

SERVICE BLUEPRINT

DESCRIPTION OF PILOT SUPPORT

User-Fac

Phase of Delivery

Marketing, company selection, delivery support, dissemination.

Company Actions

What are the main tasks that the companies have to complete?

Frontstage Interactions

What human to human interactions do they have?

Digital Interactions

What digital interactions do they have?

Backstage Assets

Who develops and delivers the content and activities?

Support Actions and Processes

What documents, presentations and expertise are needed?

Attend Recruitment Session

APPLY via online Application

Design Thinking Survey

Companies preparation - Idea/Issue

DISSEMINATION EVENT DUBLIN 30TH APRIL

Recruitment event TBC

Use they are

Discussion with ESI's Advisors/ us

Programme on Enterprise Ireland website

Through E.I Social media channels

Application online

Engage with int/external stakeholders

E.I Develop Tender

USER FACTOR

FINAL REPORT

CONTENTS

1	Summary
5	User-Factor Project Journey
10	Impact of design – theory & examples of previous studies
12	Impact of User-Factor pilot programmes
14	Wales
18	Canary Islands
21	Portugal
24	Galicia
27	Northern Ireland
31	Scotland
35	Britanny
40	Republic of Ireland
43	Lessons learnt - what's next for design in SMEs?
53	Conclusions
55	Acknowledgements

EVALUATION

INTRODUCTION

PROJECT SUMMARY

Through User-Factor pilot programmes, project partners supported 246 micro, small and medium companies across the Atlantic Area region. Programmes predominantly offered design training, mentoring and tailored advice services, there were pilots that also offered direct design intervention or were focused on improvement of existing design support programmes.

Our main goal was to exchange best practice in user-centred design and design-driven innovation support for small and medium enterprises (SMEs) and then to test design support delivery in our regions to find out what are the specific requirements of SMEs in regard to provision of such support, what works well and what are the main challenges that need addressing in future support programmes.

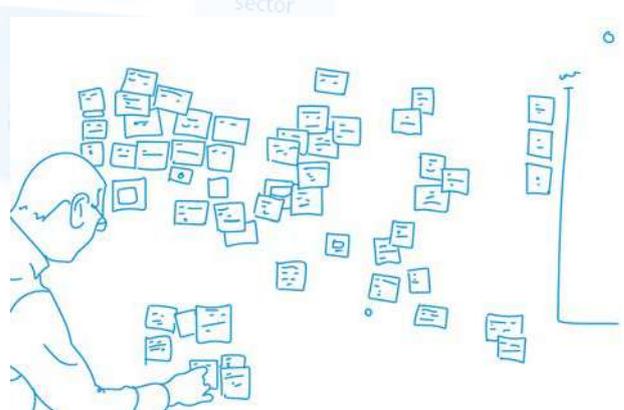
Design is one of the most accessible approaches to innovation, it is a people-centred activity by which desirable and usable products and services are defined and delivered. As such, it has been growing rapidly among big companies, as well as in public sector for citizen-centred transformation. Among smaller businesses though, which are the backbone of our economies and local communities, design is still a vague and underutilised concept.

Building on the European Commission's ambition to 'strengthen European SMEs' ability to use design as a strategic tool in creating products and services with a higher value for their customers'¹, a partnership of eight organisations involved in providing innovation support to SMEs embarked on this learning journey to make design support for SMEs attractive and effective.

The global pandemic of the COVID19 virus disrupted our knowledge exchange process and delivery of our pilot programmes, but it also made it evident that design will be key in the pandemic and post-pandemic reality when

adaptation and user-centred innovation are more important than ever. Huge tasks ahead of us in the process of green, digital and citizen-centred transformation make design to continue to be high on European policy agenda. It plays a central role in the New European Bauhaus (NEB) initiative, dubbed "the soul of the European Green Deal" by the European Commission's President Ursula von der Leyen. The New European Bauhaus is centred around the values of sustainability, aesthetics and inclusion, and the Commission will invite the Member States to use those values in their local strategies and to mobilise the relevant parts of their recovery and resilience plans, as well as the programmes under cohesion policy, to build a better future for everyone.²

Disregarding the challenges linked to the pandemic, when companies faced with uncertainty were less willing to start new project and invest in innovation or problems linked to shift to a digital mode of providing support, the main barrier to a greater adoption of design that we found among SMEs is their limited understanding of design as a tool for innovation that can be applied on operational or strategical levels. This lack of design or broader innovation culture in small business is often linked to the limited time and resource that they have available. Pressed for time, they usually prioritize day-to-day business over strategizing and often can be hostile to novel to them methods of working. Even when SMEs get to know the benefits that design present to their business, they still could lack time, expertise and funds to implement design advice.



1) European Commission (2013). Implementing an Action Plan for Design-Driven Innovation. SWD(2013) 380 final. Brussels.

2) European Commission (2021). New European Bauhaus. Beautiful, Sustainable, Together. COM(2021) 573 final. Brussels.

Therefore, based on our interregional learning process and testing various modes of design support with almost 250 SMEs, we recommend that:

. Design support is accompanied by design awareness-raising activities that in succinct and relevant to SMEs way explain what design is and what it can offer to their business, using real life examples.

. The programmes are developed using design process to ensure they respond to SMEs' needs, the support process is digitalised and streamlined, taking as much administrative burden of SMEs as possible, clearly explained from the outset and that the expectations regarding the outcome are set.

. The whole design innovation ecosystem is engaged in co-developing and co-delivering the programme – in this way it will leverage the impact and ensure that duplication of effort is avoided and opportunities for synergies capitalized on.

. The support includes new and emerging topics such as for instance design for circularity, for digital and virtual interactions, for services and policies.

. Design support considers the design sector and provides support to designers as well to ensure a supply of high quality and up-to-date design expertise.

Our relatively small-scale and light-touch design interventions succeeded in building the design culture among small businesses, raising awareness of design and its benefits, and improving understanding of users, methods of engaging and innovating with them. Across many pilot programmes, businesses declared new skills gained, increased capabilities, and improved internal processes and business management. SMEs in majority agreed that design can increase competitiveness and profitability and improve brand image. Many businesses went on investing in design and creating new design-related roles. Pilots where more in-depth interventions were offered, or design service was provided directly, managed to result in new or improved products and services leading to opening new markets or increase in sales.

The User-Factor partnership is convinced that the role of design will be growing, and funders and business support organisations need to constantly improve their offer to help SMEs reap the benefits that design presents. We hope that our lessons learnt, and examples of good practice will be useful for the whole innovation and business support community across Europe and beyond.

We would like to thank all entrepreneurs and stakeholders who were involved in the project in our regions.

User-Factor Team at the lead partner – PDR

Piotr Swiatek

Ollie Sutcliffe

Prof Anna Whicher

INTRODUCTION

THE PROJECT JOURNEY

In 2016, User-Factor project concept brought together eight partners aiming to explore and improve models for design support in small and medium enterprises (SMEs). Our partner organisations from across the Atlantic Area region were keen to strengthen integration of design as a tool for user-centred innovation into policy and support mechanisms in line with the European ambitions of the ‘Innovation Union’³ strategy and subsequent ‘Action Plan for Design-driven Innovation’⁴.

“3.2.1. Creating capacity to deliver support for design-driven innovation for businesses throughout Europe.

There is weak provision of specialised design-based training and mentoring programmes for SMEs, and of design-led innovation incubators. Making such support services available more widely will improve businesses’ ability to use design as a driver for innovation.”

User-Factor partners are experienced in providing business and innovation support, but for some design was a novel approach to business improvement and transformation. We adopted the European Commission’s definition of design as ‘an activity of people-centred innovation by which desirable and usable products and services are defined and delivered’⁵ and built an ambitious programme of knowledge exchange activities. Through a series of transnational workshops

and stakeholder engagement in partner regions, User-Factor’s goal was to identify and share best practice in SME support, develop and test pilot design support schemes for SMEs, evaluate their impact and implement learnings into our support offers for long-term impact.

The project concept found favour with the Interreg Atlantic Area programme and received backing worth over €1.5m (with the total value of the project of over €2m) from European Regional Development Fund. The partnership involved:

- *PDR – International Centre for Design & Research at Cardiff Metropolitan University (Wales, UK) – lead partner*
- *Scottish Enterprise (Scotland, UK)*
- *The Innovation Lab at the Department of Finance, Northern Ireland (UK)*
- *Enterprise Ireland (IE)*
- *GAIN, Axencia Galega de Innovación (Galicia, ES)*
- *Asociación de Empresas Tecnológicas Innovalia (Canary Islands, ES)*
- *SPI, Sociedade Portuguesa de Inovação (Norte, PT)*
- *Chambre de Commerce et d'Industrie de Région Bretagne (Britanny, FR)*

We launched the project in March 2018 with the first transnational knowledge exchange workshop hosted by Scottish Enterprise in Edinburgh. Having looked at the European policy for design and research on design support, each partner presented a successful case of design and innovation support mechanism from their regions. These examples were turned into case studies that form part of a handbook of good practices. We also discussed the critical success factors and potential pitfalls within these programmes as the first step to developing our pilot programmes.

Enterprise Ireland prepared the next meeting that took place in Dublin in October 2018 and focused on framing the details of pilot programmes. We discussed topics such as design support objective, regional challenges and policy drivers, programme management and delivery, target audiences and facilitators as well as the desired impact. Partner also developed strategies needed to engage and recruit the stakeholders and explored the structure of the pilots at a conceptual level. The framed design supports had nuanced objectives, but fall into two main categories:

- *Developing a tailor-made design support intervention for SMEs in collaboration with existing support services;*
- *Evaluating current support offerings and supporting SMEs in the journey of application to engagement.*

Similarities that emerged across all framed pilots included the need to promote the value of design internally and externally; as well as a strong focus on collaboration in developing and delivering the pilots.

After the workshop, Scottish Enterprise decided to go down the route of improvement of their 'By Design' programme. Together with PDR, they undertook an in-depth customer evaluation through use of surveys and interviews. This research targeted 400 SME's who had received support during 2017-2019 and produced a number of recommendations for improvement of the support service, which were then tested by Scottish Enterprise. See more about the 'By Design Grant' evaluation in the next chapter.

RESULTS

In the run-up to the third workshop each partner was busy planning their regional design support pilots. Hosted by the Galician Agency of Innovation in Santiago de Compostela in March 2019, the meeting peer-reviewed the draft pilot implementation plans with partners offering their experience and expertise to each other. Then, using a design tool – service blueprint, partners visualised and prototyped their pilot service offering from the perspective of the target companies. This assisted them in understanding how the support will be delivered.

Our last pre-pandemic, in-person workshop took place at the end of September 2019, hosted by Innovalia Association in Santa Cruz de Tenerife. The central theme for the meeting was 'Monitoring and Performance Assessment' of design interventions. PDR, the lead partner of User-Factor project, has presented a selection of different studies of value of design, from evaluations of the impact of design sector on the economy, evaluations of specific design policies and programmes to studies of the effects of design interventions in individual enterprises. Based on that knowledge, partners worked collaboratively in groups to propose a framework for evaluating our design interventions. Because our pilot programmes vary significantly, each partner will adopt the framework to specific characteristics of their programme. Nevertheless, to ensure comparable data a set of common indicators was selected for all the interventions in three evaluation categories:

- *Business culture and design leadership,*
- *Business performance,*
- *Support experience.*

3. European Commission (2009). 'Design as a Driver of User-centred Innovation', SEC(2009)501 final, Brussels.

4. European Commission (2013). 'Implementing an Action Plan for Design-Driven Innovation', SWD(2013) 380 final, Brussels.

5. Ibid.

When the COVID-19 pandemic struck, most of our pilot programmes were under way and needed to be put on hold or restructured for remote delivery. SMEs were uncertain about their business future and not willing to take up new projects, focusing on business survival. Nevertheless, our partnership demonstrated resilience, adaptability and can-do spirit and continued project activities. With a slight delay, our Capitalization workshop took place remotely in November 2020, when with the support of digital tools partners collaborated on development of the goals for the project capitalisation, brainstormed ideas for action on the partnership level, as well as discussed who should be involved in those efforts. Our main ambitions in the long term include:

- Growing awareness of design in business and innovation

– using the project outputs and lessons learnt through the process to engage with broad spectrum of stakeholders including policymakers and public administration, business organisations, education sector and disseminate the results of the project.

- Continued support – refine design support offered through pilot programmes to influence future support programmes.

- Foster a community of practice – continue to share knowledge and exchange good practices through formal and informal future collaborations.

Following the workshop, partners also developed corresponding actions on their regional level.

The ultimate knowledge exchange workshop was held remotely in May 2021 and revolved around the findings and insights from evaluation of the pilot programmes. The final results, case studies and trend predictions are included in this impact report.

Our lessons learnt for design support arrived very timely. At the start of the new European strategies where green, digital, and citizen-centred perspective tops the agenda. Design is an inclusive, user-centred, engaging and collaborative approach that encourages simultaneous pursuit of economic value, social equity, and ecosystem quality. As such plays a central role in the New European Bauhaus (NEB) which principles is going to be echoed in the 2021-27 Cohesion Policy.



Intention

- Position User-Factor as a facilitator to promote, disseminate and share the culture of user-centric design with Brittany's economic actors.
- Increase the skills of companies and designers.
- Explore how design can create value to "traditional businesses" and improve innovation skills.
- Facilitate business between SMEs and designers.

User-Factor

User-Factor aims to strengthen innovation in SMEs by supporting them to develop a user-centred approach to innovation.

www.user-factor.com

sp/ gran

“Through its transdisciplinary and participatory approach, the New European Bauhaus reinforces the role of local and regional communities, industries, innovators and creative minds that work together to improve our quality of life. Cohesion policy will transform new ideas into action at the local level.”

**Elisa Ferreira,
Commissioner for Cohesion and
Reforms**





IMPACT OF DESIGN

THEORY & EXAMPLES OF PREVIOUS STUDIES

Measuring design and its effects poses many challenges – design can mean different things to different people; it is difficult to isolate design from other business functions and its impact can manifest itself with a delay. That is why design's impact can often seem limited to slogans such as for instance the famous Thomas Watson's quote 'Good design is good business'. Nevertheless, there is a wealth of studies proving the positive impact of design on business activities and results – from increased customer satisfaction and greater loyalty to improved quality, streamlined internal processes, increased sales and higher profits. This measurement is crucial to create evidence-based policy and targeted support programmes for business innovation and competitiveness.

Design can be assessed on various levels or from different perspectives. The Organisation for Economic Cooperation and Development (OECD) identified five types of measures of design:

- Measures of design as an industry
- Measures of design as workforce skills and tasks
- Measures of design as intellectual property rights
- Measures of design as an element of innovation and innovation activities
- Measures based on direct enquires on design activities and expenditures ⁶

Those measures correspond with the levels of design impact on micro and macro levels:

1) Design impact at macro level in the public sector – refers to the impact on the economy and society as a whole. A good example of such an assessment is a recurrent study by the Design Council 'The Design Economy' ⁷ report which looks broadly state of design in the UK, and its value to the economy. The 2018 edition of the study established that the design economy in the UK in 2016 was worth £85.2bn in gross value added (GVA), what amounts to 7% of UK GVA and is an equivalent to the size of the distribution, transport, accommodation and food sectors. The 2021 study has ambition to look for new sources of data and types of design impact on society and environment, and in the public sector.

2) Design impact at macro level in the private sector – is concerned with the aggregate impact of design use on industry as a whole; or measures of design sector itself. Certain elements of the previously mentioned 'Design Economy' study falls into that category. It found that in 2016, there were 1.69 million people employed in design roles, which is as many as in the hospitality sector. The employment growth in the sector was higher than UK's average and staff in design roles were 29% more productive than the average UK worker. Similar study in Ireland showed that design sector creates around 48,000 jobs, which is an equivalent of 2.48% of the total workforce, and it is a rapidly growing sector with over 3,000 jobs created between 2011 and 2014. The study also revealed that the contribution of the Irish design

sectors to total exports from Ireland was estimated at 19.5% in 2012, and more than 21% in 2013!⁸

3) Design impact at micro level in the public sector – can refer to public authorities’ use of design as well as the return on investment of government funded design programmes and policies. The evaluation of Scottish Enterprise’s ‘By Design’ grant scheme, undertaken as part of the User-Factor project, revealed that Design is a relatively low-cost way for companies to innovate as 64% of companies reported bringing a new product or service to market and 27% entered new markets. Furthermore, after the grant, 83% of companies continued to work with a Design agency going on to invest £26,000 on average. This demonstrates that a small government grant of up to £5,000 can stimulate a five-fold increase in investment.⁹

4) Design impact at micro level in the private sector – is the extent of use and impact of design on individual businesses. There have been many individual surveys and reports published on design capability within firms and the perceived and actual value of design to those firms. Brigitte Borja de Mozota has listed 33 different ad-hoc studies on design’s role and influence on business performance, exports and macroeconomic performance from different countries and industries.¹⁰ They suggest a positive correlation between the use of design and better results in terms of sales, exports, productivity and margins. Design helps to access new markets and increase a present market share and positively influences many non-financial aspects of firms operations such as better management of creative and innovative processes in the company, or improved company’s image and customer experience, among other. Woudhuysen and Ford also summarized case studies and statistical data on the value of design in firms say that they ‘show cost/benefit ratios of perhaps 1:5’.¹¹ In case of individual businesses, those studies can take more qualitative approach and look deeper into not only financial gains but also organisational aspects and measures such as innovation risk reduction or acceleration of bringing new ideas to the market, increase of customer loyalty, improved internal processes or staff satisfaction levels.



Figure 1. Levels of Design Impact. Source: Whicher, A., Raulik-Murphy, G., and Cawood, G. (2011) ‘Evaluating Design: Understanding the Return on Investment’, *Design Management Journal* 22(2), pp.44-52.

6. Galindo-Rueda, F., Millot, V. (2015). ‘Measuring Design and its Role in Innovation’. OECD Science, Technology and Industry Working Papers. 2015/01, OECD Publishing. <http://dx.doi.org/10.1787/5js7p6lj6zq6-en>

7. Design Council (2018). ‘The Design Economy 2018. The state of design in the UK’. London

8. Department for Jobs, Enterprise and Innovation (2016). ‘Policy Framework for Design in Enterprise in Ireland.’

9. Gaynor, L., Swiatek, P., Whicher, A. (2020). ‘By Design Grant Evaluation’. User-Factor research report.

10. Borja De Mozota, B. (2003). ‘Design Management - Using Design to Build Brand Value and Corporate Innovation’. New York: Allworth Press, pp. 52-65.

11. Woudhuysen, J., Ford, P. (2014). ‘Publicly funded design support for SME manufacturers’. First published at AgIdeas conference, Melbourne, April 2014.



Impact of User-Factor pilot programmes

The pilot interventions varied from light touch advice and training to in-depth design projects what posed a challenge to collect comparable data across all programmes. Nevertheless, all partners asked for feedback in three evaluation categories:

- *Business culture and design leadership*
- *Business performance*
- *Support experience*



All pilots succeeded in building the design culture among small businesses, raising awareness of design and its benefits, and improving understanding of users, methods of engaging and innovating with them. Across many pilot programmes, businesses declared new skills gained, increased capabilities, and improved internal processes and business management.

For relatively small and short-term interventions, it was difficult to assess a change in business performance, especially during challenging pandemic times. Nevertheless, SMEs in majority agreed that design can increase competitiveness and profitability and improve brand image. Many businesses went on investing in design and creating new design-related roles. Pilots where more in-depth interventions were offered, or design service was provided directly, managed to result in new or improved products and services leading to opening new markets or increase in sales.

Evaluating support experience is important for future programmes and allows to get to know business support needs. Participating businesses were largely satisfied with support they received. They mostly appreciated the design approach, clear process and setting out expectations. Further support, especially financial one, to implement and launch the design recommendation was the most common suggestion for programme improvement. As tested by one of the partners, following the design advice with a guidance on funds available to realise it is a very useful and valued element of support programme.





IMPACT

Wales, UK

Bringing Creativity to Business

Bringing Creativity to Business was a pilot programme for Wales-based small and medium enterprises that offered tailored support in introducing user-centred approaches in various aspects of business activity. The programme offered services such as user research, service design, UX design and design thinking training and resulted in new services and process improvements being introduced in majority of supported SMEs. PDR's pilot support programme was developed during the COVID-19 pandemic and the main goal for the pilot programme development was to combine remote delivery with maximum flexibility to best respond to current needs of businesses. Thanks to clear process and individual approach the programme met expectations of participating businesses shifting their understanding of design and encouraging for more investment in design in the future.

In total 11 SMEs took part in the programme, eight of them progressed through the whole support journey, while three SMEs only required advice or clarity on specific subjects, and as such they did not need support through the whole project development process. Supported businesses were of various sizes from micro-firms to medium enterprises with up to 80 staff and hailed from both service (marketing, sustainability, arts, hospitality, community support, retail) and

manufacturing industries (cosmetics, bikes). All support was delivered internally by PDR staff. Supported businesses were regularly informed about the progress and involved in relevant research and design activities to build their capacity to use design tools and methods themselves.

Recruitment of SMEs posed the biggest challenge in programme implementation what suggest that appropriate time and resources need to be dedicated in promotion of design support offer, as understanding of design can still be limited to purely aesthetic aspect and SMEs might not be able to see the relevance of it to their business. Design will be crucial in the post-pandemic recovery to help businesses to adapt, innovate and shift to new, more green business models. Based on the lessons learnt from the project, we advise that more well-explained and promoted bespoke design support should be offered to SMEs emerging from pandemic restrictions, especially in areas of digital design, service design, eco-design, circular design and user research and engagement.

IMPACT

Bringing Creativity to Business supported 11 SMEs, the main impacts achieved were:

Shift to a more strategic understanding of design;

All SMEs improved their understanding of user needs and enhanced their competitiveness (50% declaring a large extent);

All stated that design increases turnover and improves organisation's image (a third said "to a large extent").

Business Culture & Design leadership

Before participation in the support programme, most of the businesses associated design with marketing and promotion activities, product development and definition of form and function. Having received the support, the perception of design shifted towards creative problem-solving, better understanding user needs and innovation and competitiveness. All businesses plan to increase their design activity, particularly in terms of user research and engagement. Half of supported SMEs declared that they are already incorporating design tools and methods in their business activities. Among the other design topics of interest to SMEs, web development, market research, eco-design, product and packaging design, and social innovation were chosen most often.

"We definitely plan to consider the user in a way that we haven't considered before."

Business Performance

In terms of new products and services, half of supported businesses introduced changes already few months after receiving support. Others are planning to use the insights and recommended solutions to inform their

future business activity. All surveyed SMEs said that design improved their understanding of user needs and enhanced their competitiveness, with 50% declaring a large extent. Similarly, all stated that design increases turnover and improves organisation's image, with a third saying that to a large extent.

"We will be launching the new service that we worked on with User Factor and taking into consideration all the findings from the work."

Support Experience

All supported businesses were satisfied with received services with 85% very satisfied. The businesses appreciated the design approach, clear process, and insightful research. In the feedback survey, they were complimenting the way in which design approach focuses on both user and business needs and frames them into business opportunities. Other highly evaluated elements of the support programme included professionalism and expertise of the team, good organisation and speed of delivery. There were not many suggestions for programme improvement, other than further support with project implementation, more research data to be included in the report or faster delivery. One business commented that at first contact, the support offer did not seem relevant, what may suggest that understanding of design is still limited to styling or product design.

What were the two best features/touchpoints of the support?

“The high level of organisation and professionalism and the willingness to really listen to our needs and understand our business.”

What were the two features/touchpoints of the support that need improvement?

“Further help with making the changes a reality would be appreciated.”

“Before we took up the offer we weren’t sure it was relevant to us, through the initial email.”

What additional support would have been useful during the support process?

*“The process was great and I have nothing to add here.”
Impact on the project partner delivering the pilot*

Impact on the project partner delivering the pilot

The majority of PDR's work is focused internationally and the programme thought us about the importance of strong links with the local business environment. Therefore we plan to strengthen our service offer to local SMEs. Based on the experience of delivering the programme, we expect that more design support will be needed for SMEs in areas of digital design, service design, eco-design, circular design and user research and engagement. Creative and cultural sectors, social businesses, hospitality and other close-contact services will need new approaches to innovate their offer and increase competitiveness.

SME Story - Frog Bikes

<https://www.frogbikes.co.uk/>

Frog Bikes is an established manufacturer of high-quality kids bikes with a strong reputation for ergonomic and bespoke products. They wanted to explore the possibility of shifting their business model, from selling them to leasing them on a long-term basis. In doing this, they hoped to reduce waste from their bike market and 'close the loop' as users would send back the bike after they had outgrown it, it would be refurbished and leased again.

The provided support covered a range of methods. We began by giving an overview of the design process, its stages and the importance of user research. We introduced Frog Bikes to some tools and methods we thought they might be able to implement for future projects and throughout our support, we also showed them how to use them.

Our research started with industry benchmarking examining other businesses that leased products for long term periods of time. We covered a variety of industries from appliances to toys to cars, each trying to identify industry and consumer trends - but from different angles.

As part of desktop research, we also conducted an academic literature review on consumer attitudes to alternative models of consumption, exploring potential motivations and barriers to long-term renting, second-

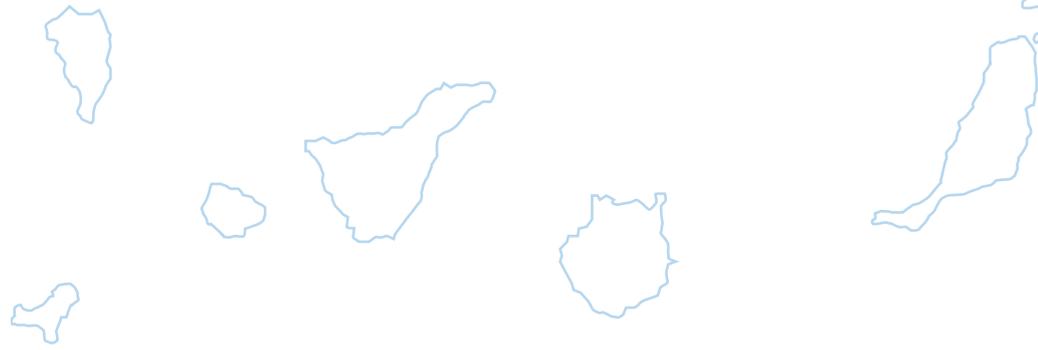
hand market and collaborative consumption of various everyday life goods.

After conducting these, we presented our findings to Frog Bikes, explaining our process and giving advice on how to conduct market research on their own.

The second part of research involved a series of user interviews with potential clients – parents with young kids interested in cycling. Based on the interviews, we developed personas – archetypes of Frog Bikes users, their needs and preferences. Insight into the clients' attitudes coupled with findings from desktop research allowed us to formulate recommendations in a final report, which also included a section on ideation and how to analyse findings.

During the hand-over session, we presented alternative solutions to the one initially considered by the client. Frog Bikes ultimately determined that leasing bikes in the way they had planned would not be successful and feel as though they have avoided a big pitfall which would have taken time and resources to implement.

Frog Bikes had found this tremendously useful in laying the foundations for new business ventures and most importantly took much learning from the experience – going from design just being viewed as a marketing tool to having been exposed to user-centred design approach applied in strategic business management context, facilitated by PDR.



IMPACT

Canary Islands, Spain

Design Factory
(Factoría de Diseño)

Design Factory was a specialized training and mentoring programme aimed to help Canarian SMEs to improve the design of their products and services focused on the user. It intended to facilitate the innovative culture in companies and specifically the innovation of products and services focusing on improving competitiveness, knowledge of users and identification of their needs.

The programme consisted of two phases - intensive face-to-face training sessions, followed by a personalized mentorship to implement a new product or service design developed through with insights and lessons learnt through the programme. Design Factory was delivered by Innovalia.

The training included two workshops:

- Discovering your users – which put into context all the information that companies and entrepreneurs know about their ideas, products or services and based on this identified what they offer to their users and what their objectives are;
- Crossing the road – which aimed at identifying of characteristics and requirements that users present in respect of the service or product, and then generating ideas that meet the identified needs and a new user experience.

Both workshops were designed in highly interactive and participative form with a set of individual, group and mixed exercises. In this way, a dynamic and creative

environment was achieved that helped to maximize the results of the activities and creating synergies between the participants.

At the end of the training, participants were tasked with a Leap into the void challenge where participants put in practice what they have learned during the workshops. This meant to validate and optimize each of the activities of their user's journey in real environments, capturing the impressions of customers and consumers. Throughout the implementation challenge, they were supported by mentors who checked their performance and also solved questions, or any barriers encountered.

Awareness of benefits of design among SMEs was the main challenge for Innovalia to reach the target audience with the offer of the pilot programme. To overcome it, the team prepared an extensive promotional campaign including TV and radio advertisements, as well as attending relevant events, meetings, seminars or conferences to explain how design can help any SME and what the Design Factory will offer. Additionally, the geography of the Canary Island was problematic in the pilot delivery – workshops were held three times each in different locations to be closest to participating SMEs. The mentoring phase was conducted remotely due to the pandemic restrictions. All participants were struggling to overcome the new situation generated by the lockdown, however the knowledge acquired in the Design Factory proved useful to develop new services or re-design the existing ones to meet the demands during that period.



IMPACT

Design Factory supported 25 SMEs, the main impacts achieved were:

Increased use and understanding of design and its benefits;

Strengthened competitiveness in 80% of participating businesses;

Design intervention helped to open new markets to 56% SMEs and even increased profits in 40%.

Business Culture & Design leadership

Before participation in the support programme, most of the businesses associated design with marketing and promotion activities, product development and definition of form and function. Having received the support, the perception of design shifted towards creative problem-solving, better understanding user needs and innovation and competitiveness. All businesses plan to increase their design activity, particularly in terms of user research and engagement. Half of supported SMEs declared that they are already incorporating design tools and methods in their business activities. Among the other design topics of interest to SMEs, web development, market research, eco-design, product and packaging design, and social innovation were chosen most often.

“We definitely plan to consider the user in a way that we haven’t considered before.”

“Now have more tools to capture their engagement with our service and will build this into future strategy.”

Business Performance

In terms of new products and services, half of supported businesses introduced changes already few months after receiving support. Others are planning to use the insights and recommended solutions to inform their future business activity. All surveyed SMEs said that design improved their understanding of user needs and enhanced their competitiveness, with 50% declaring a large extent. Similarly, all stated that design increases turnover and improves organisation's image, with a third saying that to a large extent.

"We will be launching the new service that we worked on with User Factor and taking into consideration all the findings from the work."

"We decided NOT to launch the service we were considering, on the basis of the findings. Although this may seem like a negative outcome, I believe it's actually saved us years of effort and likely substantial losses."

Support Experience

Almost all participants (24 out of 25) considered their journey through the Design Factory pilot "good" or "excellent. They have rated the training content as "good" (16) or "excellent" (9), similar to mentorship and follow-up support – "good" (14) or "excellent" (11).

Impact on the project partner delivering the pilot

In general terms, the Design Factory programme has changed the way how we at Innovalia develop our services. It is seen as a success story on how to enrich our services thanks to the participation in a European project.

In this sense, one of the first points we noticed during the implementation of the Design Factory was the need to digitalize the process for a better understanding and usefulness of it. Not only by providing digital tools that allow participants to keep working on their solutions at home, but to digitally transform the entire programme and, in this way, to enhance the understanding of

SME Story – Murias Digital

<https://muriasdigital.es/>

The business image is very important when it comes to attracting clients (it is usually the first impression of a company and must be key and professional). That is why Murias Digital helps to position local companies in Google Street View (and therefore, in the Google search engine and Google Maps: two of the most used platforms worldwide when searching for businesses). The visibility of the company increases and even the SEO is improved when a Virtual Tour is inserted in the corporate website.

Before participating in the Design Factory programme, the company did not take its users into account. It offered a standardized service without looking at the different targets that its project had, providing a good but not personalized service. Also, it didn't take user experience into account, so its customer support was based merely on maintenance service.

Having received the design support through the programme, their mindset have completely changed. The pilot has helped them to identify different roles within the user experience, thus being able to analyze in detail each step of the service offered and improve it continuously.

Main impacts:

Updated vision of product and service design - Design is an important tool and has great strategic value in the company.

Increased income after participating in the Design Factory pilot.

Remarkable increase in the awareness of the company regarding service and product design.

"The Design Factory has completely changed my way of thinking. Now, before any meeting with a client, I always put myself in the shoes of my clients and I offer them a personalized service".



IMPACT

Norte, Portugal

Design for Business

Design for Business (DfB) was a design support programme comprised of two virtual training pilots offered to SMEs and start-ups, to foster regional cooperation and the implementation of design methodologies in innovation processes, promoting the development of new products and services. The training was delivered in three sessions, and focused on design thinking, agile development, and lean manufacturing. The first edition of the training took place on between April and May 2020, whereas the second was delivered from November 2020 to January 2021.

The pilots were delivered by Sociedade Portuguesa de Inovação (SPI) in partnership with Porto Design Factory (PDF), an interdisciplinary laboratory of ideas who works in applied research and in collaboration with industry. The programme aimed to contribute to design-driven innovation in companies in Portugal, and to raise awareness towards the added value of user-design methodologies for innovation in services and products.

In total, the programme was attended by a total of 47 participants from 34 businesses. The registration survey collected information regarding the challenges faced by businesses in Portugal. During the first edition of the DfB pilot, mentoring sessions with area specialists, as well as a personalised booklet with the main conclusions regarding the programme and methods to support user-design innovation were provided to the attendees.

Although the online format of the training had the advantage of allowing for more flexibility and wider regional representation in the training, it also presented challenges regarding the completion of all the predicted activities, such as prototyping and product design.

Moreover, in general, it was found that there is a widespread unfamiliarity towards the advantages of the implementation of design methodologies for business and product development.

IMPACT

In total, DfB had two sessions and supported 47 attendees from 34 companies. The KPIs achieved were:

Higher number of SMEs with design awareness;

Improved design strategies for SMEs;

More funding achieved through capacity building actions in design.

Business Culture & Design leadership

Previous to the participation in DfB, there was an overall unfamiliarity amongst the selected companies regarding what design can achieve when applied to business and service areas. After the conclusion of the programme, it has been possible to pinpoint some of the impacts on the companies' business culture and the development of design awareness. The evaluation results regarding the perception of the benefits of the design methodologies shared during the training indicate that across both editions, 95% of the respondents agreed that there are several areas that can benefit from the implementation of the design tools and methodologies learned. The areas with the biggest potential for improvement

through the implementation of design methodologies were highlighted by the respondents as: business and project management, proposal development, planning and coordination, CRM, productivity, efficiency, and team organization.

Additionally, 80% of the survey responses indicate that participants continued to research the tools and methodologies shared during the training. 15% of respondents were planning to open new job opportunities based on design approaches discussed during the training, and that 94% of respondents would recommend DfB for companies in early-stage development. Finally, the vast majority of the respondents (78%) indicated that the tools and methodologies shared would help them develop new products and services.

Business Performance

The most important insights regarding the impact of the DfB pilot among the companies in attendance relate to the foreseen improvements to business performance. Overall, the programme has been beneficial to the companies that attended the programme, and a long-term impact has been noted in the evaluation reports. Based on these, it is possible to highlight the following impacts on business performance after the conclusion of the training:

95% of survey respondents declared having a clearer perception of the usefulness of design for business;

85% stated that the training improved the quality of their work;

95% agreed that there are several areas in their company that could benefit from the tools and methodologies learned;

85% agreed that the tools and methodologies learned during the training will help them to know their customers better and to improve consumer experience;

65% agreed that the methodologies learned will help them to develop new products or services;

88% indicated that the knowledge gained may have a contribution in increasing company profits.

Support Experience

Finally, evaluation results regarding support experience indicate that 90% of respondents found that the training sessions met their expectations, and that 50% of the respondents from the first edition agree that the support offered during the mentoring sessions was very good. Most of the participants agreed that all of the sessions were useful.

Overall, the training had a long-term impact since 75% of the evaluation answers indicated that the participants continued to do research on the tools and methodologies learned during the sessions, especially regarding lean development, design thinking, and agile development.

Impact on the project partner delivering the pilot

The training sessions were helpful not only in reaching a large number of stakeholders who were not aware of the usefulness of design for business outside of the classic visually oriented areas, but also in improving SPI's capabilities in this topic. Since SPI staff attended the training and can access the contents shared, this also benefited the company.

SPI will continue to raise awareness and to support the development of such innovative programmes for SMEs. Furthermore, SPI will capitalize on the DfB conclusions through the promotion of new design programmes and actions at the national and regional levels. SPI will develop a strategic action plan based on the evaluation of the design pilots, provide service support for developing design in SMEs, and share relevant materials and good practices with interested parties. The focus of this action will be regional authorities in order to support them in disseminating the strategic use of design amongst SMEs.

SME Story – Marzee Labs

<https://marzeelabs.org/>

Marzee Labs is a web development company made up of a small team of programmers and designers which works in designing and developing websites from scratch, improving web platforms, technical consulting, tech architecture, and user experience. Marzee Labs focuses on websites, community platforms, cloud applications, e-commerce and institutional websites. Their main objective coming into the Design for Business training was to better understand how to integrate design concepts and methodologies in the business areas of their company, rather than using it only as a technical tool. Their transversal motivation was to grow their business.

Marzee Labs' participation in the DfB pilot allowed them to gain a better understanding of the potential of design thinking and agile methodologies. Overall, their knowledge of what design can do for their company was complemented and reinforced, since they got to know how to integrate new tools and methods into their daily practices. Another positive output from their participation was the networking and active interaction they were able to have with companies from the fields that usually request Marzee Labs' services. This was a very useful opportunity, since the team must always have a very in-depth knowledge of their clients in order to translate their services and identities correctly into an online format. In this context, the programme was helpful in allowing them to understand how these companies think, and to gain inspiration from how they use the design methodologies presented in the training. The mentoring sessions were very helpful since Marzee Labs is a small company, and thus, they have at times found impediments to their implementation of Agile methodologies.

“Thanks to the mentoring sessions offered, the company was able to pinpoint aspects to work on and to implement measures to improve these areas, which are in place until today”



IMPACT

Galicia, Spain

GAIN Pilot

The GAIN Design Pilot aimed to support 25 Galician SMEs to develop new innovative products and services through user-centred design tools. The objective was to build design capacity within benefitting businesses, so that they can discover user needs and demands and adapt their product or service offering on their own or with a help of a designer.

The pilot was divided into two modules: one for SMEs interested in service design and the other for product design-oriented companies. Two professional designers, expert in each discipline of design, were commissioned to delivered to programme. 13 companies attended the service design strand to identify new business opportunities, and 12 companies focused their intervention on a development or improvement of a product.

Before starting the process, GAIN gathered their project stakeholders and they actively participated in determining what would be the criteria to recruit SMEs to participate in the pilot. With the stakeholders' help, the initial questionnaire was designed. Once this questionnaire was completed by companies interested in the programme, we were able to determine their initial commitment to the action pilot targets.

Between October 2019 and June 2020, each SME received individual support from design experts. The support involved on average of three working meetings focusing on business challenges or ideas in a form of a design sprint or immersive workshop in the design process.

As a result of the series of meetings, each participant received personalized design recommendations report and advisory about public funds available to implement the ideas.

Most of the companies (88%) participating in the GAIN Design Pilot confirmed their intention to apply recommendations and lessons obtained during this pilot. However, the pandemic situation had impacted the delivery of the pilot and its results. The shift to digital delivery eventually worked out, but many businesses were forced to change their plans due to the sanitary restrictions. Businesses related to online training services, online sales, and food distribution had benefitted greatly from additional support to improve their offer, but the same case was different for companies in sectors such as tourism, hospitality and organization of events. Nevertheless, we were pleased to see that some affected in their business were able to reinvent themselves to survive thanks to design advice.



IMPACT

The Galician Design Pilot worked with 25 businesses and achieved:

Increased knowledge about user research and user engagement tools and processes;

Improved internal capacities to work on company's challenges;

Half of businesses declared the will to create new design-related roles.

Business Culture & Design leadership

At the outset of the GAIN Design Pilot, only 4 of the 25 participating companies acknowledged no experience in the use of design. Most of them used design processes before with more or less success. Intriguingly, at the start 10 SMEs declared their conviction that design was part of their strategy (Design Ladder level 4), but later on and after their pilot participation, only 1 kept that opinion. After participating in the pilot, the diagnosis became more realistic and most of them admit their position between levels 2 (form-giving & styling – 12 companies) and 3 (development process – 10 companies) on the Design Ladder.

Having said that, 76% of participating businesses declared improvement in their knowledge of their clients/users, with 41% were helped by the designers to be user-centred and 35% introducing new tools and processes to better capture user needs. Majority of participating businesses saw improvement in internal capacities and processes to work better as team on company's challenges.

Also at two points of the pilot, companies were asked about design contribution to business aspects differentiation, brand image, product/service development, sales, exports and sustainability. Most of companies agreed both before and after intervention that design helps to develop new and better solutions and sell more products/services. There was a slight

increase in the perception of design as a tool to improve the brand image and increase the end-user satisfaction. Interestingly, after the pilot there was a drop in answers about design's positive impact on exports and sustainability.

Business Performance

The Galician pilot was delivered from October 2019 to June 2020, when business activity was strongly dropped under the pandemic extraordinary circumstances. Many businesses couldn't continue the implementation of their design recommendations. Nevertheless, still 30% of the companies participating in the Service Design Group acknowledge that they were helped to launch a new or improve an existing service. That is in a contrast with the Product Design Group, where only 14.3% declared that they were helped to define a new product or to make improvement.

After participating in the pilot, 71% of the companies in the Services Design Group declared their will to introduce new staff roles to the implementation of new or improved design processes. Companies participating in the Product Design Group keep a more conservative attitude, although it is worth noting that almost 30% were analysing the possibility of hiring external designers.

Support Experience

There is an evident difference between satisfaction level (what is linked the perception of the impact of the intervention) between the Service and Product Design cohorts. This might come down to personal traits of the expert advisors and their communication skills were mentioned in a positive and negative context. While 30% of Service Design Group was satisfied and 70% very satisfied with the advice they received, in Product Design Group 40% found it acceptable and 60% satisfactory. All businesses from Service Design Group would like further collaboration with their expert, and in Product Design Group only 70%. The same trend is reflected when asked about expectations, service designer met (60%) or exceeded (40%) businesses' expectations, while the product designer partially met (55%) or did not met the expectations (28%). Low valuation of the product design expert was highly influenced by the delays in project progress and remote delivery caused by the pandemic.

Impact on the project partner delivering the pilot

Several learnings were made from our pilot design experience, mainly related to our idea of working only with two expert designers instead of doing it with a portfolio of experts and giving companies a chance to select one to work with. We also learnt the value of making a general introduction to design methodology and tools at the first meeting with all businesses to explain the process. It might be useful to include also other methodologies such as Agile or Lean.

What worked well was the advice on the funds available to progress the projects. All the participants in design mentoring actions should be instructed about public support design grants, giving them options to follow their design projects.

On the other hand we realized, that some sort of skills and capacity building is also needed for design sector. As creative business, they often see themselves as innovative and user-focused from the definition, while in reality they rarely take the point of view of their clients in their services.

SME Story – Centum Digital

<https://centum.com/>

Centum Digital is a company specialised in developing telecommunication engineering products and services, mainly solutions in the field of digitalization, automation, artificial intelligence and signal control.

By participating in the User Factor- GAIN Design Pilot, the company was aiming to implement improvements into their own product design. The product in focus was Lifeseeker – an onboard aircraft system, that allows geolocation of missing people by detecting their mobile phones.

The main challenge that the company faced was access to new markets. Design actions were oriented to determine the characteristics and specific requirements of each potential sector, but also to be able to understand the needs of the different types of buyer-users in each sector.

As part of the designer's advisory process, a report with findings and recommendations was drawn up and shared with the internal design team. The designer's idea was to facilitate the discovery of specific sector needs quickly, concisely, and effectively. In this way, internal design teams can collect ideas and suggestions leading to the definition of improvement proposals. A new range of products with a clear focus on specific markets' needs was proposed and developed during the pilot intervention. The main effort was focused on the realization of a "mini" version of Lifeseeker to be placed in drones.

From the beginning, the product image has been worked to show robustness and technical excellence. The brand was incorporated in a prominent way. Product dimensions were balanced to reduce costs and to be able to open the market doors more easily.

Lifeseeker has managed to be integrated into the Cellular Airborne Sensor Search and Rescue of the Royal Canadian Air Force. It has been chosen as a success story in the field of locating people in emergencies by unmanned aerial vehicle during the UNVEX drone fair (2021)



IMPACT

Northern Ireland, UK

Business Growth Skills: X-Factor in Business

The pilot programme, which underwent several iterations to engage twenty-five SME's, culminated in a Business Growth Skills workshop, which sought to raise awareness of service design and to inspire SMEs to engage with design as a tool of innovation. Given the lack of design culture in the region and the SME focus on product in NI, it was clear that in order for businesses to adopt design practices, they would have to see the value in design for themselves in the first instance. This would mean changing the traditional business mindset. The ADKAR model for change identifies five building blocks – raising awareness, building desire, sharing knowledge, action and reinforcement. The first three were the goals of the initial pilot. It was hoped that SMEs having seen the importance of design themselves and having access to tools, a shift in mindset towards exploring design in business to innovate, would occur. That it would spur the fourth step— action.

The difficulties in recruiting 25 SMEs to the pilot resulted in various iterations. The first iteration offered an immersive two-day walk through of the design process, Across the two days, SMEs were given the opportunity to explore personas, journey map, business model canvas, empathy map, prototyping. The workshop was delivered by an external consultant who had proven experience in supporting SMEs to use design. Feedback from the first iteration highlighted that SME's prioritise daily operations over training or strategizing. Time was a major factor in low uptake. Therefore, the second

iteration offered a more condensed version of the pilot. Understanding customer problems and developing solutions to make service design relatable was a key goal. These were delivered by February 2020 just before the onset of COVID19, which meant SMEs struggled to take their learning forward as surviving the pandemic and ensuring safety to staff and customers became paramount.

The degree of impact likely from such interventions at that point became a concern. This was offset by offering an intensive design intervention to two of the twenty-five companies. It was hoped that working closely with two SMEs exploring a design challenge, and creating two vibrant case studies as a result, these case studies could tangibly illustrate the value of design in business to SME's who had participated in the programme and beyond. Supporting SMEs to see the value of design for their business is crucial because until SMEs see the value of it, it will be an uphill struggle for SMEs to embed design in their daily operations.

IMPACT

Throughout the iterations of the pilot programme in Northern Ireland, 25 businesses were supported in various ways and achieved:

Increased focus on the customer experience and feedback;

Business mindsets shift and embedded tools and processes to think strategically about customers;

Two in-depth user-centric business transformations.

Business Culture and Design Leadership

Whilst there are some great positive indicators overall, SMEs at different stages of the SME lifeline have responded differently. Start-ups have indicated more receptivity than established SMEs. This subset (early-adopters) has got it, see the value of it. A small few had begun to think about their business from the customer perspective and looked at empathy maps and customer journeys, but this has been COVID interrupted. This said, there are SMEs who think they are already using design (pseudo-adopters), but in fact they are not. A third group, the design DNA group do have design in their formal educational background and do see it as a vital part of operations, and do speak about customers in a way that indicates less of a gap between service provider and customer. Whilst there is a fourth group who are simply overloaded and struggle to have the time to focus on anything beyond operations. Working with the two SMEs more closely through the case studies has illuminated the 'hostility' SMEs express when pulled away from operations. COVID 19, however, has been an accelerator to SMEs honing in more on customers, and the significant changes highlighted should not be under-estimated as they do indicate a shift in mindset, however, there is concern as to how SMEs will navigate forward. 47% say they plan to use the tools once normality resumes, but primarily the design DNA group have active plans as to how they will do that. And there is something to be noted about SME culture which

is reactionary versus strategic, leaving little energy to implement changes that require time. It suggests embedding design into operations is a vital step forward.

Business Performance

It has been impossible to draw the link between the design intervention and business performance as the majority of training took place in February 2020 with the onset of COVID-19 and the first lockdown in the UK by March. The focus on safety and survival has been the overall experience of the majority of the SMEs. Many report a fall in business and profit with COVID-19, some have lost entire markets, but haven't looked to design as a way to support them during this time. However, there are small but significant changes evident going forward, such as: an increased focus on the customer experience and feedback, a sense of needing to adapt their businesses and the intention to use tools going forward. These are subtle steps towards a design mindset. It will take time for SMEs to adapt to new practices and embed them to their fullest potential to achieve economic impact, but it is this shift in thinking that will result in growth and revenue over time.

Support Experience

People reported the support being helpful overall. The majority had no knowledge of design / service design before training. Post-pilot many indicated the training made them think differently about customers, or that it helped provide a framework going forward to put customers first. A large percentage, approximately 50% said they would have given it more thought if not for COVID. However, working with the two SME case studies closely has been most telling. It has revealed how much SMEs struggle to respond to anything beyond the daily operations. Low SME capacity limits what is feasible, even with support, which points back to the need to embed design as a vital part of operations. From the experience of the case studies, this would have to be a gradual change rather than a quick fix.

Impact on the project partner delivering the pilot

SMEs prioritise daily operations over strategizing, this means for design to have a place in the day-to-day activities, it must be embedded into their daily operations. Simple methodologies that respond to where SMEs are at that help them start to include design as routinised activities should be a key goal.

The final learning of the User Factor legacy is the importance of capturing design stories in a living, vibrant way as the case studies have aimed to do, and which the capitalisation plan will disseminate. It is hoped that they will inspire other SMEs to seek more active feedback, to engage with their customer and to start thinking about how service design and design can support them in innovating their businesses. Crucially, that it will help them navigate the experience economy. To date, the lack of great examples in the community means there is nothing to emulate. The learning of the User Factor years has been invaluable in understanding the path taken and the road ahead for SMEs navigating the economy.

SME Story – Kitchen Design House

<https://kitchendesignhouse.com/>

Kitchen Design House (KDH) is a family-owned manufacturer and retailer of fitted kitchens and bedrooms. Their main challenge coming to the pilot programme was to increase their customer traffic despite the fact that their service is a once in a lifetime service.

Using the double diamond and design thinking process with KDH, we engaged in the discovery / define and develop / deliver phases.

In the discovery / define phase, we engaged in secondary research and gathered insights relating to the industry from macro global trends to national trends, whilst we looked at big influencers in the industry. Simultaneously, we engaged in primary research; we developed a question set and piloted it prior to conducting 10 interviews with customers who had recently had a kitchen remodelled or were in the process of doing so. From the research, we were able to identify high level insights. Drilling down into these insights we identified a divide in customers approach between those for whom it was a logical / emotional experience, which impacts the delivery end. Trust and control were important but meant different things to different customers. The insights allowed us to identify four customer types across an emotional / logical axis who have very different needs along the customer journey. We were then able to identify key metrics that articulate the different needs of the customer types at different points along the customer journey. From there, we were then able to map and compare the different customer types experience along the customer journey.

Customer insights revealed that the experience across the journey is paramount. Seamless journeys means that customers rave about their experience, and effectively become 'lifetime customers', in other words they become ambassadors of the service. Creating seamless journeys would ensure an increase in customers. Understanding the different customer types isn't enough. Research also revealed that the journey is also impacted by the various players involved in the process. There is a significant variance regarding the different cultures across the individual players e.g. builders, lighting designers, etc. This means without addressing the culture and finding

ways to unify it, it is challenging to create seamless customer experiences. The service design process took us down the route of exploring how we might build customer empathy across the service ecosystem to develop a customer centric culture.

Attracting contractors who aspire to customer centric values by communicating this upfront on the KDH website to contractors, and also writing these values into 'terms of services' whilst creating customer check-in points along the contractor journey per customer type. Seamless journeys & happy customers (in services that require emotional financial investment) = customers that become lifetime KDH ambassadors.



IMPACT

Scotland, UK

Improvement of the By Design grant scheme

Through the User Factor project, an evaluation of Scottish Enterprise's (SE) By Design programme was undertaken in 2019, which produced a list of recommendations to improve support for businesses. As a result of this evaluation, SE implemented several changes to the grant to improve the customer experience.

One of the main recommendations from the research was to create resources that would support businesses who were undertaking or considering starting a design project for the first time. We worked with a design company and a small group of SMEs to produce three guides to support businesses in the following areas:

Preparing for a design project

Selecting a designer to work with

Managing a design project

In addition, we have developed a 'self-serve' online innovation diagnostic tool to support early-stage businesses who are new to these practices, or who need to undertake some additional work and planning before undertaking a design or innovation project diagnostic tool to ensure they are in a better position to invest in a design.

The focus for Scottish Enterprise while developing these resources was to simplify the language around design and make them easy to understand for SMEs with little experience of undertaking a design project.

We also worked with our internal Innovation team to ensure the specialists who provide business support to SME's were trained in design thinking. This meant that they could introduce businesses to design thinking methodology and help manage the expectations of the businesses before they progressed to the grant. We also shared a summary of these findings with all 200 Business Gateway advisors, based across all regions in Scotland, to raise awareness of the impact of design on the businesses they were working with.

Apart from first-hand experience of the impact of COVID-19 on businesses, we have also encountered a few common issues related to support programme delivery. The most common one has been where the design supplier can no longer deliver, and the company need to source a new supplier. We have helped the company find a new supplier, secure a quote and ensure that those costs are within the approved grant amount and ensure that the supplier can deliver to the timescales specified by the business. Project end dates for completion have also slipped due to several issues. We have been able to offer automatic extensions for projects and work with companies to understand their issues and see if there is anything we can do to help ensure the project is completed.

IMPACT

Following these changes, through User-Factor we supported 46 SMEs to undertake a design project and a further 19 have taken part in design thinking workshops.

Those supported during 2020-2021, mainly (41) set out to use the support for prototype design and development with some using part funding for market research and brand development.

To date, 35 companies have completed their design projects, with 3 still underway. Unfortunately, due to the impact of Covid-19, 8 projects were lost with the company withdrawing from the grant.

The delivery of this support was refined through engagement with our existing customers, which endorsed the value of implementing design thinking practices. In 2019, PDR at Cardiff Metropolitan University conducted an evaluation of the experience and impact of the By Design grant on 400 participating companies as part of the User Factor project funded by Atlantic Area. When the remaining 3 companies complete their projects, we will undertake an evaluation of the improved programme.

From the wider evaluation (see 'By Design Grant Evaluation'), we know that as a result of by Design support:

64% of companies launched a new product or service.

63% of companies expect to make over £100k over 3 years.

68% of companies collaborated further with a design agency.

71% increased their investment in design.

Design Thinking workshops involved a group of 19 early-stage businesses in Dumfries and Galloway and Ayrshire in 3 online design thinking workshops. The workshops involved breakout rooms where each business was introduced to design thinking practice. Each participant was given a taster session using a set of design tools

on Miro boards to find their target market and define and test the commercial viability of their USP. We have received overwhelmingly positive feedback from our customers:

“I thought the workshop was excellent and a great way to think about the business and what you’re doing it for i.e., what your customers need and expect.”

“I knew at the start it was going to be exciting, and it was. Really enjoyed going through the methodology and having more time to reflect on the process as well as my business proposition.”

Impact on the project partner delivering the pilot

The User-Factor project has enabled the Innovation team at Scottish Enterprise to explore the impact of our 'By Design' grant support mechanism to drive Scottish SME design projects.

PDR undertook an in-depth customer evaluation on our behalf between December 2018 and April 2019 through use of surveys and interviews. This research targeted 400 SME's who had received support during 2017-2019. The feedback has been collated and has been used to help design and develop a new approach to delivering business support in line with Scottish Enterprise's new strategic framework. We continue to develop our bank of resources to support the business to develop these areas and again, can share this with all partners if they are interested.

There was some feedback from the evaluation about SE's processes from application to claim stage. This feedback has been important in helping shape a new digital approach to funding for SE. We are currently developing a new process which will start with online customer portals and from here customers will be able to track their grants from beginning to end and claim online.

In 2020 SE undertook a review of all their grants and support for businesses and simplified the offering to customers. Although SE do not specifically offer the by design grant anymore, we do offer an Enabling Fund which is able to support businesses to undertake design projects. Through the new approach for businesses there is more wrap around advisor support available to help companies develop and implement bigger and more successful projects in line with SE's core values.

SME Story – Design Exhibition Scotland

<https://www.designexhibitionsotland.co.uk/>

Design Exhibition Scotland is a pioneering project championing contemporary design excellence, exploration & innovation. This project had a design focus and the By Design grant was used to support the research, design and development of the new drinking fountain minimal viable product.

Once a common sight across Britain, drinking fountains were a generous and civic celebration of free and clean drinking water. The project ambition was to develop a drinking fountain fit for the 21st century which will in part be inspired by the Victorian fountains designed and manufactured by Walter Macfarlane & Co in Glasgow at their Scarcen Foundry in Possilpark in Glasgow. Responding to the growing concern about our dependency on single-use plastics, the drinking fountain aims to change habits and introduce people to clean and fresh mains water that is not 'packed in plastic'. The research and design process considered the 'temporary' drinking fountain, that could be suitable for festivals and events. The organisation collaborated with Mirri Ltd and Neptune Fabrications.

Design Exhibition Scotland are now developing Dixon (their MVP (Minimal Viable Product)) and exploring ways to start production and create an outstanding range of fountains. They have developed an additional 3 unique fountains.

It is estimated that the project will create 4 new jobs in Scotland with potential sales of £500,000 over a 3-year period.

'The real joy for us was having the freedom of time to properly explore and interrogate the subject and its development until we have reached a point we are really satisfied with and an object we are really proud of. We really hope that it can be adopted by councils, institutions, festivals, clubs and individuals alike and really help make a significant impact on reducing further plastic waste,' Simon Harlow of Mirri

SME Story – Rigrun

<https://www.rigrun.co.uk/>

Rigrun is a bespoke Health & Fitness digital monitoring tool, designed specifically for employees working on offshore-oil and gas production & drilling units. Rigrun is currently operated by a software/hardware solution installed in the gym of offshore worksites. This includes a touchscreen tablet, casing unit and specialist software that can still capture data when the internet is down. To serve a much larger international customer base and improve the service we offer clients the company wished to develop a smartphone app that would work in conjunction with their existing technology.

The proposed project covered activity relating to the design and development of the RigRun App. The company also promotes annual running digital competitions to motivate participants to improve their fitness whilst working offshore.

It is anticipated that this project will result in sales of £380,000 over a 3-year period and the creation of 9 jobs.

Customer feedback:

'The touchscreen tablet devices are a definite improvement on traditional health promotion methods. It is easy to use and easy to install in the gym as well.'

'... I would like to say this has been great for me personally. It got me off my backside to do something that I used to do in my youth ... Over the RigRun® event I have found my fitness has improved and I intend to continue this after it comes to an end.'



IMPACT

Brittany, France

User-Factor : when design drives innovation (User-Factor: Facilitateur de création de valeur par le design)

In Brittany, CCI Bretagne's design pilot programme aimed to

Position User-Factor as a means to promote, disseminate and share a culture of user-centric design within the Breton businesses community

Strengthen skills of designers and within companies

Experiment with value through design to improve innovation capabilities,

Facilitate business relationships between designers and SMEs.

The offer of the pilot programme was developed collaboratively with stakeholders in the region, as well as on a broader national scale. As a result, a tailored service offer was created to respond to the needs of each SME willing to discover, understand, practice and apply the design approach. The pilot was divided in four modules:

Inform

A community: organization of executive meetings to improve practices through experience sharing and to encourage the transition to innovation through design [discovering user-centred innovation and design],

Experiment

Design Workshops: Participation in practical workshops (1/2 day) and/or an experimentation workshop (1 day) in an inter-company format to discover user-centred innovation and provide methodology on the phases of a design approach [learning to master the different phases of the design approach],

Implement

Individual design support: Implementation of tailored support to develop and consolidate an innovation through design project in order to guide the company towards the optimal solution and facilitate connection with a designer. This step includes workshops with the company's project team [designing products and/or services by putting the user at the heart of strategy],

Perform

A follow-up and evaluation of the company's projects thanks to the Design Trophies [Being autonomous and piloting a design strategy]. We relied on a place of reference and experimentation to raise awareness and stimulate and unite SMEs & Designers around user-centred innovation: Design Lab Bretagne managed by APCI, an association for the promotion of design, and hosted in the premises of eclozr, a place for innovation through digital and design.

From June 2019 to September 2021, we implemented the pilot by organizing 15 events & workshops and directly supporting 10 SMEs. Due to the Covid-19 pandemic, the implementation of the pilot was strongly slowed down between March and December 2020.

Support was delivered both internally by CCI Bretagne staff and externally by designers. For events & workshops, we collaborated with designers. We developed an experimentation workshop with the Bretagne Développement Innovation's designer (one of our stakeholders): Lab Cookies. All individual support we provided to 10 SMEs was delivered by CCI Bretagne staff.

Due to the Covid-19 pandemic and human resources' change in BDI, we decided to work with Super Super, a design agency, to create a new workshop delivered in February and September 2021. In total, 17 SMEs from targeted sectors and 1 public organization took part in these workshops. The Covid-19 pandemic also coerced strong movements and operative changes in our pilot. The implementation was suddenly stopped in March 2020. Thanks to digital tools such as Beekast & Teams, we were able to continue individual support with some companies. However, most of them had other priorities during this uncertain period. And, even though video calling was quickly introduced, it did not allow personal contact which is essential in design. Furthermore, we faced a real and growing interest for our design pilot in Brittany. Unfortunately, we lacked human resources and time on the project to respond to all requests.

IMPACT

Of the 28 organisations supported in total, 18 took part in our workshops (1 day) and 10 benefited from individual support (3 to 5 days). We organized or co-organized 13 events. Each event was organized with a stakeholder and involved local designers. In total, 339 people attended to our events.

A feedback survey sent out to 10 individually supported SMEs revealed the impact of our intervention:

An increase in strategic understanding of design;

Continued investment in design in 90% of businesses;

Product/service improvements in all supported companies;

New design-related roles in all supported businesses;

Mobilisation of the entire regional ecosystem.

Before participating in the design pilot, 55% of companies enrolled had never worked with a designer. Some of them (11%) used design only as a style. The designer was enrolled at the end of the product / service conception for packaging or communication support (graphic design). Only one company employed its own designer, but, in this case, we faced another issue: most of the company staff did not understand what the role and mission of their designer was as they were in the marketing team (it created a confusion on differences between marketing and design).

We asked companies to evaluate their perception of design before and after User-Factor intervention. Firstly, it is interesting to note that 67% of companies said, before received User-Factor design pilot, that design is for better understanding user needs (78% after the pilot). It means that even if they had never worked with a designer, they were familiar with design objectives and business impacts. A pilot like User-Factor was a good opportunity to take the plunge into user-centred innovation without too much risk.

Furthermore, it stands out that at the end of the design pilot, 67% said that design is for innovation and competitiveness (22% before) and 44% said that design is for strategic decision making (0% before). It means that there is a majority perception of the design closer to levels 3 and 4 of the Design Ladder.

Additionally, 90% of the survey responses indicate that companies continued to use methodologies and tools into how they operate.

The most important impact is that all companies supported have opened new job opportunities based on design approaches (to recruit staff or designers from agencies).

“Now, we will focus more on our customers or end users before developing a product”

Business Performance

In terms of products and services, all businesses supported introduced changes in their organisation after receiving support.

However, even after the pilot, 67% of SMEs declared that design contributes to a limited extent to improving productivity. Only one participant, who had been a designer within their company for several years, said that design impacts productivity to a large extent. 55% of respondents said that design contributes in to limited extent to increasing turnover.

On the other hand, 78% said that design improved customer relationships and enhanced competitiveness to a large extent.

Support Experience

Finally, evaluation results regarding support experience indicate that 90% of respondents are very satisfied of the experience of collaboration with CCI Bretagne staff who delivered the design pilot

77% of respondents found the design pilot useful or very useful to their company. Companies for whom design support has been less useful said that this is due to pandemic restrictions that stopped the project and the individual support provided by CCI Bretagne. Given the long periods of lockdown, the time schedule was modified several times. Indeed, this slowed down the stages of the support plan hugely for many of the companies supported.

There were not many suggestions for programme improvement, other than further support with project implementation, integrated a product designer in the

Impact on the project partner delivering the pilot

The impact of User-Factor pilot in Brittany has exceeded our expectations. Its implementation has yielded a structuring impact for the design ecosystem. Moreover, it was very helpful to reach a large number of stakeholders, which has given us more visibility among SMEs & designers. It's also improving CCI Bretagne's capabilities in design and positioned us as a key player on the topic.

One of the leveraging effects to improve appropriation of design by SMEs is to bring together and facilitate a "design cluster" in our region. It is necessary to work with the whole design ecosystem (supply & demand).

In terms of capitalization, CCI Bretagne will continue to position itself as a key player to unite and facilitate a community of designers. This action which seems necessary should be subject to an agreement with Brittany Regional Council in 2022 (It was already the case in 2021).

"Design provides tools and methodologies to change posture through collective intelligence exercises, enhances collaborative work inside and outside the company, enables better customer engagement & improves their experience"

"The value of design lies in the value of people"

SME Story – MéGo

<https://me-go.fr/>

MéGO! is a French SME that sorts and recycles cigarette butts (used filters). It collects cigarette butts from companies and communities in order to recycle them. MéGO! provides a complete and unique B2B solution to companies, associations and communities. Its role is to help you set up a dynamic cigarette butt collection system.

To succeed, MéGo! install street furniture (ashtrays, containers), posters, and roll up and ensure the collection, recycling, statistical monitoring and carbon footprint of operations. The goal is to set up a unified approach to reduce the carbon impact, raise awareness of the environmental challenge.

In anticipation of the 2025 circular economy law in France which will require that 100% of plastic waste is recycled, the company wanted to think about the development of street furniture product line made from the recycling of cigarette butts and plastic waste.

They wanted support to develop this new street furniture product line. But, beyond the object, they wanted to create value by selling a custom service. So, they needed to reinvent the customer experience.

With that in mind, we provided our support into 5 stages:

- Workshop “Understanding the environment: benchmarking & stakeholder identification” / Trend book on street furniture and plastic waste recovery;
- Workshop “Understanding customers & their needs”;
- Workshop “Define differentiation, leverage of the offer”;
- Workshop “Imagine the best solution” (Ideation workshop);

Design brief.

After writing of the design brief, we found a new innovation support called “BreizhFab” in which the work with a designer could be granted. Following our recommendations, MéGo chose to work with Leano Design, an industrial design agency based in Brittany .

The two main design learnings mentioned by the CEO, Bastien Lucas, are:

- the importance of working in network with stakeholders;
- the importance of involving team members to stimulate creativity and to provide innovative solutions.

In order to complete the design process, the city council of Landerneau (Finistère – Brittany) has agreed to work on a large-scale experiment.



IMPACT

Ireland

Thinking Ahead Through Design

Thinking Ahead Through Design was a pilot programme aimed at raising awareness of design thinking as a tool of design driven innovation in micro, small and medium enterprises and to build capability in this area.

Enterprise Ireland partnered with the Industry Research and Development Group (IRDG) to design and deliver the programme to 25 MSMEs. This partnership followed a lot of engagement with internal and external stakeholders to garner views on the topic and the most appropriate delivery methods. All participants were client companies of Enterprise Ireland or one of the Local Enterprise Offices (which are funded by Enterprise Ireland).

The programme was built around the ARRIVE (Audit, Research, Reframe, Ideate, Validate, Execute) model which was developed by Frank Devitt, Martin Ryan and Trevor Vaughn, all of whom were involved in the programme delivery, and was structured as follows:

Preliminary meeting of project team and recruitment of participant companies by Enterprise Ireland.

Online diagnostic of participating companies to capture baseline data.

Three regional launch events to onboard participant companies; review of companies' initial scoping document to identify key areas for intervention.

In-company mentoring (three half-days) including: experiencing the principles of design thinking; applying the principles to in-house challenge, with mentoring;

transferring learnings for future projects.

Final event for participating companies.

Outcome evaluation.

The programme was launched in a face-to-face format in February 2020 and was then transferred online due to Covid-19 restrictions placed on in-person meetings.

Despite Covid related challenges the feedback received from participants was very positive with the majority believing that on completion of the programme they had a greater understanding of how design thinking can deliver value to their business and were confident they could apply more of design thinking approaches in their business.

This is very useful feedback to encourage future Enterprise Ireland programmes to embed design thinking processes and practices in our client companies.

IMPACT

Initially 25 companies were recruited onto the programme. These companies comprised of micro, small and medium enterprise. They were from a number of different sectors and various locations around Ireland.

With some drop-offs and replacements the final number of companies to fully complete the programme was 17. These 17 attended launches and had a minimum of 3 one-to-one sessions with a design practitioner while some of the 25 attended a launch and had 1 – 2 one-to-one session.

The impact evaluation found that;

- An increase in understanding of design as business innovation mindset;
- Improved understanding of user engagement in business development process;
- Increased business capability and confidence in applying design thinking in business.

Business Culture & Design leadership

Prior to attending the Thinking Ahead Through Design Programme many companies did not have a clear understanding of what design thinking was and how it could positively impact their business. On completion of the programme, evaluation clearly showed that many companies could now see and understand design thinking as an agent of a growth mindset in individuals and in the business. Using the ARRIVE process as a framework within which to practise this mindset and enhance innovation outcomes gave a clear direction and measurable outcomes

Participants learned that design thinking is not just a collection of diverse methods or exercises but is more an integrated philosophy of innovation. Participants have also learned how a deep knowledge of user needs and desired outcomes always leads to improved innovation

outcomes. Exercises here included Interviewing, Ethnographic observation, Empathy Mapping, Journey Mapping, Qualitative Data Synthesis.

Business Performance

It was clear from the outset that participating companies were all looking for a strategic framework with which to influence change, find new directions and bring the team along with them. Some were more strategic and were willing and able to consider longer term developmental horizons. However, most were looking for shorter term effects on business. A significant number of the latter conceded they effectively had no time or resource to implement non-urgent changes as they continued to battle against economic downturns brought about by Covid-19.

Support Experience

Despite challenges with having to move the programme online rather than the original intended format, the majority of participants expressed satisfaction in the support they received.

Despite these challenges the majority of participants agreed that the programme had contributed to their business capability. While all participants felt confident, albeit to varying degrees that they could apply design thinking approaches to their business.

Impact on the project partner delivering the pilot

The programme reinforced what we already knew from data available – that many Irish MSMEs are not aware of design thinking and it's benefits to the business.

Through the programme we have helped increase that awareness, even in a small way, which will help build on future projects. The majority of participants stated that they were interested in continuing on their learning journey with design thinking.

Within Enterprise Ireland, the importance of Design Thinking is being more widely recognised. We have now embedded specific design thinking models on some of our long-term strategic change programmes such as Innovation 4 Growth and Go Global. We are also looking at other ways to bring design thinking to a wider audience of our client companies and hope to roll out a plan in 2022.



LESSONS LEARNT

WHAT'S NEXT FOR DESIGN IN SMES?

Through User-Factor pilot programmes, project partners supported 246 micro, small and medium companies across the Atlantic Area region. Programmes predominantly offered design training, mentoring and tailored advice services, but there were pilots that also offered direct design intervention or were focused on improvement of an existing design support programme.

Our main goal was to find out what are the specific requirements of SMEs when it comes to user-centred design and design-driven innovation, what works well in such support provision and what are the main challenges that need addressing.

The outbreak of the global pandemic of COVID-19 virus disrupted delivery of the pilots in all partner regions. First, the uncertainty of the situation made businesses very cautious. Many SMEs switched to a survival mode and were hesitant to take up new project, make investments and introduce any innovations. Therefore, the projects were delayed or in some cases abandoned. Secondly, the shift to remote and digital support delivery did not come without some teething problems. Creative, tactile and interactive ways of design benefit from face-to-face collaboration; some aspects of design process like parts of in situ user research or prototyping needed to be put on hold in time of movement restrictions and social distancing. On the other hand, we were glad to

see businesses also using the design pilots as an opportunity to re-invent their offer and adapt in the difficult times. Design, especially for user-centred, circular and digital transformation will be key driver of innovation in the post-pandemic drive to a more humane, green and beautiful Europe as outlined by Ursula von der Leyen, the President of the European Commission.

Although the pandemic was a black swan type of event for our project and pilot testing, it taught us a lot about the need to invest in user(SME)-centred digitalisation of innovation support programmes. The digital shift accelerated rapidly and support provision need to step up the game and offer their services in a clear, intuitive and understandable way, fully online from the stage of looking for support, applying for it, receiving it and reporting on it.

The biggest challenge beyond the pandemic was the low awareness of design and what it can offer to business. In the majority of partner regions, the understanding of design among small businesses was limited to a function of aesthetics and style and as such many firms struggled to see the need for investment in design. The lack of a design culture means that design feels 'new' instead of a tried and tested way to navigate customer tastes. This caused problems with recruitment for programmes and suggests that more design awareness-raising and pro-

motion need to be undertaken and that design support programmes should be accompanied by information campaigns. A good way of increasing design awareness is making the business experience it first-hand. SMEs understand customer feedback. They may not fully appreciate how crucial it can be to help navigate service development, but SMEs start to really see the customers when they access living insights. When SMEs have the opportunity to see their service from the customer perspective in a living way, the 'a-ha moment' follows, but 'really' seeing the customer first may be a more likely goal towards closing the gap between the customer and SME. This creates a place for design, and a tangible one that is within reach.

SMEs also tend to be time poor, they to give very little to strategic visioning and prioritize daily operations. One of the project partners described working with small businesses as 'a tug-of-war between the next job they had to do, email they had to write, versus giving time to think about customer improvements or design, that often felt even hostile'. When a firm does not see the relevance and value of design to their business, design intervention can be treated like an extra rather than a key part of operations. Until SME sees the value of design for themselves, and the value of experience for the customer, and until they understand design as a route to navigate changing consumer tastes and preferences, they will not give enough time to it.

Time, but also trusting what change or innovation is regarded as important and what innovation providers are worth to engage with. Liaising with key familiar business gatekeepers / ambassadors in the community of SMEs can help to offset these challenges. The gatekeepers such as sectorial associations or business networks can give valuable insight into support that is needed, and can endorse and promote the programmes to their members.

Relatedly, the commercialisation of design thinking is widely reported upon and refers to the sale of service design tools, such as customer journey and empathy maps, however, these tools in themselves are not enough to address the complexity of a design intervention. This means that SMEs can end up feeling that design is 'gimmicky'. It is important to explain the design methodology and process, setting out the expectations and making

sure design is not presented as a quick and magical fix.

On the design service supply side, it was observed that the design sector need support as well. Design field is constantly developing and needs innovation itself. Creative requirements and can easily become very bureaucratic. Numerous rules for granting support and complex procedures for obtaining it and reporting on it, make the support offer impenetrable and may discourage entrepreneurs from applying in the first place. Design offers a method to learn about the real support needs of businesses and to develop an offer that respond to those needs in the most effective way. Many partner organisation that have not previously had experience of design, increased their internal capabilities and declared adoption of design methodology in their operations.

USER FACTOR PILOTS

	Type of intervention	Design services offered	Number of supported companies	Challenges	Main impact on SMEs	Main lessons learnt
PDR	Tailored advice and design service	User research, UX design, design audit, service design, design thinking training	11	<ol style="list-style-type: none"> 1. Low awareness/ misunderstanding of design and its benefits - as a result many firms did not see it relevant to their business making recruitment difficult 2. Pandemic – firms were apprehensive about starting new projects and making investments in uncertainty of the pandemic 	<ol style="list-style-type: none"> 1. Improved understanding of design 2. Improved understanding of users 3. Increased turnover, improved brand image 	<ol style="list-style-type: none"> 1. Design and its benefits need to be explained and promoted in a way that is relevant to SMEs 2. SMEs value setting expectations at the start, clearly explaining support process, as well as fast delivery 3. SMEs want support in implementation of design advice 4. Upcoming support needs: digital design, ecodesign, service design, UCD 5. Business support organisations need to adopt their services to specific needs of SMEs
Innovalia	Training and individual mentoring	Design thinking, user-centred design	33	<ol style="list-style-type: none"> 1. Low awareness/ misunderstanding of design and its benefits – a lot of promotion to encourage firms to apply 2. Geography – pilot needed to be delivered across Canary Islands 3. Pandemic – switching to remote delivery 	<ol style="list-style-type: none"> 1. Improved understanding of design 2. Increased competitiveness 3. New markets opened for 56% 	<ol style="list-style-type: none"> 1. To ensure take-up of design support promotional activities are needed to communicate design benefits to SMEs. 2. The whole process of business support provision need to be digitised 3. Project helped the team to also adopt UCD approach; get to know business support needs and change the way that Innovalia's services are developed and delivered



	Type of intervention	Design services offered	Number of supported companies	Challenges	Main impact on SMEs	Main lessons learnt
SPI/PDF	Training and individual mentoring and advice	Design thinking, Agile development, lean manufacturing	34	<ol style="list-style-type: none"> 1. Low awareness/ unfamiliarity of design and its advantages 2. Pandemic – digital delivery difficult for supporting product design and prototyping projects 	<ol style="list-style-type: none"> 1. Increased awareness and understanding of design 2. Improved understanding of users 3. Improved internal processes and business management 	<ol style="list-style-type: none"> 1. Need to disseminate the value of design and engage with regional authorities for continuous design innovation support. 2. Benefits and constraints of digital delivery of business support. 3. SPI team increased their own internal capacity and adopted more UCD in their operations.
GAIN	Tailored advice (three working meetings)	Product design, Service design, Design Thinking	25	<ol style="list-style-type: none"> 1. Misperception of design – firms thought they are more strategic in the use of design than they really are. 2. Pandemic – delays and issues with digital delivery, firms focusing on surviving rather than new projects. 3. Miscommunication between firms and design advisors 	<ol style="list-style-type: none"> 1. Improved understanding of users and user research methods 2. Improved internal capacity and processes 3. New design related roles in 50% of participating SMEs 	<ol style="list-style-type: none"> 1. Limits of working with pre-selected design advisors – consider letting firms to choose their design service provider 2. A need to explain the method and support process from the start 3. Link design with broader innovation methodologies 4. Providing advice on funds for further development and implementation is highly valued 5. Design sector need CPD training as well to update their skills

	Type of intervention	Design services offered	Number of supported companies	Challenges	Main impact on SMEs	Main lessons learnt
iLab NI	Training and self-service design toolkit. In-depth interventions with two businesses	User-centred design, Service design	25	<ol style="list-style-type: none"> 1. Time constraints – SMEs are time poor, balancing running the business vs. improving the business is very difficult > by prioritizing running day-to-day operations, SMEs can become hostile to change. 2. Pandemic stopped changes implementation in many cases 	<ol style="list-style-type: none"> 1. Increased focus on user experience and feedback. 2. Introduction of tools and processes to think more strategically about customers. 3. Shift in business mindsets towards user-centricity 	<ol style="list-style-type: none"> 1. Young firms and start-ups are more receptive to design (early adopters) 2. Some firms know UCD language and claim they are user-centred but in fact they're not (pseudo-adopters) 3. Design DNA firms know their customers and have processes in place. 4. Overloaded SMEs prioritize daily operations to strategizing, they can be hostile to change. 5. Design is a gradual change rather than a quick fix. 6. Importance of promoting relevant success stories
Scottish Enterprise	<p>Improvement of existing grant scheme:</p> <ul style="list-style-type: none"> - introduction of guides on the design process; - introduction of an online innovation diagnostic tool; -simplification of the language used; - training advisors in design. 	<p>Grant of max. £5k to purchase design services such as: product/service design, customer research, prototyping, market launch, brand development.</p> <p>Additionally Design Thinking workshop for SMEs</p>	46 [+19 through design thinking workshop]	<ol style="list-style-type: none"> 1. Pandemic – challenges in support delivery, supplier issues, delays and changing timescales, withdrawals from projects 	<p>The main 'By Design Grant' evaluation revealed that:</p> <ol style="list-style-type: none"> 1. 64% beneficiaries introduced new products or services 2. 71% increased their investment in design 3. 68% continued work with design agency 	<p>The evaluation of the 'By Design Grant' led to review of all grant schemes and development of a new wholly digital approach to SE funding. As a result, a new, simplified and fully digital process has been developed.</p>

	Type of intervention	Design services offered	Number of supported companies	Challenges	Main impact on SMEs	Main lessons learnt
CCIB	Suite of activities:: - promotional, net-working events; - design workshop; - tailored advice; - design trophies.	User-centred design, Service design, product innovation.	28 (+339 engaged in events)	1. Pandemic – delays in support delivery, change of priorities in companies. 2. Insufficient human resource in support provider to respond to big interest.	1. Increased strategic understanding of design. 2. 90% continued their investment in design. 3. Product/service improvement in all businesses. 4. New design roles in all supported businesses. 5. Mobilisation of entire design-innovation ecosystem.	1. Mobilisation of stakeholders can leverage support delivery. 2. A need to engage design sector in the process and look into providing support also for their skills development. 3. Need to promote/ lobby design to authorities.
Enterprise Ireland	Programmes of activities that included net-working, training, individual advice and mentoring	Design Thinking, User-centred design, Service design	25	1. Pandemic – problems with transition to digital delivery, business drop-outs because of no time and resource to implement changes due to the pandemic. 2. Little awareness of design.	1. Improved understanding of design 2. Improved internal capacity and processes 3. Willingness to continue investment in design. 4. Increased visibility of design within Enterprise Ireland.	1. Raising awareness is needed to help future design support programmes. 2. Design Thinking needs to be embedded across range of support programmes. 3. Design needs increased understanding and importance in support organisation.



WHAT DID WE LEARN

Following the pilot evaluation exercise, project partners came together to share their results and insights. PDR facilitated an interactive session where we discussed our tips and main lessons learnt for various stages of providing support and tried to anticipate trends in the future design support programmes.

What did we learn over the course of the pilot?

General

Deliverables from support process need be practical and relevant solutions

Training is needed for both companies and designers

Financial support to implement design recommendations is the most sought after form of support

No design culture – SMEs often start with zero concept and so have a long way to go

Companies struggle to commit to innovation projects in situations like Covid pandemic

Planning/ organisation/ onboarding

Engage business, innovation, design stakeholders early in the process

Design is still a difficult concept to understand for SMEs

Language around design misunderstood – explain or use plain language

Develop the programme iteratively building on feedback and tests

Do not target specific sector until you engage with them and tailor support to their needs

Recruitment / Target Audience

Be very practical about 'what's in it for the companies'

Communicate the benefits clearly & promote them

Engage with stakeholders that can disseminate the programme to targeted SMEs

Businesses are distrustful of 'free' support offers, they trust and value more 'fully funded'

Some sectors are more difficult to reach and convince to take part (agri-food for example)

Face-to-face introduction to the programme of the companies worked well

Clearly explain aims and do not create false expectations

Must have engagement and buy-in at all levels of the business

Recruit more (reserve list) in case of dropouts

Services offered

Consider including a workshop to explain and experience the design methodology

Companies value help with implementation

Focus on supporting SMEs to help them adapt and anticipate future trends (e.g. digital, sustainable transformation)

Mentoring works well if companies have time and resource to implement recommendations

Bespoke, tailored support works well in expectation management

If you offer financial support to undertake design activity, leave the choice of design service provider open
SMEs are keen to engage with support on their existing projects

Delivery

Briefing document at the start sets the expectations

Get buy-in from companies at the start

Establish a community between programme participants

Peer to peer learning, very useful for the participants of the workshop

SMEs which prioritise daily operations can struggle to give time to things outside this

Delivering the support relying on limited number of advisors/designers not a good idea (people can not get well with one another)

Subcontracting a design-expert company was very useful

Using supplier, created an independent and safe space (mix of 1:1 and group activity)

Having a subcontractor facilitated the pilot delivery - participants were very satisfied

Virtual collaboration tools/online whiteboards worked in virtual times

Collecting feedback

Online survey was good - but a one-to-one interview would be required to better understand the case studies

Face-to-face would work better to get more detailed and honest feedback

Finding 'hard numbers to measure success' was difficult

WHAT DOES THE FUTURE OF DESIGN SUPPORT LOOK LIKE?

Reflecting on the lessons learnt, as well as current socio-economic context, how the next design support programme could look like in your region?

Organisation / Focus / Services offered

Starting with SMEs' needs – what do they want? what would be of most value?

Focus on feasibility support for innovation projects, using design methodologies

Supporting SME to start with user insights stage

More training sessions & less workshops

Support and diagnostic tools for early stage engagement, and 1:1 specialist advice to identify innovation opportunities

More prototyping support will be needed

Consider working with supply chains either regionally or on a sector basis to encourage fair work, green jobs etc.

Develop a stronger 'more captivating introductory model'

Focus on digital, green design and user research

Recruitment / Target audience / Eligibility

Individual support for SMEs based on specific needs may get more buy-in than selling 'design'

Strong collaboration with stakeholders helps to target and recruit companies

SMEs can help to encourage other businesses from their supply chain to participate in the programme

Companies are free to choose their design provider

Use multipliers to reach "traditional" SMEs

Consider addressing strategic sectors in your region or the ones most in need of help: CCIs, social businesses, tourism

Consider a fee to enter the programme to make company invested in the project

Bring SME organisations into the project early in conception, involve them in initial talks etc

Delivery

Develop different approaches to service all businesses, for e.g. - website diagnostic, then workshop/1:1 to identify innovation opportunities

Mix of online and in-person delivery

Best practice case studies or visits

Video content 'how to'

Delivery together with the regional authorities

'Easy' user research methods embedded in support

Embrace digital offering - can reach wider geography/ easier for companies to commit

Delivery leading to implementation support

Common process but tailored support

Offer prototyping services – engage with co-creation spaces or fablabs

More case studies to share (video content, testimonies)

Feedback collection / Follow-up / Legacy

Increase exposure of design in SME's and competitiveness

Come up with a quantifiable method of evaluating use of design in future projects (time spent? Funds invested?)

Engage the regional authorities to promote the results together with companies

Follow-up in the medium-term through one-on-one interviews

Show collective results

Progression to more strategic forms of design



CONCLUSIONS

Design's popularity exploded in the last two decades. Previously predominantly seen as a styling, design as user-centred innovation methodology quickly conquered new fields of business and social activity. Big multinational companies and growingly the public sector have embraced design, pulling a lot of design expertise.

In the new context of even more volatile and uncertain global situation exacerbated by the pandemic and climate changes, creativity and cooperation will be key on in an effort to achieve health, natural, social and economic recovery.

The broad concept of value to the people and planet or so-called triple bottom line - encouraging the simultaneous pursuit of economic value, social equity, and ecosystem quality are concepts that have always been important in the design process. New transformation challenges will require design approach, that is why design plays a central role in the New European Bauhaus which values are going to be echoed in the 2021-27

Cohesion Policy. The European Commission will invite Member States to introduce the New European Bauhaus in their socio-economic and territorial development strategies and to reflect their commitment to support and mainstream the New European Bauhaus in the implementation of cohesion policy 2021-2027 as part of the Partnership Agreements and relevant operational programmes

Small and medium businesses are the backbone of our communities and economies, shaping our neighbourhoods, workplaces, and everyday life. Therefore, any change in how they operate, manufacture or provide services will have a significant and direct impact. But it is not easy for them to navigate innovation and transformation projects on top of their day-to-day business. Despite design's popularity, it is still a concept not well known among general population of businesses and customers. With it comes a lot of misconceptions about design relevance to SMEs. Whereas design is one of most accessible forms of innovation, one that is focusing on

human needs, problem solving and respects the environment at the same time.

Hard, comparable data and scientific evidence of design effectiveness is still the holy grail of many design researchers. However, the more it becomes a horizontal approach and infiltrate all areas of social and business life, the more difficult it is to isolate design as a function and an independent variable. Hence, its impact in small business is mainly measured based on estimates or through qualitative methods.

Our pilot programmes show that once introduced to design approach SMEs find it very useful and effective in improving business operations and customer orientation, bringing about new user-centred products and services what leads to opening of new markets or increase in profitability among other benefits. The lessons learnt through implementing and evaluating the User-Factor design support interventions suggest that for SMEs to be able to reap the benefits of design methodology, a few key points should be taken into account:

- *Design support is accompanied by design awareness-raising activities that in succinct and relevant to SMEs way explain what design is and what it can offer to their business, using real life examples.*
- *The programmes are developed using design process to ensure they respond to SMEs' needs, the support process is digitalised and streamlined, taking as much administrative burden of SMEs as possible, clearly explained from the outset and that the expectations regarding the outcome are set.*
- *The whole design innovation ecosystem is engaged in co-developing and co-delivering the programme – in this way it will leverage the impact and ensure that duplication of effort is avoided and opportunities for synergies capitalized on.*
- *The support includes new and emerging topics such as for instance design for circularity, for digital and virtual interactions, for services and policies.*

- *Design support considers the design sector and provides support to designers as well to ensure a supply of high quality and up-to-date design expertise.*

While User-Factor partnership has advanced the knowledge about support needs and support provision requirements of SMEs in our regions, we hope that it will also help other regions to improve their innovation eco-systems and contribute to the sustainable, green, and humane transformation across Europe.

ACKNOWLEDGEMENTS

PDR would like to thank all the businesses that dedicated their time during difficult pandemic times to testing User-Factor pilot support programmes.

We are also extending our grateful thanks to our dedicated project partners:

Scottish Enterprise

Alison Tennant
Colin Meager
Gemma Lee

Enterprise Ireland

Daryl Regan
Darragh O'Carroll

Galician Agency of Innovation

Santiago Nieto
Ana Fernandez
Lucia Rodriguez Quiroga

Sociedade Portuguesa de Inovação

Francisco Rocha
Douglas Thompson
Inês Francisco

La Chambre de commerce et d'industrie de Bretagne

Loubna Bentamy
Alexandre Colomb

iLab NI, Department of Finance, Northern Ireland

Elizabeth Meehan
Malcolm Beattie
Tony Young
Neil Robinson
Emer Morelli

Innovalia

Francisco J. Piñeiro
Belén Canitrot
Jose Manuel Cabello Montesino
Antonio Collado
Oscar Lazaro

Cardiff 2021

Written by the project team at User-Factor lead partner with contributions from the whole partnership

Piotr Swiatek
Oliver Sutcliffe
Anna Whicher

