



TESTING IDEAS THROUGH PROTOTYPING

INNOVATION BRIEFING

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In partnership with

FUTUREGOV

FOREWORD

FutureGov was pleased to partner with NLGN for the latest Innovation Briefing, “Testing Ideas through Prototyping”. In this briefing, we’re exploring the benefits and opportunities that arise when we create the time and space to bring prototyping practices into our work.

At a time when years of austerity has caused constraints and fiscal uncertainty, the public sector is under increasing pressure to achieve more with less. We have to think and act creatively to support more experimental mindsets that allow organisations to be responsive to change and capable of addressing the complex and changing issues of the 21st century. From our experience, this means helping public institutions open up the space for experimentation. We believe that prototyping is a powerful way of helping to do that.

Prototyping is the act of developing early stage mock-ups of an idea, product or service. Through the process of making, we’re forced to turn our most intangible ideas into something real so we can test, get feedback and quickly iterate at low cost. Through short cycles of iteration, we’re testing and validating our riskiest assumptions, easily course correcting when services or solutions aren’t meeting the needs of citizens.

It’s not a solo endeavour, nor one only afforded to designers. Prototyping is a collaborative process which encourages us to work in the open. Putting something into the world that isn’t finished can often feel uncomfortable. It goes against our natural instincts to want to show polished or finished solutions. But by inviting others into the process, sharing our ideas early and often, we create buy-in, fostering relationships that will help our ideas sustain and thrive.

Prototyping is ultimately a process of learning. It’s both a noun and a verb. The act of prototyping helps us better understand the issue we’re trying to solve and support a continuous learning mindset into the way we work. For these reasons, we are proud to partner with NLGN for this briefing, sharing our approaches and examples from others.

This Innovation Briefing adds to that knowledge, providing valuable case studies, which illustrate some of the different ways that local authorities are using good design to deliver social value.

ROB BATES

Creative Director, FutureGov

NLGN Innovation Briefings are for our members only and are focused on the practicalities of leading innovation. The briefings use active case studies and provide lessons learned from those at the vanguard of innovation. They are designed to promote sharing and expertise within our network of leading local authority innovators.

OVERVIEW

In a time of budgetary constraints and fiscal uncertainty, it can be hard for councils to look beyond the pressing challenges they are facing and dedicate scarce resources to plan for the future. However, for many local authorities, the twin challenge of resource constraint and the shifting nature of demand in public services has provided the impetus to think creatively and this sometimes involves redesigning services, policies or ways of working. More and more, councils are also starting to see the value of investing in future-proofing and are seeking to proactively shape their future.

A critical part of thinking creatively and developing an innovation is testing and de-risking of ideas before implementation, something more familiarly known as ‘prototyping’.

WHAT IS PROTOTYPING?

Prototyping is a learning tool, which can be defined as the process of mocking up an idea quickly at an early stage, using minimal resource in order to measure and improve its viability, desirability and feasibility.¹ Prototyping elicits feedback and reworking of an idea before more substantial resources are committed to the subsequent stage of implementation.

In the process of developing a prototype, a team learns not only what works, but also what doesn’t. It precedes more elaborate and costlier phases, such as a pilot and therefore involves only the minimum investment needed to test something. There are a wide range of things that can be prototyped, including products, services, systems, strategy and policy.

WHAT IS IT USED FOR?

Prototyping is often used as part of research through testing, and as a way to obtain buy-in through engagement. When used as part of research, prototyping allows an idea to be challenged and improved, thus reducing risk; it also provides an opportunity to highlight potential issues further down the line. It is often used to make a case for the expansion of an idea, or to secure more investment in a new project.

¹ Adapted from definitions by FutureGov, Nesta, and others.

Outside of formal research, prototyping is also used to engage non-experts, to make complex ideas more accessible and tangible for the end users. It is also a tool to obtain support and buy-in from potential partners through demonstration and early implementation.

METHODS OF PROTOTYPING?

Depending on what is being prototyped, there is a broad range of methods that can be employed. This includes paper or 3D prototypes, skeletal frameworks, storyboards, service blueprints, role play, business model canvas, and future scenarios.

Paper or 3D prototypes are particularly useful when prototyping a product, for example, to build a mock-up to test the suitability and performance of different types of materials.

Skeletal frameworks are basic guidelines, often in the form of wireframes' and described as 'low-fidelity representation' as the design team work towards a more advanced design of a product or service.

Storyboards are a method derived from filming and can be an excellent way of helping people visualise a user experience.

Service blueprints are likened to a journey map. They are a visual representation of the relationships between different service

elements, including service users, products, process, which correspond to specific stages of a customer's journey.

Role play is also known as experiential prototyping, which allows design teams to explore possible scenarios, and capturing the emotion and feedback of users when using a product or service.

Business model canvas facilitates collaboration by visualising the key components of a business model, and inviting stakeholders to test and develop new iterations of the model as part of the process of refinement.

KEY CONSIDERATIONS

In order to get the most out of prototyping, councils should bear in mind these four key principles.²

1. Don't start with a fixed solution, start by understanding the needs of users
2. Try multiple approaches, you are more likely to land on the right solution
3. Don't worry about making it perfect
4. Collect data and stories that make the case for spreading, scaling and sustaining the idea.

² These four principles are taken from the Champion Cities. Available at: <https://mayorschallenge.bloomberg.org/the-creative-city-report/Chapter2/>

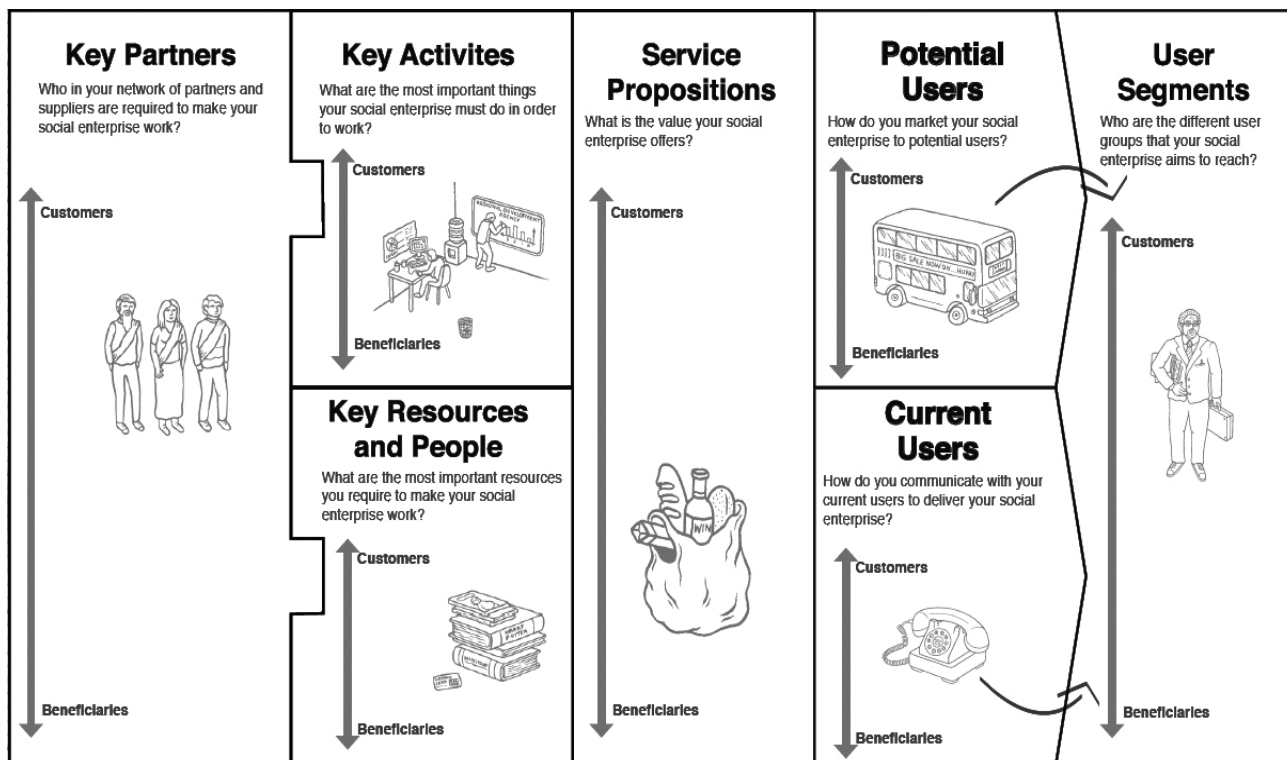


FIGURE 1: An example of a business model canvas. Source: Nesta and Think Public

CASE STUDY A

Designing 'Inclusion Plans' to meet local aspirations and new statutory requirements

Newcastle City Council

Ahead of the reforms of the Homelessness Reduction Act 2017, Newcastle City Council (NCC) was a Homelessness Prevention Trailblazer area. The council received some national government funding for system change to strengthen its citywide approach to identifying and responding to the risk of homelessness at the earliest stage, and to improving their understanding of the causes of homelessness and the effectiveness of their

responses. They already had a nascent vision to redesign the homelessness assessment framework to become more inclusive and holistic, but combined with the Act's new requirements to identify support needs and draw up a joint plan for individuals at risk, this gave impetus for a redesigned approach. This had as its aim producing a new approach to homelessness assessment and plan-making that matched these local aspirations with the new statutory and monitoring requirements.

NCC were keen to use prototyping as part of the service design approach in order to actively involve residents and staff, to use their insights to understand how to maximise time spent with individuals and to foster wider culture change.

APPROACH

NCC used prototyping at two stages. The first was at the beginning as a form of research - a series of workshops designed to inform the next more practical stage. Workshops were held with residents experiencing periods of homelessness, to get their perspectives on being assessed and their desired outcomes. Then workshops were held with frontline staff, to get their experience of assessments, and these included an element of role play to explore what they could practically achieve within the time of an interview and with a changed framework.

These workshops led to a short overview plan which set out what the assessment phase would seek to do. This plan culminated in a wish list on what the process could do or would mean – for example containing broad open (rather than specific) questions that would allow someone to speak more openly about their experience. In designing their own ideal assessment, the team gathered together different versions of personalised plans and assessments, drawing from the best features of other existing plans. At this stage, MHCLG's draft HRA monitoring requirements were published, which contained closed questions, and these requirements had to be incorporated as part of the plan, meaning that the first draft version of the assessment to be used within the service became more specific, with the plan elements of this staying relatively open.

Following the development of this draft document (called 'Our Inclusion Plan'), prototyping was subsequently used to test it in real time at the Housing Advice Centre, where Newcastle's statutory homelessness assessments are carried out. Over a period of weeks, the testing phase intensified. First, the draft plan was tested by two senior members of staff using a less complex case. The following week, testing was rolled out to all staff, first using a less complex case, and then a more challenging case alongside a few more simple cases, so the pace and extent of testing built up over time.

This phase was led by an individual, who collected feedback from staff informally in a variety of ways, for example via emails or conversations. The feedback was collated and regular open team discussions were held to reflect on the comments received and their implications. By the following day, a new version of the assessment form was produced for staff to test. Over five weeks 13 versions were tested, with significant changes incorporated between the first and final versions. This allowed the staff and residents to feel more comfortable with the format before it was incorporated into IT systems in readiness for the new legislation to take effect.

The new approach to assessment and plan-making was implemented when the HRA Act came into force, but the prototyping approach continues. The team recognises that in order to foster more reflective practice

and a culture of iterative development, the approach adopted needed to work over a longer term. There are still reviews of the Inclusion Plan to allow for opportunities for feedback. In addition, the team used a prototyping approach to clarifying and visualising the city's responses for residents who are homeless or at risk of homelessness, known as 'pathways'. As the pathways were prototyped, the team invited staff from across the system, including officers from Shelter, frontline hostel staff, and Jobcentre work coaches, to workshops to test the draft resource online. To build a sense of ownership among the partners, the team took an open approach that they not only welcomed critical comments but allowed for the possibility of the draft being deconstructed and rebuilt by stakeholders, if necessary. The team reflected on moments of consensus, keeping hold of the wider process so that over time a shared approach was developed.

LESSONS LEARNED

- **CAPACITY FOR PROTOTYPING:** The team was small, with limited capacity, so building a sense of ownership over the process was important for it to succeed. Having one individual lead the process was essential, as it provided much needed direction, reassurance and responsibility for responding to feedback. But the team agreed that the commitment from the team who would

be using the resources in their role ultimately provided the crucial support for the process to work effectively.

- **CLARITY OF PROCESS AND COMMUNICATION:** Being really clear about the purpose and vision for prototyping was essential. This allowed for an approach that balanced clarity with flexibility: a clear framework and timescale, with a process that built up over time, with scope for people to give feedback along the way.
- **CULTURE CHANGE IS AN IMPORTANT CONTEXT:** The process of prototyping has important benefits for the dynamics of the team. Involving frontline staff and developing their sense of ownership and input had important benefits. The very approach of testing early drafts in a frontline service and iterating was observed as being outside the natural territory of a council. Discussing the feedback, experiences and learning and then agreeing the next steps collaboratively has been an important new approach within the team.

CONTACT: For more information, please contact Christopher Parker, Senior Active Inclusion Officer, Newcastle City Council on christopher.parker@newcastle.gov.uk

CASE STUDY B

Supporting prevention through a new council-wide operating model

London Borough of Barking and Dagenham

Against the common backdrop for councils of rising demand and reduced resource, the council leadership felt that key indicators in the borough were reaching a crisis point, such as levels of educational attainment and unemployment. After a process led by the leader and chief executive to understand what wasn't working well, a new operating model was proposed across 17 place services to pick up the most acute issues outside social care.

The main aim of the new approach was to put in place a more preventative system of support that would help people to help themselves. This meant moving from a model whereby people were either assessed as eligible for a service or not, and if not they were given no support at all. The new approach involved being more proactive with cases that would have been closed as "no further action" in the short term (about 40 per cent), and being more proactive in intervening earlier.

APPROACH

Early models were built on the principles of the "troubled families" initiative and a process of light testing through workshops was undertaken over a period of six months. These involved staff and partners, to work through the options within existing practice and to identify what could be changed in the future. Following this phase, an approach was formulated that was then shared with other stakeholders through workshops and meetings for further input as part of a second testing phase, lasting 6-12 months.

Communication and ongoing staff engagement were important during this phase. Around 50 staff champions were identified to understand the way processes were changing and to communicate challenge and feedback. Monthly staff 'roadshows' were held involving 500 staff to discuss how the approach was working, what could be different, and to generate ideas and suggestions.

This prototyping phase refined an approach that flowed better so that when people came to the council, for example about a housing issue, any related issues they experienced would also be addressed. The staff role would change from administering a process to having a conversation – a challenge to achieve in practice. But by focusing on a person's whole situation, this approach enabled the staff to build good relationships

and to work with the individuals concerned to come up with a plan of action that gave them more control of their lives.

IMPACT

The Community Solutions approach has had a significant impact across a number of measures. For example, numbers in temporary accommodation were reduced from 1,962 in October 2017 to 700 in March 2019. Anti-social behaviour cases reduced from 1,710 to 720, and the numbers of people helped into work rose from 550 to 750. The reconfiguration of services means that there are now more people directly involved in providing them, but overall the council has saved £3 million due to improvements in housing, reductions in overall staff numbers and new ways of working.

LESSONS LEARNED

- **DON'T OVERCOMPLICATE:** The process was governed by the general principle of 'test and learn' – this wasn't perfect but was important to have an uncomplicated approach with a clear message about what needed to be got from it.
- **MAKE SURE THE RIGHT SUPPORTING CAPACITY IS DEPLOYED:** There was a core delivery team to support the process, with external resources and secondments contributed, and they coordinated the feedback and response. The 50 staff change champions were also
- critical to the success of the approach and the ongoing engagement of staff to the 'test and learn' approach.
- **DON'T UNDERESTIMATE HOW HARD ORGANISATIONAL CHANGE CAN BE:** There were real breakthroughs when staff were empowered to make choices, but there were also challenges. People both inside and outside the organisation were used to a service approach which 'does to' people. This new approach involved breaking habits, and that takes time. Some people were more open to change than others so it is important to involve people early on and be as honest as possible with them. Don't be guarded and treat things as issues for only management, but instead treat staff as equal partners and take chances.
- **BE COMFORTABLE WITH SAYING YOU DON'T KNOW:** The approach involved setting parameters for what you are trying to achieve and being comfortable with it evolving within them. Give people the confidence and permission to make mistakes and they can genuinely surprise you.
- **DON'T RELENT ON THE COMMUNICATIONS:** A variety of platforms for communication and types of engagement mechanisms were used throughout the process: Twitter, Yammer, an internet site, staff groups, drop-in sessions, one to one interviews across

16 council buildings. When engagement exercises were undertaken it was important to reference what people have already said so they see their input is effective.

- **KEEP THE FAITH!** Keep politicians informed about progress and ensure they are promoting it externally and pushing it internally. You have to prove things with hearts and minds – stories and numbers.

CONTACT: For more information, please contact Mark Fowler, Director of Community Solutions, London Borough of Barking and Dagenham on mark.fowler@lbbd.gov.uk

CASE STUDY C

Developing affordable recipe packs to encourage healthy eating

London Borough of Hackney

Hackney has been working to tackle adult and childhood obesity through a series of local initiatives. The council alongside Tower Hamlets and Haringey each obtained separate

funding from Healthy London Partnerships to support each of the council's separate projects to prevent childhood obesity.

The council first set out to identify people's barriers to healthy eating by developing a better understanding of their circumstances and the specific challenges faced. These include understanding why existing initiatives and programmes such as fruit and vegetable stalls, despite being subsidised, have struggled to gain traction with the local community. With new insights, the council worked to develop a programme that could make a difference in the long run, which can also be genuinely owned by the local community. The council recognises that to improve take-up, community ownership of the new programme cannot be an after-thought but that it must be integral to the design and delivery of the programme from the start.

Drawing from public health team's efforts to tackle obesity through strategic levers, e.g. from planning policy to projects with schools such as the daily mile, the council developed a programme around affordable healthy food, called *Make Kit*. To build a sense of ownership, the council invited a number of local entrepreneurs from the Voluntary and Community Sector (VCS) who had been involved in various local projects to come together to work with an estate the council had identified as having high scores of indices of multiple deprivation and childhood obesity.

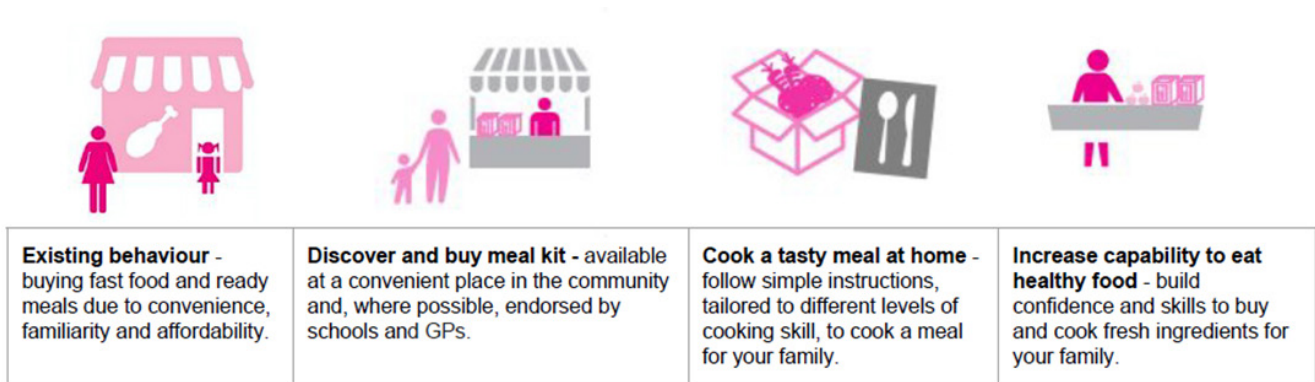


FIGURE 2: Prototyping as storytelling a customer's journey

APPROACH

The project started with ethnographic research to develop an understanding of habits, where people were getting their food, cultural relevance of food. This research revealed a great opportunity to build a sense of community ownership among the local residents, given the significant food diversity among the residents, which in itself is an invaluable asset. In developing a new affordable healthy food programme, the council set out to tap into the diverse experience and knowledge of the community around food.

Following a series of engagement with businesses and local groups, the idea emerged to develop a healthy food recipe pack delivery service—much like the model of *Hello Fresh*—which comes with a recipe card and cooking instructions, as well as portion customisation to suit different family sizes.

The project was led and developed by two local entrepreneurs, whose tenacity and enthusiasm made the project work. Utilising

the diversity of the community, each recipe was designed by someone on the estate whose family cooked a specific meal, such as Afro-Caribbean, Turkish, Vietnamese, and Italian.

A real effort was made to try and keep the cost as low as possible to make sure the recipe packs remain affordable. Groups of people from the estate volunteered in the design, acquisition and preparation of the recipe packs. The production line was carried out in the community hall and the marketing effort was primarily carried out by parents at school gates. At £4.50 for a meal for two, the recipe packs provide a competitive alternative to the local chicken shop.

The team recognised that limited funding means that they needed to develop a sustainable business model to broaden out the market for supplying recipe packs. The team explored a cross-subsidy model, which would involve selling the recipe packs at a higher price for council staff in order to help subsidise the residents. The team

experimented with various strategies including using vending machine and online ordering system, as well as scaling up distribution beyond the boundary of the Borough.

Ultimately, conscious of the risk of the team losing sight of the project's original purpose, the team decided to step back their efforts to scale up the business.

IMPACT

Prototyping *Make Kit* has enabled the council to capture the imagination of partners working together to prevent obesity, and a crucial tool to obtain buy in from key partners. By demonstrating the range of methods to tackle obesity that had been attempted which were not successful, the council was able to make a case to experiment with something new and to attempt a different approach to try and tackle obesity.

In the process of developing *Make Kit*, the team was also able to address some of the financial concerns; for example, the prototype uncovers some early concerns such as financial sustainability. By recognising this early on, the team was able to explore a cross-subsidy financial model, which necessitated the team to tap into a wider market and sell the recipe packs elsewhere. This exercise in turn revealed the high level of interest among potential users which the team had not realised previously. The process of prototyping, in an organic way, opened many opportunities for the team, through

ethnographic research, to capture crucial insights into the diversity, lived experience, strengths and assets of the end users.

Another useful outcome of prototyping *Make Kit* was the realisation that relying on one-off investments to seed-fund an initiative and expect it to continue without further support. Indeed, a common challenge of an initiative that is started through grant funding is that it is short-lived because organisations or services often struggle to obtain further funding to ensure continuity. The funding provided by London Health Partnerships therefore provided crucial support alongside public health money in setting up the *Make Kit* initiative at Hackney.

LESSONS LEARNED

- 1. DO NOT LOSE SIGHT OF THE ORIGINAL OBJECTIVES:** It is easy to become too absorbed in scaling up an idea and as a result forgetting its original purpose. Explore and experiment as widely as necessary during the prototyping stage but make sure you make room to strategically pause and reflect honestly on progress so that any expansions do not take away from the original objective of the project.
- 2. BUILD COMMUNITY OWNERSHIP THROUGH LOCAL PARTNERSHIP:** Community ownership is a key ingredient for essential take up of a new initiative.

Before resorting to external agencies and organisations further afield, you should engage local partners first, such as VCSs, to ensure the initiative can be owned by the local people who will actually promote and use it.

3. IDENTIFY YOUR USP AND MAXIMISE

THE OPPORTUNITY TO SELL IT: It is easy to get lost in the nitty gritty of developing a prototype, consequently failing to recognise its unique features and missing the opportunity to sell the idea more widely.

4. START SMALL AND BUILD UP

INCREMENTALLY: Certain conventional methods of systems mapping can sometimes make a problem seem unhelpfully daunting. Where possible, you should focus on a small number of key objectives and expand incrementally according to staff and community capability.

CONTACT: For more information, please contact Gareth Wall, Head of Commissioning for Adult Services, London Borough of Hackney on gareth.wall@hackney.gov.uk

CONCLUSION

Prototyping should become a natural part of councils' activities but for many councils the prospect of using this approach is daunting without greater internal capability. Nevertheless, prototyping has been used by

growing number of councils to test ideas and de-risk when developing specific innovations. The case studies in this briefing demonstrate just how three local authorities have used different methods of prototyping to de-risk and test their ideas.

Newcastle City Council developed a service blueprint prototype and utilised role play in redesigning their homelessness assessment and planning process. London Borough of Barking and Dagenham used a combination of skeletal framework and future scenarios in prototyping a new system for identifying needs early to support prevention. London Borough of Hackney developed a business model canvas prototype to test the financial viability and sustainability of the recipe pack product aimed at encouraging local residents to eat more healthily.

Through these examples, prototyping has been shown to be crucial in obtaining buy-in for a certain idea and in garnering momentum, whether through securing more funding and investment or through pre-empting and responding to emerging potential issues early through user research. Prototyping should not be seen as a novelty project but an integral part of a council's way of working because it can help to identify costly problems early and obtain necessary buy-in to advance an idea more effectively. But as the contributors to this briefing have advised, councils should start small and build up incrementally, to make sure that they do not lose sight of their key objectives.

FURTHER RESOURCES

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