the introduction of the Landfill Directive in 1999, which required governments to minimize the amount of waste going to landfill to the necessary minimum, it is still short of the target set by the EU Waste Framework Directive:

“By 2020, the preparing for re-use and the recycling of waste materials such as at least paper, metal, plastic and glass from households [...] shall be increased to a minimum of overall 50 % by weight.”²⁶

Waste management in the European Union is driven by European legislation and non-compliance with the targets set within Directives means that a Member State may face fines. The next piece of legislation emerging, the Circular Economy Package, includes a new common EU target for recycling 65% of municipal waste by 2030.²⁷ The Department of Agriculture, Environment and Rural Affairs (DAERA) and local councils have been active in the last 15 years to increase the recycling rate from a single figure to over 40%, however this also means that many of the solutions have already been exploited.

“The agenda is to get more value from all the waste that is landfilled or incinerated; to recover waste and use it as material for manufacture, effectively improving productivity. To do so, we need to encourage more people to recycle more things more often. We have done a significant amount of work engaging with householders, explaining and seeking to educate, which means that the low-hanging fruit has been got and the next thing is how to get the more difficult, intransigent, harder to reach communities to recycle.”

Head of Waste Management, Belfast City Council

Therefore, DAERA commissioned the Innovation Lab to take a fresh look at improving the quality and quantity of household kerbside recycling.

“The challenge for the Innovation Lab was to give a new perspective on how to introduce a change in waste management. Waste has been reported as around 25-30% of councils’ costs, so it is a high priority given the potential efficiencies.”

Project Sponsor, Department of Agriculture, Environment and Rural Affairs (DAERA)

ability

recycling

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is a strategy that
agrees to share the
responsibility of
the future in a
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sustainable



**Innovation
Lab**

Follow us: @iLab_NI

The logo for Innovation Lab features three stylized 'i' characters in hexagonal shapes of increasing size. Below the logo, the text 'Innovation Lab' is written in a bold, sans-serif font. At the bottom, there is a Twitter icon followed by the text 'Follow us: @iLab_NI'.

What The Lab Did

The Lab adopted the Double Diamond approach to frame the project activities, including background research and gathering user insight (Discover), defining the challenge (Define), generating ideas and storytelling (Develop) and refining and assessing the solutions (Deliver). After a few scoping meetings with DAERA, Innovation Lab undertook desktop research and citizen engagement activities to inform the structure of a workshop. The representatives of the Department were deliberately excluded from this phase with the intention not to project their views on to the process and not to 'contaminate' the new thinking with conventions. Three main elements were identified to help structure the workshop:

Infrastructure - the built environment, products and objects;
Service - the service providers and enablers that allow people to participate in a particular environmental practice;
Behaviour - the people and their disposition towards the environmental practice.

The Lab workshop took place over two days in March 2016 with 21 people including representatives from central government, Welsh Government, all 11 NI local councils, experts from the voluntary sector, industry and academia. The information collated during the research and user insight stage was presented in visual ways including posters, facts and figures, graphs and persona sheets.

“The bins system is a bit messy and it requires a lot of space in your home and outside your house.”

“I do recycle. I want to leave the world a better place for the next generation (as I have a child).”

“Clear guidelines are needed and then the whole thing would really be improved. Very few people recycle religiously and the average person doesn't as it's not easy and the benefits are not clear.”

“It costs a lot to recycle and it probably costs less to just landfill it.”

“I was impressed by the Lab and how they have pulled together the datasets and analysed them. They seemed to gather a lot of information and summarised it in a very useful way. However, there was no new insight per se for the professionals in the field.”
Head of Waste Management, Belfast City Council

“They reframed and re-interpreted the data and statistics that we use from the user’s perspective. They were more consumer, public-focused, as opposed to industry or government-focused.”
Project Sponsor, DAERA

The first day focused on the Discover and Define phases, and how the issues could be broken down and reframed. The participants were challenged to break with their preconceived views and be more open-minded. Next, the group moved into the creative thinking phase to generate ideas. Ideas were grouped thematically, discussed and prioritised according to what the participants thought was the most important and what the councils could agree to be taken forward. In total 17 ideas were selected to move into design, prototyping and testing, with the change of collection arrangements and reduction of the bin size on top of the list.

“The idea was to get a general consensus on the direction to go forward and agree on a couple of specific and targeted actions that could be progressed. The benefit for us as the professional wasters is that it gave us a breather from our day job, and an opportunity to look at the problem from different perspectives and discuss them with collaborators. There was a chance to step back and look at the issues with fresh eyes – is there something we could do differently; is there something we are missing?”
Head of Waste Management, Belfast City Council

Outcome

The Innovation Lab continues to work with DAERA on the recommendations from the workshop. Five ideas have been selected for further elaboration and testing:

- Reduce the size of the landfill bin and the frequency of collection;
- Provide stickers on householders' bins with what it should hold;
- Develop apps with instant access to information
- Create incentive schemes to demonstrate the individual or community benefit from recycling;
- Make the recycling system consistent with at home, work and on the go.

Although the recommendations might not seem groundbreaking, and some of the workshop activities were reported as irrelevant to the subject, the process in which they were developed and the ability to reach consensus among numerous stakeholders were found worthwhile.

"The solution does not have to be completely novel to be useful, it needs to be novel for those particular circumstances. It is about taking the best practice and refining it to match our situation. We are ready to take some of these ideas forward. They have not been implemented yet, so it is too early to talk about tangible results. However, every tonne of waste that is not going to the landfill or incineration can save £50-60, not mentioning the environmental impact. I'm sure there will be some quick wins out of that process, but we are looking for a long-term change."

Project Sponsor, DAERA

“The process behind the proposed ideas gave us the extra degree of credibility. The assessment done by the Innovation Lab, crunching all the facts and figures and proposing solutions for our specific situation, gives us certainty and veracity. This is more bespoke to our circumstances.”

Head of Waste Management, Belfast City Council

The Lab gave an opportunity for civil servants to be outspoken, overcome the tensions and distrust between different organisations and it also created a feeling of empowerment. It ensured buy-in from all the stakeholders by involving them in the change process from the very initial, conceptual stage. An additional benefit for the Innovation Lab from the project was establishing collaboration with local councils. The team will support and mentor the councils through the testing of the ideas in the council areas. This opens new opportunities for further cooperation on the delivery of public services. The Lab has been progressing two ideas selected for further action ‘to reduce the size of the landfill bin and the frequency of collection’ and ‘to provide stickers on householders’ bins with what it should hold’.

A schools design challenge will take place from January to April 2017 to design the next generation of landfill bin for Northern Ireland. The challenge is open to lower sixth students, who have been asked to form a design team of three to five people to research, design and prototype the landfill bin.

The project goals are to:

- Research topic to understand the needs and desires of the users
- Design a new landfill bin which meets the needs of NI residents
- Prototype the design (this needs to be a physical working prototype)
- Present the research, design and prototype to NI councils and NICS representatives in a 'Dragons' Den' session

After further scoping and research the Lab and Sponsor decided to redefine the challenge of providing stickers on householders' bins to designing an innovative nudge which could potentially have a larger impact on the quantity of household recycling.

The Lab held a behavioural science workshop on the 6th October with the NI councils and graphic designers to conceptually design this nudge. Following the workshop the Lab has been developing a proposal for a Randomised Controlled Trial (RCT) which will be conducted with the aim of evaluating the nudge intervention.

3.2.6

Benefit Uptake

Using behavioural insights
to increase benefit uptake

Challenge

Every year, the Department for Communities (DfC) sends out 33,000 letters encouraging recipients to call to ensure they are receiving all the benefits and services to which they are entitled. DfC is targeting the older population who are most vulnerable and historically do not claim all the benefits they are entitled to. The money for social security benefits is an annually managed expenditure, meaning that if it is not spent, it cannot be used for other purposes and is returned to the Treasury. The letter encourages recipients to make contact for a benefits entitlement check, anyone who does not reply to the letter receives a follow up call asking if their details can be forwarded to Advice NI to allow a benefit entitlement check to be carried out. Following an evaluation which showed that the initial response rate was typically around 10% to the letters, the Improving Benefit Uptake (IBU) Team decided to challenge its traditional approach.

“The old letter used to be very ‘civil-servicey’, very long and very unwieldy. With a 10% response rate, we have had to phone the remaining 90%, costing us time and money. We asked the Innovation Lab to help us make the letter more user-friendly and ultimately increase response rates.”

Project Sponsor, Department for Communities

What The Lab Did

The Innovation Lab worked closely with DfC to review the content and layout of the letters using behavioural insight approaches. These approaches, known also as nudge theory, are based on the idea that interventions are likely to be more effective if informed by an understanding of human behaviour.

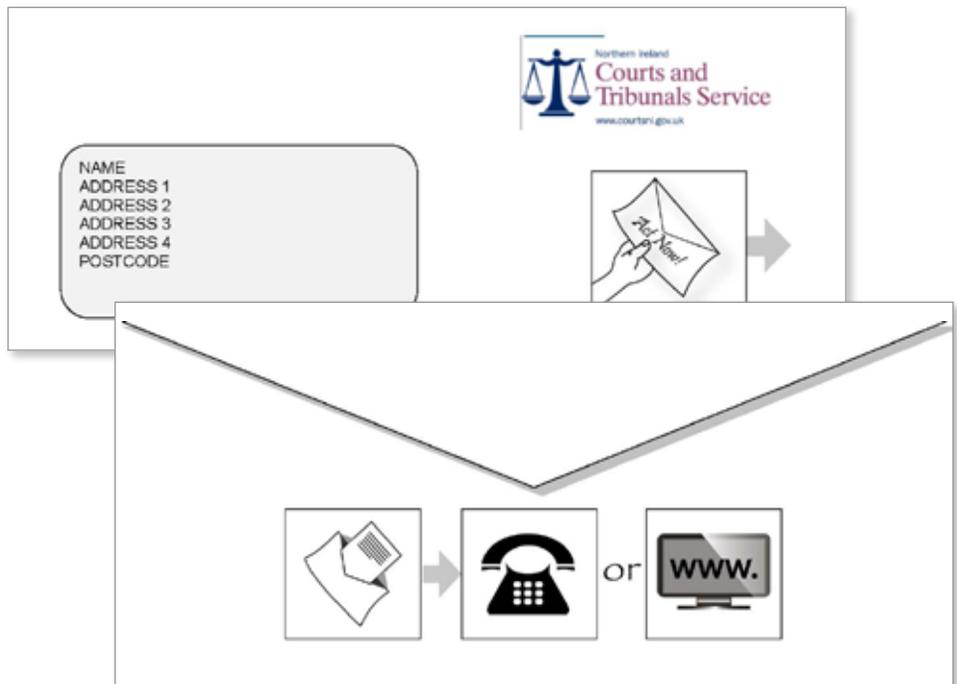
The Lab identified the following insights to inform redesign of the letter:

- **Message simplification** – removing unnecessary information, keeping the letter to one page, use of colour and boxes to highlight key messages;
- **Using social norms** – telling what other people do in that situation and what effect it has on them;
- **Framing the request** – ‘benefits’ are often perceived negatively, while ‘additional income’ has positive connotations;
- **Loss aversion** – people avoid loss, so the situation was also framed as a loss (*‘You could be losing up to £82 per week’*);
- **Chunking** – required actions were shown graphically in four easy steps to reduce the perception of difficulty.

By applying these findings, four versions of the letter emphasising different sets of insights were produced and tested in focus groups with older people to find out which one was easier for them to understand and encouraged them to take action. The respondents found the new layout very lucid and user-friendly and suggested further improvements.

“All text very clear, start and finish sections shorter and simpler.”
“Letter laid out well on top and bottom, can see how it is good to list steps in the middle but think this section has a lot of text to take in.”
“Is clearer than the previous letter and feel achieves objectives well.”
Customer feedback from focus groups

Figure 3: Redesigned letters generated in the lab





Fine Recovery Section
45 OXFORD STREET
BELFAST
BT1 3LL

NAME
ADDRESS 1
ADDRESS 2
ADDRESS 3
ADDRESS 4
POSTCODE

Date of this notice:	<input type="text"/>
Reference Number:	<input type="text"/>
Amount Due:	<input type="text"/>

Dear <<Text 1>>

You were issued with a fine notice from <<Text 2>> on xxx. **Payment of your fine is overdue.** Failure to pay **will** result in further action.

THE MAJORITY OF PEOPLE PAY THEIR FINE AVOIDING FURTHER ACTION

What you need to do now:

You need to pick a time and pay the total amount of <<Text 3>> online or over the phone.

If you are having difficulty paying the full amount now please phone us **now** on 030 0200 7812 before further action is taken

Many people find it useful to **make a plan** for getting their fine paid. You can write yours below:

I will pay my fine or call on

<input type="text"/>	at	<input type="text"/>
<small>(day of the week)</small>		<small>(time)</small>

If you do not pay

Your fine is an Order of the Court. Failure to settle this fine in full will result in further action including:

- Seizure and sale of your possessions to cover the amount due
- Prison for <<Text 4>> days.

How to pay



Online using a debit or credit card at www.courtsni.gov.uk



Call 0300 200 78 12 and pay by debit or credit card

Alternatively send a crossed cheque including your case reference and name made payable to 'NI Courts and Tribunals Service' to: Customer Service Centre, PO Box 256, Londonderry, BT48 4AP

Yours faithfully

<<Text 5>>
Fines Officer



Fine Recovery Section
 45 OXFORD STREET
 BELFAST
 BT1 3LL

NAME
 ADDRESS 1
 ADDRESS 2
 ADDRESS 3
 ADDRESS 4
 POSTCODE

Date of this notice:

Reference Number:

Amount Due:

Dear <<Text 1>>

Final Overdue Fine Notice: You must act now to prevent further action

Previously your lack of payment has been treated as an oversight however this will now be treated as an active choice if you do not **pay within the next five days**.

If you fail to pay within this time we will seek an *Order of the Court*. This may be enforced by the issue of –

- a warrant of distress (i.e. the seizure and sale of your goods to satisfy the amount owed);
 or
- a warrant committing you to prison for a specified period.

You must contact this office on XXXX XXXXXX **immediately** if you are unable to pay your fine in full.

How to pay	
	Online using a debit or credit card at www.courtsni.gov.uk
	Call 0300 200 78 12 and pay by debit or credit card
Alternatively send a crossed cheque including your case reference and name made payable to 'NI Courts and Tribunals Service' to: Customer Service Centre, PO Box 256, Londonderry, BT48 4AP	

Yours faithfully

«User_Print_Name»
 Fines Officer

“The Lab formulated the letter to get the best impact for the person who receives it. It is not only more aesthetically engaging, but also more effective as a call to action.”

Project Sponsor, Department for Communities

In order to verify the effectiveness of the new style of the letters a randomised control trial was undertaken. As the DfC subcontracts part of the call service to Advice NI, two versions of the letter were tested, one with the government branding and one with Advice NI branding.

One thousand letters of each type were issued and compared with the control group of the previous style letters with the previous branding. The results showed that in each case the behavioural insight letter outperformed the original letter response rate. The number almost doubled when the government branding was used, and was almost 70% higher for the letter with Advice NI branding.

Outcome

The results of the trial meant that not only are more people getting what they are entitled to and improving their financial situation, but also that DfC have to make less calls to those who did not respond, saving both time and money. The impressive increase in the response rate convinced the Department to adopt the new design for all of their direct targeting letters. Next year approximately 33,000 people will receive the new style letter and it will be possible to validate the impact of the whole intervention.

“The engagement of the Innovation Lab team to redesign the Improving Benefit Uptake Direct Targeting letters helped increase the effectiveness of the Improving Benefit Uptake Campaign by providing a simplified message using innovative behavioural insights and easy to follow actions demonstrated by graphics.”

Project Sponsor, Department for Communities

In 2015/16 around £18 million in additional benefits for over 4,000 people was generated. The changes in direct targeting contributed to this increase as part of the whole work of Improving Benefit Uptake Team. The impact of the improved letters is expected to be even more significant next year, when all the targeted people will receive it.

The innovative approach taken by the DfC and Innovation Lab was recognized by being shortlisted for the NICS Award in the Innovation category. The Department’s positive experience of work with the Lab has led to broadening the scope of collaboration. Going forward, the Lab will continue to improve the response levels by redesigning the scripts for the telephone staff, as well as feeding into the advertising campaign.

3.2.7

Dementia

Modelling System Dynamics
to improve Dementia policy

Challenge

It is estimated that the average cost of dementia per person (including healthcare costs, public and private social care costs and opportunity cost of unpaid work of carers) amounts to £32,250 annually²⁸, which means that the total dementia cost to Northern Ireland is approximately £645 million a year. This cost is projected to escalate significantly with an expected increase of 40% over the next 12 years and by some 150% over the next 38 years.²⁹

“In Northern Ireland we have around 20,000 people with dementia, but not everyone has a diagnosis. It is estimated that 65% of them have formal diagnosis. Although Belfast Health and Social Care Trust area is one with the highest diagnosis rate in the UK (73%), the challenge for Northern Ireland is still A) getting the diagnosis early enough; and B) getting access to appropriate support afterwards, especially in rural areas.”

Representative of the Alzheimer’s Society Northern Ireland

The multifaceted challenges associated with dementia are a priority for the Department of Health and link back to many of the aspirations of the Northern Ireland Programme of Government.

“The topic of dementia is massive. Many cases are undetected and the costs are escalating for the Department of Health. There is a considerable volume of analysis in the field of dementia but it tends to focus on the UK as a whole. The figures we use for incidents of dementia in Northern Ireland are extrapolated from UK figures. A statistician may not be happy with them. More accurate projections of dementia within the population would enable a more effective assessment of policy options.”

Project Sponsor, Department of Health

A core project team involving representatives from the DoH, Health and Social Care Board, Age NI and the Innovation Lab spent significant time scoping a question for the Lab’s project to ensure meaningful outcomes. It was decided to focus on horizon scanning with the initial question being: What will the NI health system need to provide in ten, twenty and thirty years to better support people with dementia? It was envisaged that this would include future trends and best practices in other countries and jurisdictions. In essence, how the health system would need to start morphing itself to achieve a more care-orientated model.

What The Lab Did

The Lab has a licence to reframe the challenges. From the user needs analysis, the Lab discovered that far from looking into the future, the current system requires major overhaul. As such, the Lab became focused on what they perceived to be the more apparent and pressing issues that demanded change to the current dementia service.

The workshops took place in a dementia supported living facility over five days across two weeks and focused on the Discover, Define and Develop stages of the design process. The workshops



"I hear people say "Take care of yourself and live well!" But there's no way you can do that and live normally, it changes everything." *Dementia patient at the carer's focus group collected during user research*

"Last year I hit rock bottom and took an anti-depressant. Something I'd never done and said I never would but honestly I didn't know what else to do." *Dementia patient at the carer's focus group collected during user research*

"The question...what should dementia care look like in the future may be the wrong thing to ask. Every person is different and the 'right' answer will be different for each person and their carer or family."
Carers at the focus group

involved people with dementia, healthcare professionals, carers, policy advocates, academics, regulatory bodies and people from the private and voluntary sectors. Sessions were held in Belfast and also in the West of the province to be more inclusive. A total of 80 participants contributed to the findings and recommendations generated during the Lab.

“The calibre of stakeholders at the workshop should be counted a real success. It is difficult to get people in a room for four days but almost everyone stayed until the end. People were able to set aside the usual professional boundaries. There was a committed and passionate attempt to rethink the challenges and co-design solutions with carers and stakeholders. There was a meeting of minds and a fundamental shift took place in the room.”

Representative of Age NI

The workshop explored the process of transition from a purely medical model of dementia to a community model of dementia. Based on the user insights the participants were able to create a gold standard pathway for dementia from prevention and early diagnosis to on-going support.

“The illustrations of the pathways spoke volumes. It provided a richness that text reports just cannot communicate. The process is not about money, it is about dedicating time to jointly developing workable solutions using co-design.”

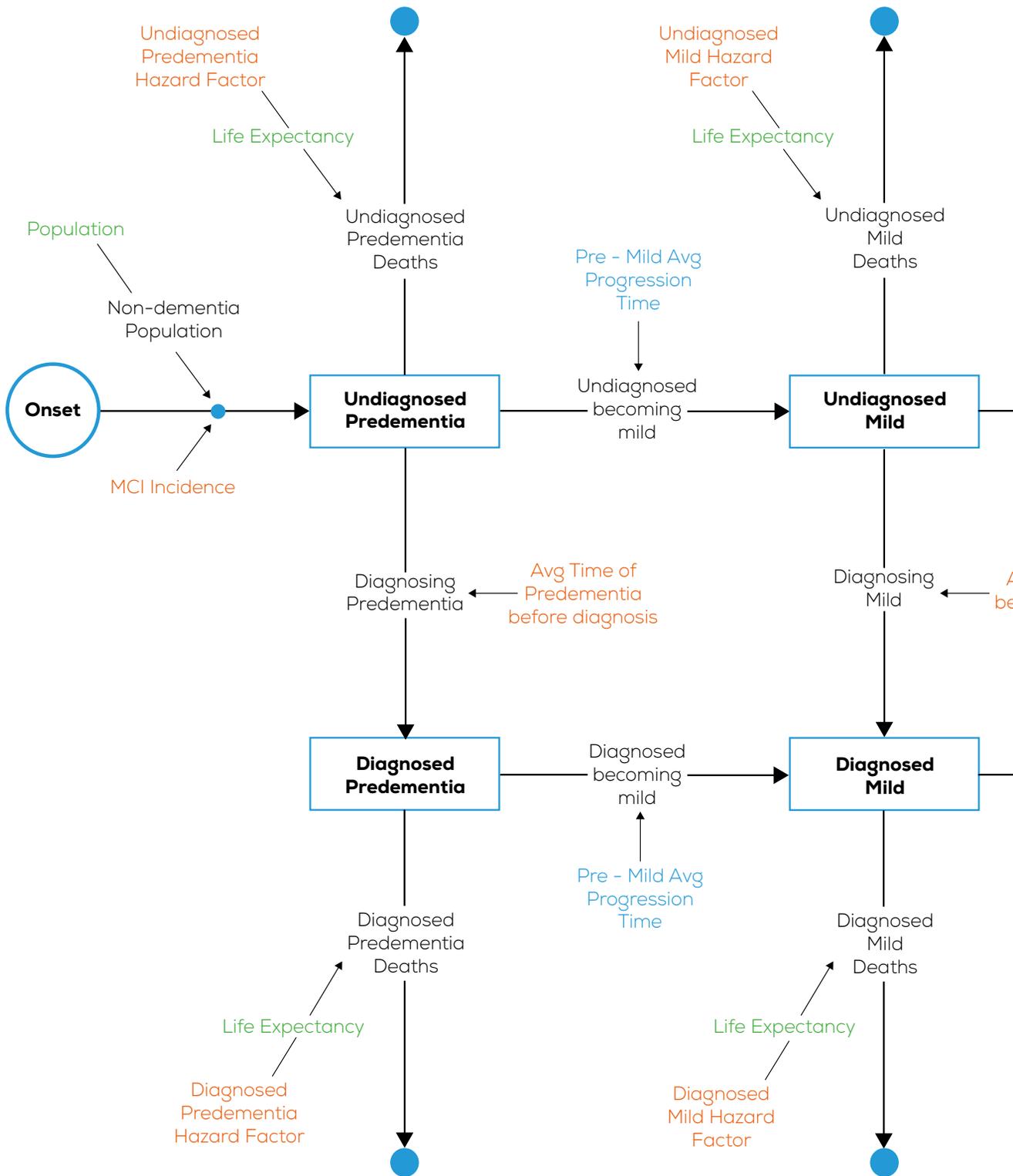
Representative of Age NI

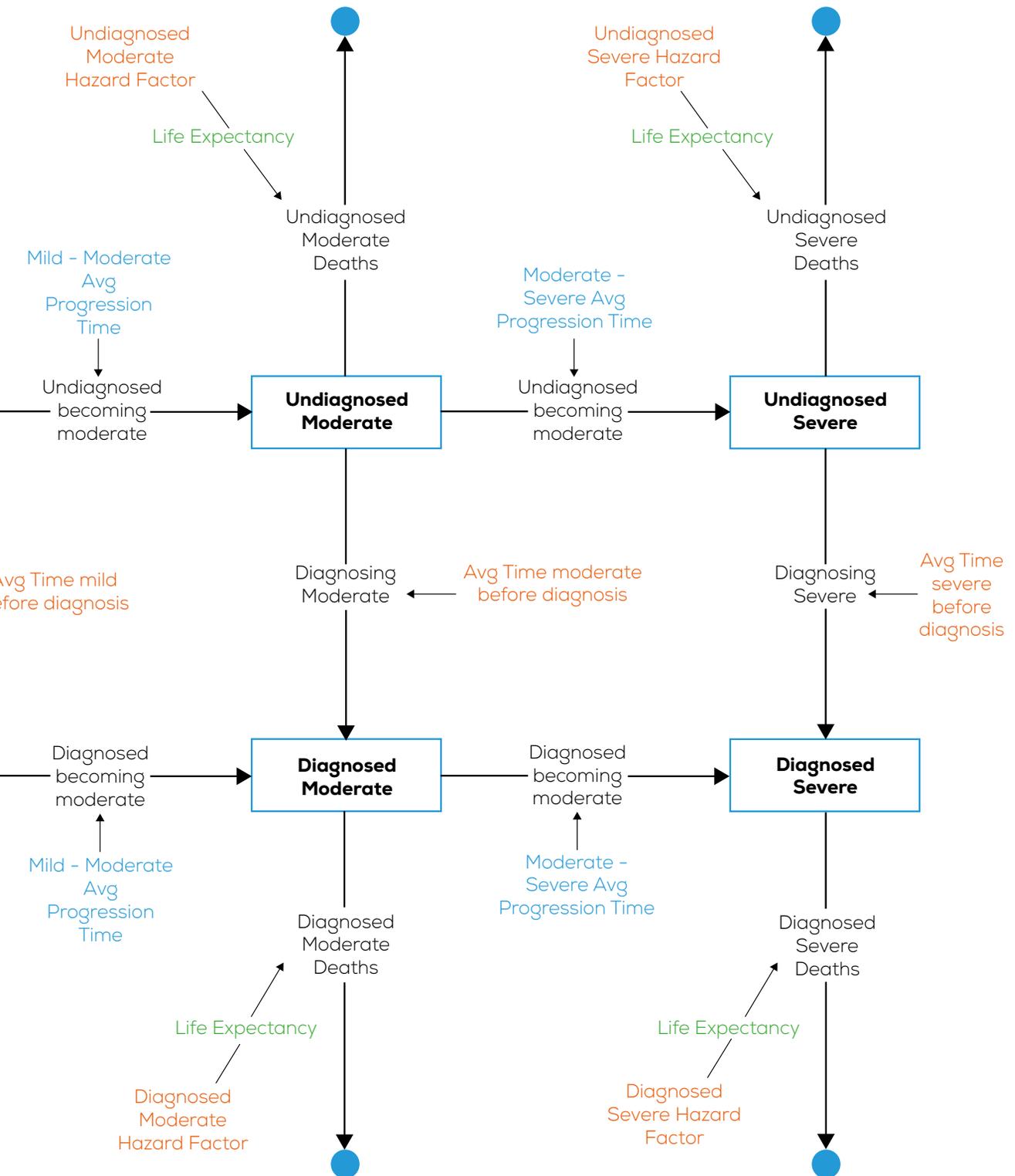
This pathway for dementia was then used to inform a series of recommendations for future-proofing the dementia services within the healthcare system.

The following was agreed as the Gold Standard during the Lab:

- **Prevention** - promoting understanding, sustaining relationships, citizenship and social inclusion embedding dementia into real life.
- **Personhood** - giving people the information they need to help them maintain quality relationships while maintaining personal identity. An enabling and supportive environment where they feel valued and understood.
- **Diagnosis** - comprehensive, accurate and as quickly as possible. Early intervention and treatment - distinct, discrete dementia service informed by people living with dementia, recognising the role that society plays - citizenship, dementia friendly communities.
- **Living well at home** - multidisciplinary teams involved in a holistic assessment of a person with dementia and their carer. Sufficient resources are in place to deliver high quality care and choice to enable the person to remain at home for as long as possible. Each person should have an identified key worker who will be a point of contact for a person with dementia and their carer.
- **Living well in supported living and care homes** - whole systems approach where people are valued and enabled to live life to the max. Where there is community ownership and flexibility, including commissioning..

A significant stumbling block in tackling dementia from a policy perspective was the lack of data in order to understand which of the proposal would leverage the greatest impact considering the resources available.





Outcome

The role of the Lab is to take a step back from immediate issues and analyse them in a much wider setting. Subsequently, the Lab progressed to tackling the more contained issue of the lack of data on dementia for Northern Ireland and took on an external expert with unique skills in system dynamics modelling. System dynamics modelling is an approach to understanding the interactions between elements of complex systems using computer algorithms to examine how variables affect each other over time. The expert mapped out the behaviours and connections across the dementia system identifying pivot points that can have a significant impact on the entire system with a relatively low amount of resource.

“The system dynamics model has been immensely helpful. It has helped us in the Department pinpoint our policy and legislative focus and it has helped the Health and Social Care Board in their operational discussions.

The algorithms enable us to explore different leverage points within the system to identify the number of people who can be helped and the cost of a policy intervention. Health systems are chaotic so if you change something it has ramifications elsewhere. You can move your points of intervention to see what the likely trajectories of impact will be on the rest of the system.

For example, if you diagnose 20% of people with dementia diagnosed earlier the capacity of the healthcare system will need to increase to treat them and there is a corresponding cost for that. As it has been done with real data there is a high probability that it behaves in the same way the system would in real life. It’s an incredibly useful policy planning tool.”

Project Sponsor, Department of Health

One of the leverage points identified was the information provided to carers and the decisions they take. Carers have a significant influence in the system. As such, a service has been proposed to help carers to understand the significance of a diagnosis and preparing them for the decisions they will have to make.

“The dynamic systems model is tremendous. It helped us to specifically pinpoint something we were not doing well and areas where we can do better. If you intervene early you save further down the line and, further, hospitalisation can be especially traumatic for people with dementia. The Dynamics Systems Model is a genuinely new way of doing business and we will definitely be applying it to other areas of business.”

Project Sponsor, Department of Health

The Dementia model has been given to the Health and Social Care Board so that when they are planning policy interventions and services they can assess the likely impact on the healthcare system.

4.0

Lab Governance

Based on insight from 30 interviews, ranging from senior civil servants to external stakeholders, an analysis of the strengths and weaknesses of the Innovation Lab has been developed focused on the operating model, leadership, processes, methods and capacity (see table 5).

4.1 Operating Model

The strength of the Lab lies in the experimental way that the operating model has been able to develop organically through a continuous learning process. This was perhaps an unintended consequence of the lack of a clear operating model defined at the time of the Lab's inception.

Nevertheless, the flipside to the lack of a clear vision, mission and targets, is that the Lab was able to develop through trial and error to reach an effective self-regulating operating model. While this self-regulation was in all likelihood an advantage for the team, protecting the Lab from stringent key performance indicators, it is timely for the Lab to enter a new phase of operations. Although no blueprint was developed for the Lab, the following has been used both as a marketing tool and mantra:

'We make a difference by creating a safe space for key players to formulate and test ideas, make mistakes and learn from them, to develop refined, added-value solutions to complex challenges.'

The Innovation Lab was established under the political direction of the then Minister for Finance based on good practices from abroad. Although some interviewees questioned the position of the Lab within the Department of Finance, from this position it is

Table 5: Strengths and weaknesses of Lab governance

Area	Strengths	Weaknesses
Operating Model	<ul style="list-style-type: none"> In two years, 18 projects were completed covering a broad range of topics. The Lab operating model was able to grow organically through experimentation meaning it was reflexive and responsive to client needs. The Lab is a 'safe space' to co-create and incubate ideas with citizens and stakeholders. The Lab has delivered cost savings; for example, over £10 million per annum for the Medicines Optimisation project. 	<ul style="list-style-type: none"> Emphasis was initially placed on the Discover, Define and Develop stages but not on implementation (Deliver) as this was not seen within their remit. At the outset no clear vision, mission, or targets were set. The Lab's offer and unique selling points is not clear for potential project sponsors.
Leadership	<ul style="list-style-type: none"> Lab established on the political endorsement of the Minister of Finance. The Head of the Innovation Lab has engaged a wide range of senior civil servants and directors across a range of Departments. To lead projects, a 'Sponsor' and 'Core Team' were identified for each project. Project Sponsors spoke highly of Lab's leadership. 	<ul style="list-style-type: none"> Lack of clear criteria for project selection. Absence of clear 'contracting' with sponsors that sets out deliverables, resources and timescales. Some topics that were scoped were too broad. Insufficient marketing to raise awareness of the Lab and disseminate good practices. Evaluation was not built into the process from the outset of a project. Limited connection between the Lab and Programme for Government.
Processes & Methods	<ul style="list-style-type: none"> Through organic means, the Lab has arrived at three innovation methods: design, behavioural insights and system dynamics modelling. Design methods are powerful for 	<ul style="list-style-type: none"> Sponsors were not always actively involved in the process leading to disengagement and a lack of ownership and implementation for certain projects.

Area	Strengths	Weaknesses
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generating insight into various user profiles.

- The methods enable quality user engagement that is not always common with formal public consultation.
- The workshops brought together a broad range of stakeholders, enabled networking and sharing of best practices.
- The process enabled users and delivery bodies to be involved from the early stages of policy development through to the implementation stages.
- Behavioural insights studies have resulted in tangible impact with a short timeframe.
- System dynamics model is perceived as a totally new way of doing business in the public sector.

- Sponsors felt they did not always have a good grasp of what the process was going to involve at the outset.

Capacity

- Highly dedicated, capable, autonomous and passionate team.
- Team members have a range of expertise across design, behavioural insights and system dynamics modelling.
- Significant experience and expertise in public administration and governance.
- Sponsors spoke highly of the Lab team's professionalism and ability to process and present information effectively and in an easy to comprehend way.

- Expertise on design, behavioural insights and system dynamics is concentrated in a small number of individuals (including two external consultants).
- Lack of a structured continuous professional development pathway for staff, particularly for new staff.

uniquely placed to drive more transparent and inclusive public decision-making in line with the Programme for Government. Housing the Innovation Lab in the Public Sector Reform Division was a logical move and provided purpose for the Lab. The Lab has been given a high degree of autonomy to experiment and the mandate to set its own strategic direction, albeit by seeking the input of the senior civil service.

“Innovation is something Ministers want to say out loud while people are looking at them.”

Project Sponsor, Department of Health

“Change is difficult; it is something that we are not good at in the public sector, in fact, it is actively disincentivised. So how do you do it? You need leadership, skills and resources. How was the Lab model designed to do that? It was not.”

Civil Servant, Department for Economy

The Lab has been an incredibly successful incubator of ideas. From a team without a portfolio, the Lab has blazed a trail across a number of key government services demonstrating that it has the expertise and capacity to deal with incredibly thorny public sector challenges such as the enforcement of court fines, meeting EU regulations, pooling government resources in shared services, developing an internal NICS recognition scheme and creating meaningful insight in a data void. The success lies in the high degree of autonomy afforded to Lab (within an accountable framework) meaning it has developed a broad experience base

4.1.1 Host a 'Lab on the Lab' to consolidate the offer and unique selling points

The lack of a clear operating model has raised the question as to whether it is better to deliver a smaller number of projects from inception to implementation or to run a larger number of projects but handover the testing and implementation stages. During its experimental phase, it should be considered a success that the Lab led 18 projects. However, it is perhaps timely for the Lab to consolidate its activities and focus on taking a smaller number of projects from concept development through to prototyping, piloting, implementation and evaluation.

The 18 projects provided a broad and firm basis for the next phase of the Lab's delivery. This involves identifying a clear offer and promoting the Lab's unique selling point when bringing clients on board. In a very tangible way, the Lab is already contributing to two significant NICS agendas – the Programme for Government and engaging citizens and stakeholders in quality public consultation. These two aspects are the unique selling points for the Lab. It is timely to host a 'Lab on the Lab' to identify the vision and objectives of the Lab with the participation of the Permanent Secretary, a small number of key departments and a range of stakeholders effectively practising what the Lab preaches. The 'Lab on the Lab' could focus on consolidating the selection criteria for projects, the evaluation framework and promotional mechanism.

The value of the Lab extends far beyond the one-dimensional impact indicators of value for money and cost savings. A striking example of the added value delivered by the Lab is the Medicines Optimisation project

“One of the problems we have in policy development is direct citizen engagement. Involving citizens in the policy process is standard practice but we do not necessarily achieve quality citizen engagement. Our desired representative user groups find it difficult to participate in the formalised consultation meetings we usually hold. The methods used by the Lab have transformed our collaboration with citizens and stakeholders to genuinely co-create policy and services; not just tick a box.”

Project Sponsor, Department of Health

This is a poignant example of how inclusive methods such as design and behavioural insights can transform the public consultation process. The formalised processes such as meetings and jargon-filled, lengthy reports isolate those who might have the most to contribute to the process. Engaging citizens and stakeholders in public consultation should not be a tick-box exercise it should be an inclusive, transparent, reactive approach to public governance.

Very often by the time a policy progresses to public consultation, the trajectory is already set and limited changes are made. However, citizens and stakeholders should be involved in every stage of the policy process from user-needs analysis, problem definition, ideas generation, testing, up-scaling and evaluation. The Lab is already a conduit for these practices and there is a real opportunity to capitalise on its potential to realise the Programme of Government and achieve quality public engagement.

"In health, the consultation documents are very highly researched and heavily referenced. We thought we were in a very informed position in terms of the evidence of what the issues were. The design methods used by the Lab made me realise how we exclude people from the policy process."

Project Sponsor, Department of Health

"The Lab helped us not only to inform the consultation paper but also our direction of analysis. It was a good starting point and accelerated the whole process of review."

Project Sponsor, Department for Economy

"The Lab activities were very helpful for the political clearance process and to get buy-in from the stakeholders. They accelerated the early part of the policy development process in terms of getting ideas together, drafting a consultation paper and deciding what to focus on. It gives it a momentum and structure."

Project Sponsor, Department of Finance

4.1.2 Approach the Permanent Secretaries Group for sponsorship

As previously stated, broadly, there are currently three main funding models for Policy Labs in Europe:

- [Sponsorship Model](#) (such as MindLab in Denmark)
- [Cost Recovery Model](#) (such as the UK Policy Lab)
- [Commercial Model](#) (such as the PDR UCD Lab)

There is also an emerging fourth model termed the hybrid model combining sponsorship, commercial income and collaborative funding. During the interviews, questions were posed as to whether the Sponsors would be prepared to pay for Lab services having already experienced the added value benefits. The resounding response was that they valued the process but did not have budget available to commission projects. In the cases of the projects on Medicines Optimisation, Waste Management, Benefits Uptake and Dementia, the project Sponsor was adamant that they would work with the Lab again.

“There could be demand for Lab services if there was money, but the problem is nobody has any money. As much as it adds value, and in my case it definitely did add value, I don’t think we would have resources to pay for that service.”

Project Sponsor, Department of Health

“There was no cost for using the Lab, which was very beneficial to us, because I would not have had a budget for that. Being able to obtain that skill and expertise at no cost to the department was definitely a value added. I wouldn’t be able to pay for those services. But I would definitely work with them again if their services were available for free.”

Project Sponsor, NI Court and Tribunal Service

“If I were to sell the idea of running the innovation lab to my department, with the current budget constraints I would probably hear “no, we have more important things to do” even though it would be of enormous benefit.”

Project Sponsor, Department of Agriculture, Environment and Rural Affairs

Where a minority of other Sponsors were prepared to pay for Lab services, there was an emphasis on greater control over the process. It is clear that there is a real need for Lab services as a way to engage citizens in meaningful public consultation and foster collaboration between departments to implement the Programme for Government; however, the demand is not widespread due to diminishing budgets and a general lack of awareness of the Lab and its processes. In this context, it is not appropriate to compare the Lab to the Public Sector Reform Division’s Business Consulting Team that hard-charges for services. The Lab is still in a comparatively vulnerable state and a transition (particularly if it were too rapid) would jeopardise the fragile modus operandi. By definition the Lab is a ‘safe space to innovate’ and a purely hard-charging model would strip the Lab of this asset due to the financial targets to which it would be subjected.

“Innovation is desperately needed in Northern Ireland. We do bureaucracy and risk-aversion like nobody else in the UK. We have particular issues with the legacy of civil service being managed by the accountants, who measure inputs not outcomes.” *Deputy Principal, Department of Economy*

“I am sceptical about going to a hard charging model, because of all the cultural problems, buy-in, location and lack of implementation.” *Project Sponsor, Department for Communities*

In the longer-term, when more established, the Lab could potentially move to a more commercial model, however, in the shorter-term it is recommended that combining sponsorship and collaborative funding models would be most appropriate. This hybrid model combining sponsorship, commercial work and collaborative funding would spread the risk beyond just the responsibility of the Department of Finance but would also give the Lab an opportunity to find additional funding through European or Public-Private Partnerships to top up its income as it transitions over the coming years.

By consolidating the Lab’s offer and its unique selling points, the Lab’s leadership team can engage the Permanent Secretaries Group in ongoing dialogue to secure sponsorship promoting the Lab as a means to achieve the outcomes of the Programme for Government. This chimes with the OECD recommendation to “develop its full potential through departmental ownership.”³⁰ The Lab can also demonstrate that it is already forging strategic alliances with other Labs and seeking collaborative funding to add further value to the sponsorship funding. Securing sponsorship from all nine Northern Ireland Departments or even a selected number of Departments will require the unique selling

points of the Lab to be championed by senior civil servants within the DoF. It is perhaps not necessary to secure sponsorship from all nine departments. If sponsorship was secured from a smaller number of departments then the non-sponsor departments could also be serviced on a commercial basis moving the operating model towards the hybrid funding model. This would also ensure that the Lab was not pulled in too many directions with each department wanting their guaranteed number of projects.

An effective approach to securing the support of key decision-makers might be to host a Lab event on the Lab. Practice what you preach by hosting a design workshop to identify the vision and objectives of the Lab with the participation of the Permanent Secretary, a small number of key departments and a range of stakeholders.

4.1.3. Create a UK network of Policy Labs and seek collaborative projects and funding

The Innovation Lab has already extended its sphere of influence to other UK policy labs. Creating a network of Policy Labs, initially across the UK and then beyond will create a firm foundation for instigating and securing collaborative projects and funding in the future. This network will also be pertinent for approaching the Executive which holds the purse strings for sponsorship. This is a vital part of the evidence base for demonstrating that in the future the funding model of the Lab can transition to be more self-sustaining.

The Innovation Lab has been actively seeking European funding, narrowly missing out on winning a project under Horizon 2020. The Lab activities are highly relevant to the third pillar called 'Societal Challenges' where emphasis has been placed on 'Co-creation' in the 2016-2017 H2020 Work Programme. It is highly likely that co-creation will remain a priority in the next EU Work Programme. With 'Brexit', there is less opportunity for UK lead partners on European projects; however, assuming the UK Government can negotiate a preferential arrangement there will always be a role for UK expertise on EU projects. Collaboration is the future, whether in EU projects or public private partnerships.

Whatever the decision on the future funding model of the Innovation Lab, one thing is evident; a clear roadmap must be developed to ensure a smooth transition from autonomy and experimentation to the new regime which preserves the team's ability to experiment.



"We have quite good buy-in from senior management. One or two are even evangelical about the Lab. Others have not had enough exposure to us. We could spend all our time marketing what we do. Equally we could spend more time doing the work. There is a balance to be struck. It's time to turn the corner on our marketing efforts."

Senior Civil Servant, Department of Finance

4.2 Leadership

The NICS is extremely hierarchical (see figure 3) and there has been much change. Between April 2014 and October 2016 there have been four Ministers of Finance due to changes in portfolios, three from the Democratic Unionist Party and the current Minister from Sinn Féin. Since the early days, the Lab has also expanded the size of the team from five core Lab staff in August 2014 to 11 core staff as of October 2016 (see figures 3 and 4). As such, the Lab must be protected and championed by the various layers of the civil service. This involves capturing success, marketing the Lab, disseminating the good practices and building capacity for the innovation methods within the wider civil service.

The entrenched hierarchical structure within the UK civil service (particularly in the NICS) does not lend itself to innovation. Potentially, in the longer-term the Lab has an opportunity to cut through some of this complexity by fostering collaboration but at present is limited by the status quo rather than disrupting it. However, if the Lab can position itself as a bastion of applied innovation within the NICS it will protect itself from ebbs and flows of political tides and secure a reputation that will yield a continuous pipeline of future projects.

Eventually the Lab will reach a position of notoriety where project Sponsors from the senior civil service will approach the Lab. Ultimately, this is about a wider systems change.

4.2.1 Create a marketing strategy to communicate the results and disseminate good practices

There is a woeful lack of information available online for potential clients and future collaborators to find out about the Lab activities.³¹ However, the Lab team is already showing signs of developing very successful marketing materials with a new animation about the Lab and more leaflets with case studies of recent projects. Promotion and marketing has been an important mechanism for the UK Policy Lab to create an appetite for their services and ultimately transition to a cost recovery model. The Northern Ireland Innovation Lab simply cannot afford to metamorphose to a commercial or hybrid model without obtaining credibility and reputation across the NICS.

It is important to distinguish between an internal promotion campaign (focused on potential customers in the NICS) and external facing marketing campaign (to the Lab's wider counterparts in Europe and beyond to raise its profile both nationally and internationally). Building a profile for the Northern Ireland Innovation Lab abroad will ultimately reflect back on the potential clients within NICS as the Lab becomes well-known enabler of public sector innovation. Thus the internal and external communication activities are mutually reinforcing.

"No one knew about the Innovation Lab, I was the first person in our Directorate to get involved. I was approached directly by the Head of the Lab." Project Sponsor, Department of Health

"Civil Service Live Conference is a good opportunity for them to promote their work." Project Sponsor, Department of Health

“There is a natural reticence in the Northern Ireland character to not over claim.” *Senior Civil Servant, Department of Finance*

Marketing is a vital part of the strategy for securing collaborative funding and sponsorship. The Lab already has a number of success stories and the Benefits Uptake team received a commendation in the 2016 NICS Innovation Awards based on the Lab’s project. This links back to securing future buy-in and sponsorship from the Permanent Secretaries Group of the nine Departments. Senior management must re-position the Lab as a conduit for supporting the achievement of Programme for Government outcomes to ensure its future relevance.

A concerted effort must be made to promote the Lab’s successes and instigate a campaign across the NICS. In recent weeks, the Lab has ramped up its social media efforts by establishing a Twitter feed (@iLab_NI) and creating an animation about the Lab. The Lab’s website must become more content rich and contain the case studies and lessons learnt. Attending the Lab Connections event was important for the Lab’s visibility among its counterparts in Europe. To demonstrate that the UK is willing to collaborate, despite the political turmoil of ‘Brexit’, the Lab could engage with the EU Policy Lab team to position the Northern Ireland Lab as an example of best practice in Europe. Building legitimacy abroad will contribute to legitimacy at home. For example, making this report public would be an effective way to offer unique insight not common within the world of Policy Labs.

4.2.2 Build evaluation into Lab processes from the outset

The issues of promotion and evaluation are mutually reinforcing. Part of the process of securing endorsement must be through demonstrating results. Evaluation needs to be built into the process from the outset. For example, this should involve collecting baseline data prior to intervention. Evaluation should be conducted ex-ante, interim and ex-post but does not have to be purely quantitative. Gathering testimonials from participants is also part of the value creation. Identifying what 'success' looks like is a fundamental part of shaping a project and will ensure that the outcomes meet the Sponsors' expectations. It is important for every project to be translated into a case study and for the testimonies of the Sponsors and particularly the general public to be captured. This is currently conducted on an ad hoc basis but it is crucial to formalise this. It is also part of the evaluation process for the Lab staff to have time to reflect on the lessons from each Lab project identifying what worked well and what could be improved for next time in order to continuously enhance the Lab operations. It should also be acknowledged that the lead time for implementation in a policy cycle can be over a year hence why a structured evaluation procedure should be implemented.

*"I'm sure we will have some quick wins out of this, but it is more about long-term change. It is too early to have tangible results."
Project Sponsor, Department of Agriculture, Environment and Rural Affairs*

*"Measuring activity of the Lab towards an arbitrary target of number of events held is counter-productive."
Senior Civil Servant, Department of Finance*

The OECD report emphasised the need to use indicators to measure the Lab's impact. Indicators should range from simple output indicators that measure the Lab's activity to more outcomes-based indicators showing how the Lab is affecting change in government. However, setting too stringent a set of key performance indicators will strangle the blue-sky thinking that is the Lab's trump card.

4.2.3 Develop a formalised approach to knowledge exchange for the wider NICS

A crucial aspect of the legitimacy building must be setting ambitious but meaningful targets (such as, for example, to engage 500 civil servants in Lab projects in the next two years). To draw on the proverb from Confucius "Tell me and I will forget, show me and I may remember, involve me and I will understand." The Lab is an effective means of building capacity for new innovation methods within the wider NICS. At present, it is not part of the Lab's target to engage a target number of civil servants; however, this was also highlighted to a lesser extent by the OECD:

'Ensure that the Lab can move beyond the traditional skill set of the civil service to employ such new techniques as ethnography, design and prototyping to help demonstrate the uniqueness of its approach compared with the rest of government, through:

- Informal 'shadowing' during a Lab project to help Northern Ireland's civil servants to develop the skills mentioned above;
- Involving the sponsor department in an active manner in the whole Lab process to fully exploit the learning opportunities (and result in shared outcomes).³²

The knowledge exchange activities do not need to be limited to involving civil servants in Lab projects. There could be 'Innovation Taster' days to generate appetite, delivering accredited training in existing modules as well as shadowing and secondment opportunities. The Lab has recently begun to do this with an open introductory session to systems dynamics modelling in December 2016.

Developing a formalised approach to knowledge exchange on the Lab methods across the wider NICS goes hand in hand with the communication campaign. It is important for the Lab to create a network of influencers with a vested interest in systems change. Only with these champions in strategic positions across the civil service will there be the critical mass to implement larger scale projects. As a result, the Lab will not be the sole team with expertise in design, behavioural insights and system dynamics modelling in NICS.



4.3 Processes and Methods

A number of the shortcomings associated with the processes and methods have been self-corrected through the trial and error approach to delivering the Lab's projects. For example, the initial format for projects with an intensive four-day workshop has changed in response to user needs to a longer-term strategic engagement (see figure 5). This is not to suggest that there is a one-size-fits-all format for a project but rather it is intended to provide guidance to project Sponsors.

Figure 5: Suggested Project Timeline



The current set-up involves a scoping phase with the sponsor, an elongated discovery phase involving user insight gathering, a two-day workshop to define the challenge, and a subsequent two-day workshop to develop concepts with stakeholders. At this stage, the project is passed back to the Sponsor for implementation.

A further example of the way that processes have changed would be that in the early days the departmental 'Sponsor' for projects would be involved in setting the challenge and receiving

the concepts but not in the ideas generation. Over time, the methods have diversified from an initial focus only on design to now incorporating behavioural insights and system dynamics modelling. With more tools in the toolbox, the Lab has generated examples of tangible impact through behavioural insights, more strategic interventions using design and has introduced a “genuinely new way of doing business” with system dynamics modelling.

The only outstanding issues regarding processes would be the need to develop effective criteria for project selection and to then select a smaller number of more strategic projects prioritising quality over quantity, thus providing the best possibility for projects to progress to implementation.

4.3.1 Develop clear criteria for project selection with an emphasis on implementation

At the outset, greater emphasis was placed on the Discover, Define, Develop stages and not the Deliver phase. Implementation must be an aspiration for all future projects and a concerted effort must be made to secure buy-in from Sponsors and legitimacy from stakeholders. Some of the challenges associated with Sponsor engagement could be mitigated by developing selection criteria in the 'Lab on the Lab'. For example, some of the selection criteria could include the following questions:

- Is the project consistent with the Project for Government?
- Is the project of strategic importance to the department?
- Does the Sponsor have the necessary personal commitment, position and authority to implement outcomes from a Lab?
- Does the Sponsor have resources for prototyping, testing and upscaling?
- Does the Lab's team have the capacity and capability?
- Is there a reputational risk for Lab?
- What is the likelihood of achieving a consensus in a Lab that will result in realisable benefits?
- Is the Sponsor prepared to make the results public?

“The current format is that project sponsors give us their thorny problems and let us bring key stakeholders together to dissect it. Some of them have done it with an expectation that very little would come of it. We need to get clients signed up to the idea of testing from the beginning.

Senior Civil Servant, Department of Finance

Shifting the emphasis to implementation will most likely entail a further up-skilling step for existing staff to ensure they are equipped with the knowledge to take ideas to prototyping and testing and ultimately to implementation and upscaling. This will involve constructing project proposals to include prototyping and testing with the project Sponsors. The role of the Sponsor in this process is vital; where Sponsors were not actively participating in the workshops, projects were at greater risk of not progressing to implementation. Based on the interviews conducted, many Sponsors identified a stage of the process at which they wished they had been more involved.

“As Sponsor I was not allowed to participate in the project for fear of contaminating the results! My role was to set the question and present the background context on the first day of the workshop and listen to the recommendations at the end. In hindsight, I would have liked to be involved in at least the ideas generation stage.” *Project Sponsor, Department of Health*

“As I was not involved in the ideas generation process, when the recommendations were presented back to me I found it difficult to identify the thought process behind the concepts. I didn’t feel I got the benefit of the whole process.”

Project Sponsor, Department of Communities

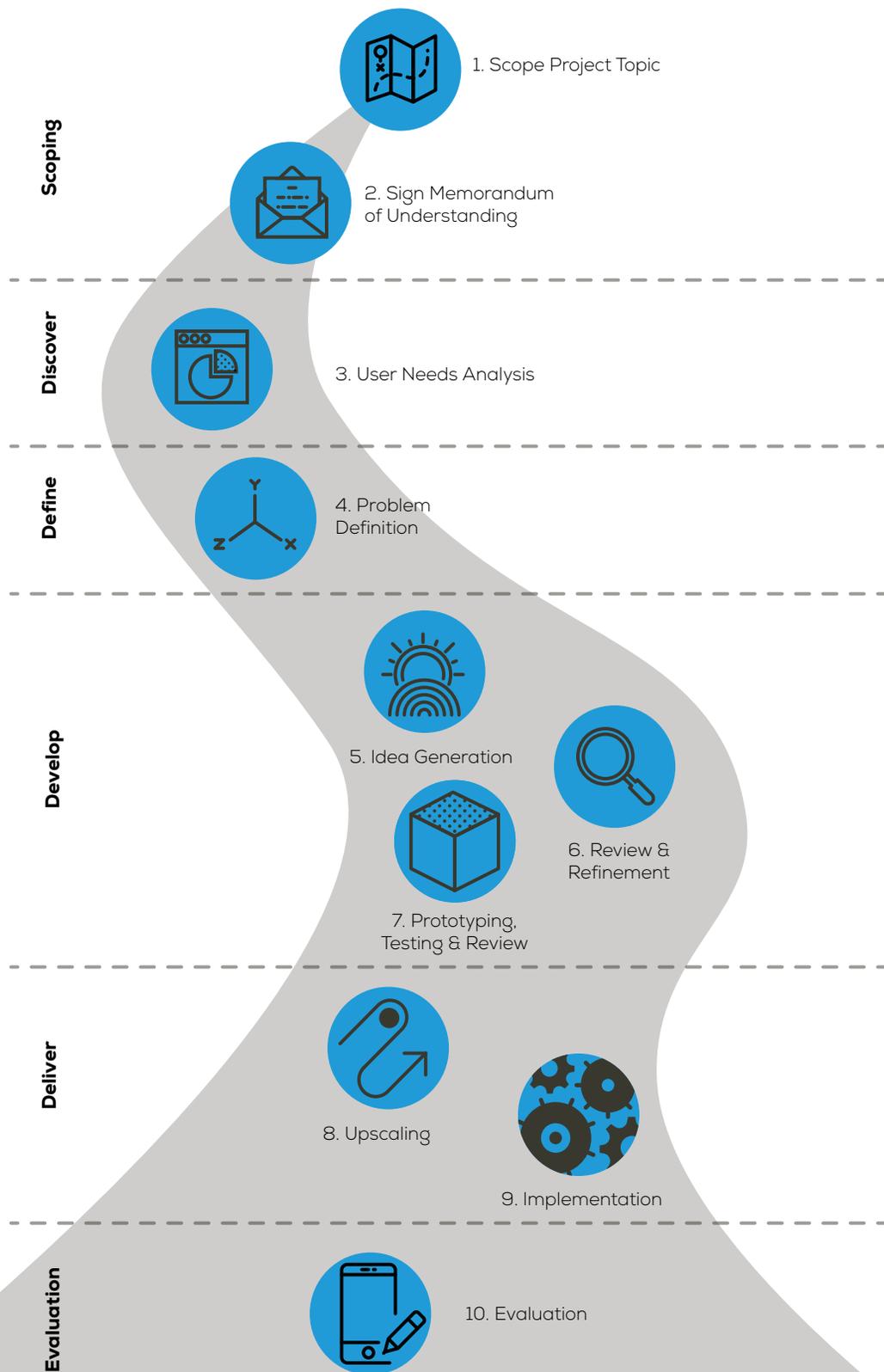
“I now think that the model can work very well with the right challenge, with the right participants, with the right buy-in, and with a very big ‘but’. The ‘but’ is implementation. Implementation has to be built in.” *Project Sponsor, Department of Agriculture, Environment and Rural Affairs*

Initially the format was for participants to spend a full four or five consecutive days in a workshop to examine the Discover, Define and Develop stages. However, certain interviewees expressed fatigue during this process. Latterly, the process has been to spend two days on the Discover and Define stages and a further two days, following a period of reflection on the Develop stage. Although the format of projects may change depending on Sponsor needs, it is important to make Sponsors and participants fully aware of the process before starting.

For example, a visual of the ‘project journey’ could be created to present to Sponsors (see figure 5). A number of Sponsors commented that they felt they did not have a good grasp of what the process was going to entail at the outset and this would avoid that confusion.

FIGURE 6

Project Journey



4.3.2 Select a smaller number of strategic projects engaging sponsors across the entire process

Closely linked to the notion of clear criteria for project selection is the issue of prioritising quality over quantity to provide the best possibility for projects to progress to implementation. This is not to say that smaller projects cannot be run in parallel to more strategic projects but greater resources should be allocated to more strategic interventions.

A word of caution should be expressed regarding failed implementation and managing participant expectations. The Lab requires civil servants and external stakeholders to give up their valuable time. Many participants commended the energy, motivation and excitement generated during workshops, which sometimes gave way to disillusion when recommendations were not followed through.

There is much at stake with these highly experimental projects including the reputation of DoF staff members as well as of high profile external stakeholders. As such, communication throughout the process to ensure the wide range of stakeholders all remain on-board should not be neglected.

“I feel we’ve let the stakeholder groups down as we’ve raised expectations and we haven’t followed through to implementation due to politics and professional boundaries. There is a lack of leadership and accountability for projects. It’s made me cautious to participate in a process like this again with the risk of fallout regarding demotivation.” *External Stakeholder*

“The process is not about money, it’s about dedicating time to jointly developing workable solutions using design. The Innovation Lab needs to be mindful of the reputation risk of failed implementation. If you do not follow through to implementation you lose the good will of the stakeholders involved. We must communicate back to participants. It’s been a brilliant experience but one I want to see through to completion.”

External Stakeholder

“The Lab probably generated more questions than answers. It definitely stimulated conversation and was exceptionally therapeutic for everyone who was there.” *Project Sponsor, Department of Health*

“I do admire the ambition to do something innovative with a very difficult subject, but I believe that you shouldn’t start something unless you can deliver against it.” *External stakeholder*

With more projects progressing to implementation each project will be larger in scope and take longer to deliver therefore to ensure quality delivery it is important to select a smaller number of projects. However, including a selection of small scale and relatively straightforward behavioural insights interventions is also valuable for the Lab to be able to demonstrate real impact in a relatively short space of time. These kinds of intervention have an important place alongside the larger more strategic projects. At the outset, it was an advantage to gain a broad experience base with the 18 projects; however, now that the Lab is gathering momentum it should focus on prototyping and upscaling.

4.3.3 Apply combinations of methods at appropriate stages of the development process

Organically, the Lab has arrived at three innovation methods: design, behavioural insights and system dynamics modelling. The various methods employed ensure the Lab can contribute to more effective citizen engagement at every stage of the policy process from scoping, user needs analysis, problem definition, idea generation, concept refinement, consultation, prototyping, evaluating and scaling. Design methods were powerful for generating insight into various profiles of users.

“The visuals of user journeys and stories were really powerful for moving from macro thinking to user-centred thinking.”

Project Sponsor, Department of Health

“The notion of ‘patient stories’ was different language for us. I was really impressed by how the team had managed to capture the patient stories and the way they were visualised. The stories really brought home to me the implications of our policies and services for individuals as opposed to case numbers. There was no other way for me to get those stories, we had already been out to consultation.” *Project Sponsor, Department of Health*

“Spending considerable time on rethinking the challenges without the prejudice of prior knowledge and not racing to solutions was enlightening for the group.”

Project Sponsor, Department for Economy

“This was hands-on innovation. We created a user journey map that spread right around the room. This meant we could literally walk through every stage of the process step by step. These are methods I’ve seen in action in other government departments across the UK but not in Northern Ireland.” *External Stakeholder*

“It was a fresh set of eyes on the process, new thinking that we would not have thought of. It was a very positive experience for us. It was very professional; the documentation was of very high quality.” *Project Sponsor, NI Court and Tribunal Service*

As obvious as it might sound, many interviewees commented on the novelty of getting all the stakeholders together at the bargaining table. The workshops brought together a broad range of stakeholders, enabled networking and sharing best practices outside the usual professional boundaries. The processes enabled users and delivery bodies to be involved from the early stages of policy development prior to public consultation. However, the luxury of taking time out of the daily routine should not be underestimated.

“We thought holding a Lab will be very useful to get a business buy-in for the rates review. It is a highly political process, so we thought a little bit of neutrality would help. We wanted people to get out of their trenches and see the perspective of others and Innovation Lab seemed like an ideal place where that could happen.” *Project Sponsor, Department of Finance*

“In your day-to-day work, you don’t have time for that fresh thinking. They reframed and re-interpreted the data and statistics that we use from a user perspective, they were more consumer and public-focused, as opposed to industry or government-focused. The team presented examples from around the world and came up with lot of ideas, which I’m potentially looking to be funding as a pilot next year.”

External Stakeholder

“The Lab gives an opportunity to be outspoken and say things you wouldn’t say at the formal meeting.”

Project Sponsor, Department of Health

Behavioural insights and system dynamics modelling are comparatively new tools in the Lab’s toolbox. However, both are yielding significant results. The behavioural insights project on benefits up-take came second in the annual NICS Innovation Awards 2016. The two current behavioural insights projects were short-term and could be classed as incremental innovation. There are opportunities to take the behavioural insights methods to the next level on a larger scale project. Similarly, the impact of the system dynamics modelling should not be undervalued. It is a differentiating factor for the Innovation Lab both within the NICS and among its foreign counterparts.

“Behavioural insights is a good method for testing how options can work. You can use randomised controls to show the difference, for example, between two different pieces of correspondence to see if one has more impact than the other.”

Project Sponsor, Department of Finance

"I honestly believe, behavioural insights and the Lab would add so much value across the front-facing services and to the public."

Project Sponsor, Department for Communities

"The System Dynamics Model enables us to look at the issue in a completely different way. It is made up of cold, hard facts of how the system behaves. It is difficult to get that objective view. System Dynamics Modelling is a genuinely new way of doing business and we will now apply it to aspects of the Programme for Government." *Project Sponsor, Department of Health*

With a greater emphasis being placed on implementation there is a need for additional methods and processes in the Lab including prototyping, digital technologies and evaluation.

4.4 Capacity

The Lab is composed of a highly dedicated, capable, autonomous and passionate team, which has been a critical success factor in the organic way that the Lab operating model has developed. To their credit, the team members have proactively developed their own skill sets across design, behavioural insights and system dynamics modelling from an initial position of hiring external expertise. And while staff do receive a range of development and training opportunities, this has been achieved in the absence of a formalised continuous professional development pathway. A significant risk in the Lab operations is that key individuals with crucial skill sets will move on leaving a skills deficit within the team.

“The Lab people are really good, they are very efficient and they do what they say they do, we are not used to that in the civil service. We developed very positive relations very quickly.”

Project Sponsor, Department for Communities

Amongst other Labs in Europe, secondment schemes can go part of the way to mitigating a risk of skills being concentrated between a small number of individuals. The Lab is currently exploring the benefits of introducing a rolling programme of six month secondments to ensure a continuous feed of fresh thinking into the Lab. This would also help to disseminate innovative approaches throughout the public sector. In this programme, departments could continue to pay the salaries of the seconded staff on the basis they would work on projects of specific benefit to their department. Such an approach could be mutually beneficial as individuals with backgrounds benefiting the Lab could be chosen, for example individuals with capabilities in statistics, digital, coding and marketing.

4.4.1 Internalise the expertise of the two external consultants

A pressing priority related to the capacity of the Lab is the status of the two external contractors. There are currently two external experts working within the team and there is a possibility that their vital talents will be lost. To have found a “genuinely new way of doing business” in the public sector is of significant value. The expertise in system dynamics modelling is in all likelihood totally unique to the Innovation Lab differentiating it from the wider NICS as well as other Policy Labs. Similarly, most Labs, including MindLab, Policy Lab and the PDR UCD Lab, recruit professionally trained designers to augment the expertise of the ‘general civil service’. The expertise of the service designer is vital for moving the more experienced Lab staff into a position of authority on prototyping through a mentoring process.

4.4.2. Identify a pathway for continuous professional development for existing and new staff

A concerted effort should be made to up skill all team members to become experts in a minimum of two of the three innovation methods (design, behavioural insights and system dynamics modelling). Of course, each innovation method is highly complex and team members cannot become experts overnight nevertheless a clear continuous professional development pathway should be identified.

This is particularly pertinent for new and seconded staff, for example, this could include one day on system dynamics modelling, one day on behavioural insights and two days on design methods.

With a greater emphasis being placed on implementation there is a need for Lab staff to develop skills in prototyping and possibly digital technologies. There is a major drive to digitalise public services and it would be useful for all staff members to have a basic understanding of digital technologies with a longer-term ambition of securing coding skills within the team. Building on the recommendation to build evaluation into projects from the outset, it would also be useful for a minimum of two staff members to be trained in statistics, measurement and evaluation skills.

Certain staff members have requested additional time to consolidate the learning and lessons from the Lab projects. This has been happening relatively effectively in parallel to conducting the Lab activities but this valuable reflection time would contribute to a more intellectual operating environment for the Lab. This reflection time would need to be undertaken in a structured way; for example, as 'lessons learned' from each project and subsequently a collective consideration of all lessons learned every six months to identify the common recurring themes.

It should also be acknowledged that the high number of projects has resulted in many peaks in Lab activities with multiple projects running in parallel. Furthermore, Lab staff must conduct business development, marketing and administrative tasks, which detract from quality project delivery. To relieve some of the pressure, a member of the NICS marketing team could be seconded to the Lab to undertake some promotional activities.

4.4.3 Unify the terminology used by the Lab to a contained list of key terms

Design is entering the lexicon of government. However, design can be a difficult concept for civil servants to grasp.

“The two-day workshop was based on the Double Diamond framework. The first day was looking at the Discover and Define phase, focusing the issues and how they can be unbundled, and then defining the nature of the problems surrounding bigger issues.” Project Sponsor, Belfast City Council

Currently, the Lab adopts a broad range of design-related terminology such as service design, user-centred design, human-centred design, design thinking and co-design, among others. Design also encompasses a raft of its own terminology including ideation, personas, prototyping and Double Diamond, which can further be confusing for those coming to design for the first time. Although to the specialists in the Lab, the distinction between these terms is clear it is not clear for Lab clients and a concerted effort should be made to streamline terminology and promote a smaller number of concepts. For example, service design and user-centred design. Similarly, there is a trend to prefix ‘co-’ onto words to imply jointly developing; such as co-creation, co-design, co-production, co-development and so on. Again, to a specialist in the field these concepts are distinct but the nuances between them are not relevant to generalists within the civil service so it would be advised for a single ‘co-’ term to be adopted, such as co-creation. A list of consolidated terminology has been proposed in the glossary in the appendix.

5.0

Recommendations



Based on the insight gleaned in the interviews, a series of recommendations has been made to capitalise on the Lab's expertise, achieve further impact and secure additional support from stakeholders. These recommendations represent both high and lower priority actions for the Lab in the short and longer-term with the potential to strengthen Lab foundations.

Table 6: Recommendations to enhance future impact

Short-Term

High Priority	Low Priority
<ul style="list-style-type: none"> • Host a 'Lab on the Lab' to consolidate the Lab offer and unique selling points to gain endorsement of senior management. • Approach the Permanent Secretaries Group for sponsorship promoting the Lab as a means to achieve the outcomes of the Programme for Government. • Create a marketing strategy to communicate the results of evaluation and disseminate good practices including improving the website and identifying key dissemination channels (such as NICS Live Conference). • Develop clear criteria for project selection with an emphasis on Sponsor commitment to implementation where appropriate. • Select a smaller number of more strategic projects, engaging Sponsors from the outset of a topic scoping across the entire process. • Build evaluation into Lab processes from the outset including simplified qualitative and quantitative evaluation focused on the ex-ante, interim and ex-post stages. • Internalise the expertise of the two external consultants on system dynamics modelling and service design. 	<ul style="list-style-type: none"> • Develop a clear project journey (ideally visual) including timescales and milestones to brief Sponsors on the process. • Identify a pathway for continuous professional development for new or seconded staff including, for example, one day on system dynamics modelling, one day on behavioural insights and two days on design methods. • Host a design workshop to identify the vision and objectives of the Lab with the participation of the Permanent Secretary, a range of key departments and a range of stakeholders effectively practising what the Lab preaches by hosting a Lab on the Lab. • Set ambitious targets (such as to engage 500 civil servants in Lab projects over the next two years) and a set of outcome indicators.

Long-Term

High Priority	Low Priority
<ul style="list-style-type: none">• Lead on the creation of a network of Policy Labs across the UK to kick start the process of seeking collaborative projects and funding.• Develop a formalised approach to knowledge exchange for the wider NICS such as through applied training on live projects, accreditation and secondment opportunities.• Apply combinations of methods (design, behavioural insights and system dynamics modelling) to projects at appropriate stages of the development process.	<ul style="list-style-type: none">• Provide time for Lab staff to consolidate and reflect on the Lab activities and lessons so they contribute to a continuous improvement process.• Unify the terminology used by the Lab and create a contained list of key terms to enable effective communication with stakeholders.• Develop an on-going dialogue with the EU Policy Lab to position the Northern Ireland Lab as an example of best practice.

6.0

Conclusion

As stated by the OECD, the Northern Ireland Innovation Lab is an 'impressive example of how the government is nurturing innovation in the public sector'.³³ In two years the Lab has led 18 projects on a wide range of challenges with half of those progressing to implementation at policy and service level. This progression to implementation should be considered highly successful. The design process by definition is a problem-solving and risk reduction exercise. A key principle is to explore and test the usability, desirability and viability of concepts. There must be an acceptance from any Policy Lab customer that the ability to put a stop to a project before costly political and financial implementation is itself a significant win.

"The Lab has real value and I think it would be a shame to abandon it because it does not work every time. Nothing does."

Project Sponsor, Department of Health

The Lab has the opportunity to position itself as a bastion of innovation within the NICS for incubating ideas and engaging citizens and stakeholders at multiple stages of the service and policy development process. In this very tangible way, it is already contributing to the ambitions of the Programme for Government.

The Lab can demonstrate quantitative and qualitative impact. The Medicines Optimisation project alone is on track to deliver significant cost savings. Although there are multiple factors at work, an investment of £60,000 in the Lab's Medicines Optimisation project could result in cost savings of over £20

million per annum. Although this figure is at the highest end of the Lab's impact spectrum, the qualitative dimension should not be undersold.

Fundamentally, the Lab has been transforming the interface between the NICS and the general public. The two unique selling points of the Lab are ensuring meaningful and quality public engagement and supporting departments to achieve the objectives of the Programme for Government.

Organically, the Lab has reached a set of optimal operating processes and methods. However, there is an opportunity to consolidate the funding model in order to achieve a greater impact in the future through joint departmental sponsorship. It was also one of the OECD recommendations to ensure that the Departments gain ownership of the Lab through a financial contribution and by providing strategic direction. Securing the sponsorship of the nine Departments will require approaching the Permanent Secretaries Group and promoting the Lab as a means to achieve the outcomes of the Programme for Government. It should be noted that for as long as the Lab may still be in its infancy ideally it would not move to a hard-charging model. Nevertheless, the Lab must be sustainable, which may include charging but for the present should rely predominantly on a combination of sponsorship and collaborative funding. The ratio between sponsorship, commercial income and collaborative funding will undoubtedly change every year but a stark transition would be detrimental and so a managed transition to any new funding model should be put in place.

Creating a strong internal and international profile is inextricably linked to an effective marketing strategy to disseminate good

practices, create demand within the NICS and secure future collaborators. This goes hand in hand with an effective evaluation procedure, not necessarily as prescribed by the OECD by simply creating indicators but also through capturing the added value in terms of quality engagement. Fundamentally, it should be a priority for all projects to aspire, where appropriate, to implementation. Without implementation, there is a risk of reputational damage to the Lab and departments by raising the expectations of external stakeholders and the public and then not fulfilling them. With more projects progressing to implementation it is necessary to develop clear criteria for project selection and to focus on a smaller number of more strategic projects ensuring that the Sponsor is engaged across the entire process.

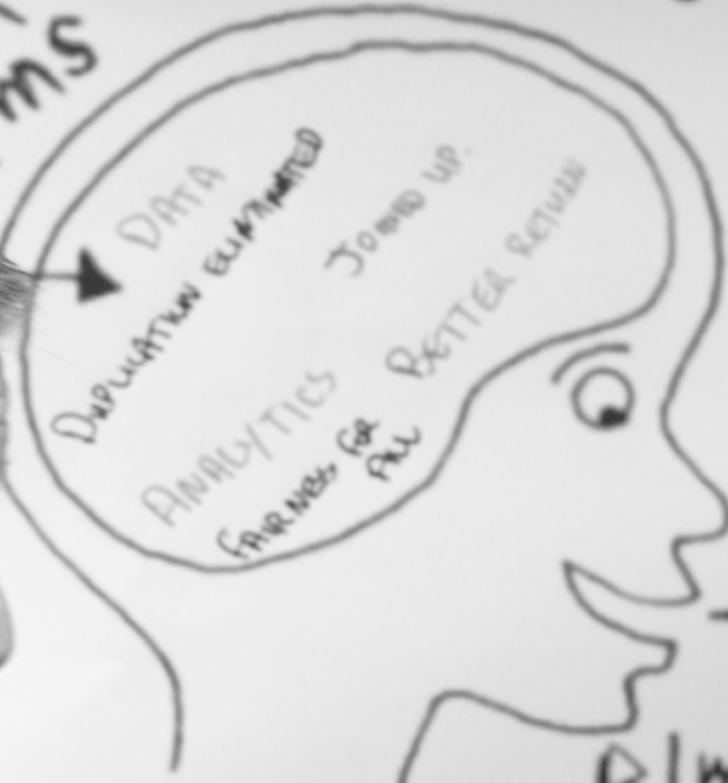
The Lab is currently a hidden gem within the NICS and additional activities should focus on future-proofing the Lab's capacity by up skilling existing staff in methods such as prototyping and internalising the expertise of the two external consultants. Without their applied knowledge of system dynamics modelling and service design the capabilities of the Lab will be drastically reduced. The Lab should be at the heart of a network of innovators within the NICS. This involves developing a formalised approach to knowledge exchange for the wider NICS such as through applied training on live projects, accreditation and secondment opportunities. The Lab has a further opportunity to position itself among its growing number of counterparts in the UK, Europe and around the world as an example of best practice. The Lab should lead on the creation of a network of Policy Labs across the UK to kick start the process of seeking collaborative projects and funding.

“The Innovation Lab has already demonstrated success in a number of exemplar projects and I believe we have the potential to build on this success to work with like-minded innovators in the public sector to bring about a paradigm shift in how government delivers services to citizens in Northern Ireland as well as provide examples of best practice in government innovation across Europe and further afield.”

Senior Civil Servant, Department of Finance

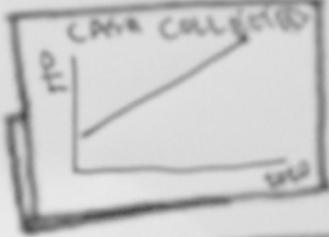


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- NI EFFICIENCY
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Side

7.0

Glossary & Appendix

7.1 Glossary

Behavioural Insights combine behavioural economics and psychology to make incremental changes to government services and policies based on citizens' experiences.

Co-creation assembles multiple stakeholders across the ecosystem to jointly develop ideas and concepts through iterative testing.

Design is an approach to problem solving that departs from an analysis of user needs and involves users in jointly developing and testing solutions.

Double Diamond is a framework for conducting design projects based on four stages (Discover, Define, Develop, Deliver) involving divergent and convergent thinking with stakeholders.

System Dynamic Modelling is an approach to understanding the interactions between elements of complex systems using computer algorithms to examine how variables affect each other over time.

Policy Lab is a multidisciplinary team developing public services and policies using innovative methods to engage citizens at multiple stages of the development process.

Personas are archetypes not stereotypes, representing key stakeholder groups in order to foster a more personal affinity with users.

Prototyping is a process of iterating concepts from low-fidelity through to piloting in order to test and refine concepts with users prior to full-scale delivery.

7.2 Appendix

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8.0

Contact

The opinions expressed in this report are those of the author not of the Northern Ireland Innovation Lab or Department of Finance.

About the Author

Dr Anna Whicher's main professional interest is in developing, implementing and evaluating policies using design methods. As Head of Design Policy at PDR, she is responsible for developing partnerships, leading networks, conducting research, engaging users, co-creating policies and evaluating impact for governments, innovation agencies, sector councils and trade associations in the UK and across Europe.

In addition, Anna is an elected board member of the Bureau of European Design Associations, a Design Council Expert on Design for Europe and a member of the Arts and Humanities Research Council's Public Policy Advisory Group. She has also worked in the UK Parliament, the French Ministry of European Affairs and Siemens in Paris. Anna has completed a PhD benchmarking design for innovation policy.

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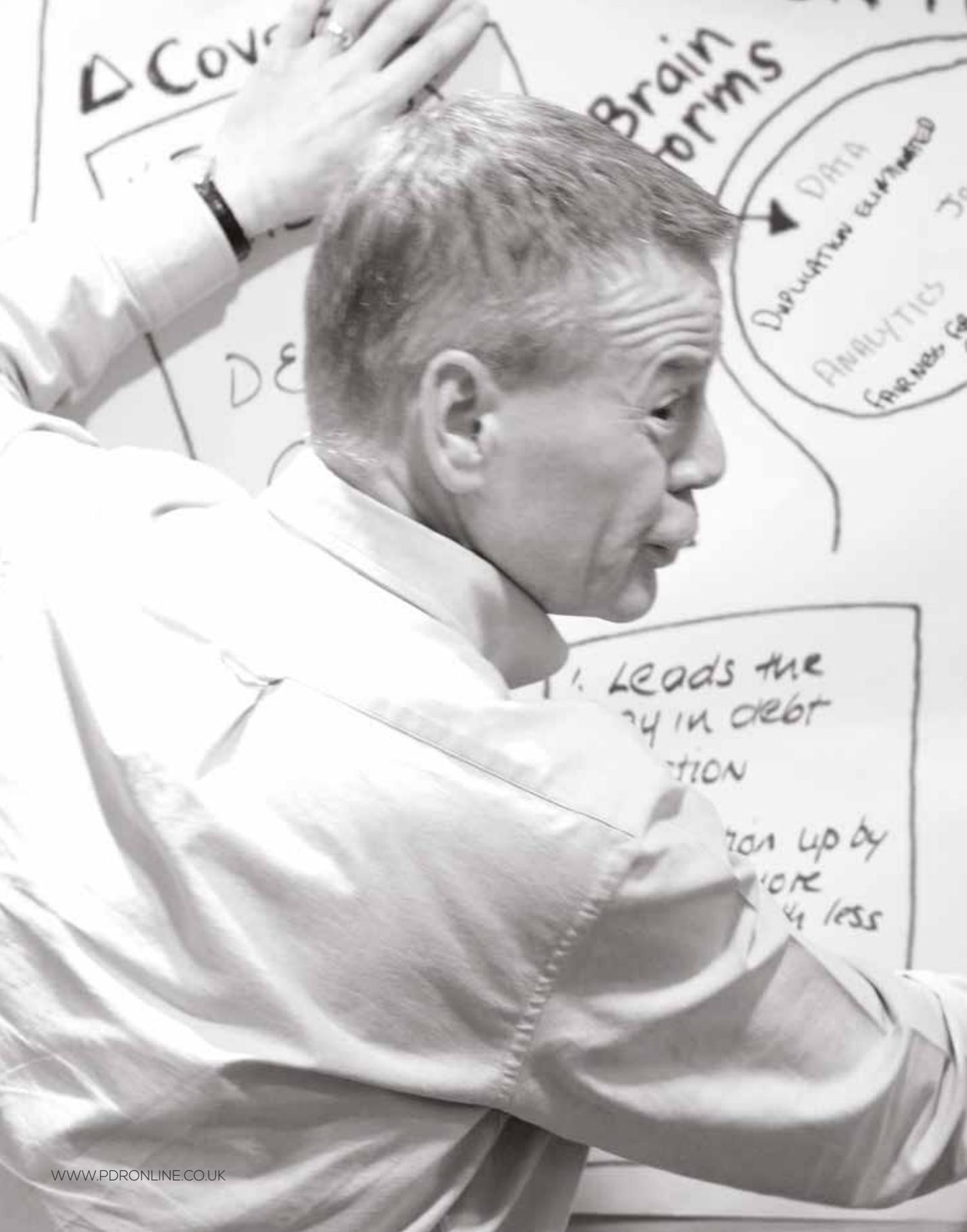
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Brain forms



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