By Design
Grant Evaluation

Research Report
This project forms part of User-Factor, a three-year project co-financed by the European Regional Development Fund (ERDF) through the Interreg Atlantic Area Programme.
Executive Summary

By Design is a light-touch grant to support Scottish small and medium-sized enterprises (SMEs) to use design and work with Scottish Enterprise for the first time. Between 2015 and 2019, 618 companies have benefited from this grant, which provides funding for a wide range of design activities related to developing new products or services, such as customer research, concept development, prototyping, testing, packaging and market launch.

In 2019, PDR at Cardiff Metropolitan University conducted an evaluation of the experience and impact of the By Design grant on participating companies as part of the User Factor project funded by Atlantic Area. The evaluation consisted of two surveys (among companies and design agencies) and two workshops (with businesses and Scottish Enterprise Innovation Advisors). The survey was sent to 456 companies with a response rate of 41%. The agency survey had a response rate of 25% among 114 supplier agencies. The purpose of the evaluation was to identify potential pressure points within the user experience in order to provide recommendations for improvement that will be prototyped in 2020.

The majority of companies benefiting from By Design operate in the technology and engineering, food and drink, creative industries and financial and business services sectors. There is a relatively even split between product-based companies and service-based companies with 10% reporting being equally based on services and products. Of the respondents, 65% have been operating five years or less. Over a third of companies used the grant for product development, followed by brand development, prototyping, concept development, web development and service development.
Of course, it is difficult to isolate the impact of design from other factors; however, companies were asked about the impact on business performance as a direct result of the grant. Collectively, 64% reported launching a new product or service and estimated an average of £240,000 in cumulative sales within three years of receiving the grant. Furthermore, 56% were able to improve an existing product or service and 27% entered new markets.

After the By Design grant, 83% of companies reported that they had continued to work with a design agency and on averaged had gone on to invest a further £26,000 in design (£2,655,000 in total). A series of 11 case studies were also developed to demonstrate impact in different sectors using different design approaches.

The workshops focused on mapping the company experience through the initial engagement, application submission, project implementation, claim and follow-on process. These user journey maps tasks enabled the participants to highlight difficulties that they encountered, which in turn provided them with the opportunity to explore how they might improve the experience going forward.

Based on the surveys and workshops, a number of recommendations were made and a series of proposals will be prototyped in 2020 including: examples of how to write a design brief in order to commission design services; a simple visualisation of the user journey to communicate the process more effectively to potential applicants, a toolkit for companies to work through with the design agency in order to introduce design-driven innovation, and implementing a structured follow-on process to support innovation active companies. The implementation of these processes can be followed on the User Factor website (userfactor.eu).
By Design grant

Design accelerates development process and is key in generating new ideas. It is a cost-effective, yet often overlooked, method of increasing success rate of innovation process. By gaining understanding of market needs in the first place and then iteratively developing concepts and testing them with users, design helps to achieve a result that is viable, usable, desirable and sustainable.

As part of a wider innovation support offering for businesses in Scotland, Scottish Enterprise developed a scheme to allow companies to experience the importance of design for both innovation and growth in any business area.

The By Design grant (2015-ongoing) aims to attract new SMEs to SE and support them in using design to develop new or improved products, services, and business processes. The By Design grant takes the risk out of the first investment in design.

The grant is offered online and provides a contribution of up to 70% of project costs (excluding VAT) to a maximum of £5000. The grant can only be used to cover activities which are yet to begin. Companies must be able to fund 100% of project costs upfront.
A number of design activities are eligible under the grant including: user insights, market research, network building, concept development, product development, service development, prototyping, packaging, strategy development and social innovation.

Branding and web development projects are only eligible as long as they are part of a bigger innovation project and don’t exceed 10% of the total project costs.
User Factor

User-Factor is a knowledge exchange project between eight European partners who aim to strengthen innovation in small and medium-sized enterprises (SMEs) by supporting them in applying design-driven innovation.

User-Factor will result in the development of eight regional design support pilots. The pilots intend to offer value to SMEs and simultaneously integrate with existing support agencies to improve their offering and build their capacity for design.

For their approach to User-Factor, Scottish Enterprise (SE) will evaluate their current By Design grant, to increase grant engagement and improve the quality of design support. Participant companies and innovation advisors from SE will be involved in project activities, enabling them to get a first-hand experience of a service design and user-driven approach.
Method

The study was initiated in November 2018, when SE and PDR outlined the scope of the project including; the objectives of SE, data to be collected, and means in collecting this data. Following this, the project team created two surveys.

The first survey was live from the 19/12/2018 to the 12/02/2019 and disseminated to 456 companies who availed of the grant between 2017 and 2019. A total of 252 companies responded (55%), and 189 fully completed the survey (41%). A second survey was live from the 06/02/2019 to the 29/04/2019 and disseminated to 114 of the supplier agencies. 34 support agencies responded (30%), and 29 fully completed the survey (25%).

The majority of the survey analysis was conducted by PDR, and a short-list of companies suitable for upcoming project activities was selected with SE. On the 10th and 11th of June, two workshops took place in Edinburgh. At the first workshop, participant companies documented their experience of utilising the By Design grant. During the second workshop, advisors from SE discussed the types of companies that avail of the grant, and the experience of these companies as they make their way through the By Design grant process.
Subsequently, PDR undertook 1-1 phone interviews with selected companies to inform the development of case-studies that aim to demonstrate the value and scope of By Design.

Based on the recommendations included in the final report, the team within SE will identify actions for further prototyping and implementation.
By Design Statistics

The By Design grant statistics

<table>
<thead>
<tr>
<th></th>
<th>2015-16</th>
<th>2016-17</th>
<th>2017-18</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of applications received (EFRS)</td>
<td>300</td>
<td>620</td>
<td></td>
</tr>
<tr>
<td>No. of applications rejected (EFRS)</td>
<td>34</td>
<td>151</td>
<td></td>
</tr>
<tr>
<td>No. of applications sent for appraisal (EFRS)</td>
<td>266</td>
<td>469</td>
<td></td>
</tr>
<tr>
<td>No. of applications approved (AAG)</td>
<td>152</td>
<td>328</td>
<td></td>
</tr>
<tr>
<td>No. of applications rejected (AAG)</td>
<td>136</td>
<td>134</td>
<td></td>
</tr>
<tr>
<td>No. of grants claimed</td>
<td>0</td>
<td>207</td>
<td></td>
</tr>
</tbody>
</table>

Figure 1: The By Design grant statistics (2015-2019)

List of Acronyms

UX - User Experience
CRM - Customer Relationship Management
SE - Scottish Enterprise
IP - Intellectual Property
BGA - Business Gateway Advisor
ISE - Innovation Specialist Engagement
SME - Small to Medium sized Enterprise
F2F - Face to Face
SURVEY FINDINGS
OVERVIEW OF SURVEY FINDINGS
Summary

For a relatively small financial amount, By Design offers significant value to both the companies receiving the support and agencies providing the support.

For the companies receiving the support, the grant assists in developing new and improved products, services, and processes, which can result in entering new markets, increasing sales, profits, and improving their competitiveness.

Moreover, there is definite knowledge transfer that takes place from engaging with By Design. This knowledge transfer is evident in a broader understanding of design, increased practice and investment in design after the grant process, and a greater desire to engage with design in the future.

For support agencies, By Design contributes to developing networks and new clients, building an understanding of design internally, increasing investment in design, and introducing new staff, processes, and technologies into the workplace. These factors contribute to the generation of additional sales and profits.

Support agencies have an overall positive experience, and the projects are often exciting and exploratory. There is risk involved, due to the lack of design experience of companies receiving support and the need to offer more time to help build their understanding. Additionally, there is a lack of financial security when working with smaller companies who are often in an early stage of their business and who must pay the project costs upfront.
Participant Company Profile

‘Scotland is Now’ is a campaign developed in collaboration with the Scottish Government, Visit-Scotland, Scottish Development International and Scottish Universities. The campaign aims to highlight Scotland as a forward-thinking, highly innovative country. Fig. 2 demonstrates a snapshot of business growth sectors in Scotland, combined with stats on the food and drink sector, a key player in Scotland’s Economy.

Companies that availed of the By Design grant cover all growth sectors but are concentrated in;

- Technology & Engineering (28%),
- Food & Drink (17%),
- Creative Industries (14%),
- and Financial & Business Services (11%).

65% of participant companies are less than five years old, while 22% are more than ten years established. This variation highlights the need to adopt innovative thinking and practices transcends companies and that design is increasingly recognised as an activity that can help companies become more innovative and competitive.

<table>
<thead>
<tr>
<th>Industry Sector</th>
<th>No. of People</th>
<th>GVA</th>
</tr>
</thead>
<tbody>
<tr>
<td>FINANCIAL AND BUSINESS SERVICES</td>
<td>316,200</td>
<td>£15 billion</td>
</tr>
<tr>
<td>OIL, GAS AND RENEWABLE ENERGY</td>
<td>168,750</td>
<td>£9.2 billion</td>
</tr>
<tr>
<td>TECHNOLOGY AND ENGINEERING</td>
<td>161,000</td>
<td>£6.0 billion</td>
</tr>
<tr>
<td>FOOD AND DRINK</td>
<td>118,000</td>
<td>£5.5 billion</td>
</tr>
<tr>
<td>CREATIVE INDUSTRIES</td>
<td>77,000</td>
<td>£4.4 billion</td>
</tr>
<tr>
<td>AEROSPACE AND SPACE</td>
<td>26,000</td>
<td>£4.0 billion</td>
</tr>
<tr>
<td>TOURISM</td>
<td>206,000</td>
<td>£3.9 billion</td>
</tr>
<tr>
<td>LIFE SCIENCES AND BIOTECH.</td>
<td>40,000</td>
<td>£2.4 billion</td>
</tr>
<tr>
<td>TEXTILES9</td>
<td>0.00</td>
<td>£0.35 billion</td>
</tr>
</tbody>
</table>

Figure 2: Business Growth Sectors in Scotland (2017)

Sources: [www.scotland.org/business/growth-sectors](http://www.scotland.org/business/growth-sectors)  
Growth Sector Briefing - Food and Drink, Office of the Chief Economic Adviser July 2019
By Design Experience

Companies used the By Design grant for a wide range of design activities, and in most cases received a combination of design services. Product development (36%), prototyping (27%) and concept development (25%) are three of the most popular services availed of, all of which directly relate to defining and delivering new products and services.

Brand development (33%) is the only service in the top four that is not a driving factor in the general process of product or service development. Web development (17%), service development (17%), and market research (12%) are other services engaged with regularly.

Overall, companies found the By Design grant process a positive experience. In working with SE, 94% of companies were satisfied with the collaboration (67% very satisfied, 27% mostly satisfied) and 97% are more likely to engage with SE services in the future. In working with the design agencies, 91% were satisfied (58% very satisfied, 33% mostly satisfied), and 68% collaborated further with the agency.

The biggest challenges identified by respondents who had challenges (n-136) include:

- Finding and working with the right design agency (32%);
- A lack of management and marketing skills (25%);
- A lack of general and specialised design capabilities (22%);
- The funding amount and the By Design grant process (20%);
Impact | Business Performance

As a result of the By Design grant, 64% of companies launched a new product or service, 56% improved a product, service or process, 41% increased their competitiveness, 39% made additional sales, 30% generated additional profits, and 27% entered new markets. The total estimated value of cumulative sales (on average per company, n - 117) in the 3 years after the grant is £240,000. 63% of companies forecast making over £100,000 in the 3 years.

Since the By Design grant, 59% say that their sales turnover has increased (19% increased considerably), 58% say that their profitability has increased (15% increased considerably), and 37% say that their employment has increased (8% increased considerably).

Impact | Business Practice & Culture

Since the By Design grant, 71% of companies say that their investment in design has increased (34% increased considerably). 75% of companies say that their awareness of design has increased (48% increased considerably). The evolved understanding of design included an increase of 20% in companies viewing design as being for innovation and competitiveness (50% in total), an increase of 15% in companies viewing design as being for new product/service development (63% in total), and an increase of 11% in companies viewing design as being for better understanding user needs (25% in total).

Additionally, there was a rise of 7% in companies viewing design as being for creative problem solving (30% in total) and a rise of 6% in companies viewing design as being for strategic decision making (15% in total). There was a decrease of 4% in companies viewing design as being for styling, marketing, and promotion (20% in total).
Impact | On Business Practice & Culture

44% of companies had never used design before the By Design grant. 91% of companies have used design since, including a 21% increase in using external designers on a regular basis (30% in total), a 6% increase in using external designers on an ad-hoc basis (41% in total), and 8% increase in employing designers (20% in total).

The most popular design disciplines used since the grant include; communication and branding (63%), digital and UX design (51%), product design (42%), service design (29%) and strategic design (19%). Communication/branding and digital design are expected to increase in use by 11% in the coming 12 months (74% and 62% in total, respectively), while product development will decrease by 2% (40% in total). Importantly, there is a 19% increase in companies interested in using service design (48% in total) and a 15% increase in companies interested in applying strategic design (34% in total) in the next 12 months. 16% of companies are interested in engaging with ecodesign, and 21% are interested in interior and retail design.

Companies believe that future investment in design will contribute to (Great and some extent)

96% believe that it will improve their company image (76% Great Extent)
91% believe that it will enhance their competitiveness (65% Great Extent)
91% believe that it will increase their turnover (59% Great Extent)
90% believe that it will help develop new or improved products (73% Great Extent)
88% believe that it will increase their profits (53% Great Extent)
87% believe that it will help develop new or improved services (64% Great Extent)
86% believe that it will improve their understanding of user needs (55% Great Extent)
86% believe that it will increase their market share (54% Great Extent)
Support Agency Profile

The support services offered by the support agencies highlights the integrated and broad nature of design. In most cases, the supplier agencies provide a range of services that contribute in different ways to the development of products and services. There are definite similarities in offerings, but also variations in how they are defined.

Digital services define over 50% of the support agencies offerings. 38% are established in the last four years, while 58% are operating between 5 and 20 years.

By Design Experience

87% of the support agencies were satisfied with the collaboration with companies (60% being extremely satisfied). 97% of the support agencies collaborated further with companies and 86% collaborated with more than 1/2 of the companies that they supported.

Impact | On Agency Performance

As a result of working with companies, 74% of support agencies stated that their sales turnover had increased (17% increased considerably). 58% stated that their profitability increased (6% increased considerably), 40% stated that their investment in design increased % (10% increased considerably). and 35% stated that employment increased (6% increased considerably).
Support agencies stated that engaging with the By Design grant lead to an increase in network building (68%), follow-on business (49%), and training of their staff, or introduction of new process and/or technology (31%). Additionally, 36% increased their awareness of design (10% increased considerably).

➤ CULTURE CHANGE TAKES TIME
“...There is an educational element involved with companies who utilise the By Design grant as they typically have not designed a product before and do not understand the process and costs associated with designing and bringing a product to market. This leads to a fair bit of unpaid support which draws focus away from our larger more long term customers”

➤ PROJECTS ARE EXPLORATORY AND EXCITING
“...By Design encouraged more early stage companies to invest time in creating interactive demos and conduct more in-depth user experience analysis, which encouraged us to try out new tools and design techniques”
PARTICIPANT COMPANY SURVEY

Part 1 - Company Profile
Part 2 - By Design Experience
Part 3 - Design and My Business
Part 4 - By Design Impact
1
Company Profile
In which sector does your company primarily operate? | n - 205
Are you predominantly a product or service-based company? | n - 206

- Product (101) 49%
- Service (84) 41%

What year was the company established? | n - 203

- 0 - 2 years 28%
- 2 - 5 years 37%
- 5 - 10 years 13%
- 10 - 20 years 15%
- + 20 years 7%

When applying for the By Design grant did your company export? | n - 206

- Yes (28) 14%
- No (178) 86%

If Yes, what Percentage of sales came from exports? | n - 28

- 0 - 19.99% 7%
- 20 - 39.99% 7%
- 40 - 59.99% 47%
- 60 - 79.99% 21%
- 80 - 99.99% 21%
- 100% 4%
By Design Experience
How did you find out about the By Design grant? | n - 198

<table>
<thead>
<tr>
<th>Method</th>
<th>Percentage</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Gateway advisor</td>
<td>43%</td>
<td>84</td>
</tr>
<tr>
<td>Recommendation</td>
<td>25%</td>
<td>49</td>
</tr>
<tr>
<td>Direct promotion by SE</td>
<td>13%</td>
<td>26</td>
</tr>
<tr>
<td>Scottish Enterprise website</td>
<td>10%</td>
<td>19</td>
</tr>
<tr>
<td>Innovation advisors</td>
<td>6%</td>
<td>12</td>
</tr>
<tr>
<td>From the design agency</td>
<td>3%</td>
<td>8</td>
</tr>
</tbody>
</table>

For what type of design activity did you use the grant? | n - 198

<table>
<thead>
<tr>
<th>Activity</th>
<th>Percentage</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prototyping</td>
<td>36%</td>
<td>71</td>
</tr>
<tr>
<td>Brand development</td>
<td>34%</td>
<td>65</td>
</tr>
<tr>
<td>Concept development</td>
<td>27%</td>
<td>54</td>
</tr>
<tr>
<td>Web development</td>
<td>25%</td>
<td>50</td>
</tr>
<tr>
<td>Product development</td>
<td>23%</td>
<td>49</td>
</tr>
<tr>
<td>Service development</td>
<td>17%</td>
<td>33</td>
</tr>
<tr>
<td>Social innovation</td>
<td>12%</td>
<td>23</td>
</tr>
<tr>
<td>User insights</td>
<td>9%</td>
<td>17</td>
</tr>
<tr>
<td>Marketing</td>
<td>7%</td>
<td>13</td>
</tr>
<tr>
<td>Network building</td>
<td>5%</td>
<td>9</td>
</tr>
<tr>
<td>Other, please specify</td>
<td>1%</td>
<td>1</td>
</tr>
</tbody>
</table>
How did you find the experience of this service provided by Scottish Enterprise?  | n - 198

<table>
<thead>
<tr>
<th>Rating</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very satisfied</td>
<td>133</td>
</tr>
<tr>
<td>Mostly satisfied</td>
<td>53</td>
</tr>
<tr>
<td>Neither</td>
<td>27</td>
</tr>
<tr>
<td>Mostly unsatisfied</td>
<td>4</td>
</tr>
<tr>
<td>Very unsatisfied</td>
<td>0.5</td>
</tr>
<tr>
<td>Don’t know</td>
<td>1.5</td>
</tr>
</tbody>
</table>

Would you be more or less likely to engage with additional Business Gateway or SE services?  | n - 175

<table>
<thead>
<tr>
<th>Option</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>More likely (169)</td>
<td>97%</td>
</tr>
<tr>
<td>Less likely (6)</td>
<td>3%</td>
</tr>
</tbody>
</table>

How did you find the experience of collaborating with the design agency?  | n - 195

<table>
<thead>
<tr>
<th>Rating</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very satisfied</td>
<td>113</td>
</tr>
<tr>
<td>Mostly satisfied</td>
<td>64</td>
</tr>
<tr>
<td>Neither</td>
<td>64</td>
</tr>
<tr>
<td>Mostly unsatisfied</td>
<td>5</td>
</tr>
<tr>
<td>Very unsatisfied</td>
<td>1.5</td>
</tr>
<tr>
<td>Don’t know</td>
<td>2%</td>
</tr>
</tbody>
</table>

Did you continue to collaborate with the design agency?  | n - 177

<table>
<thead>
<tr>
<th>Option</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes (122)</td>
<td>68%</td>
</tr>
<tr>
<td>No (50)</td>
<td>28%</td>
</tr>
</tbody>
</table>
What were the main challenges for your business when using design in the development of the product or service? | n - 136

**Working with design agency**
- Finding and collaborating with relevant design agency: 24%
- Communicating what we wanted to the design agency: 8%

**By Design process**
- Budget and funding - not enough: 14%
- Slow application and claims process
- Limited follow on support from SE
- No access to design experts in SE to speak to

**Culture**
- Thinking differently and focusing on user experience: 7%
- Time management: 6%
- Getting management buy-in and consistency in in-person services
- Developing a world-view mindset

**Capabilities**
- Strategic positioning, promotion and marketing: 13%
- Branding, and how company image is perceived: 4%
- Our own lack of technical design expertise (circular economy, software etc.): 7%
- Our own lack of general design expertise: 4%
- Having the IP rights legalised
- Getting UK manufacturers with the correct stock, resources and capabilities: 4%
Design and My Business
Which of the following statements best describes your understanding of design:

/ Prior to the By Design grant? | n - 201 
/ After receiving the By Design grant? | n - 177
Which of the following statements best describes your design activities:

/ Prior to the By Design grant? | n - 200
/ After receiving the By Design grant? | n - 198

- We had never used design before. **88** (44%)
- We have not used design systematically since the grant. **18** (9%)
- We used external design consultants on an occasional or ad-hoc basis. **70** (35%)
- We used external design consultants on a regular basis. **17** (9%)
- We employed our own designer(s) or had a dedicated design team. **59** (30%)
- We employ our own designer(s) or have a dedicated design team. **39** (20%)
Which of the following design disciplines:

A. Has your company used since receiving the By Design grant? | n - 170

B. Might your company use in the next 12 months? | n - 175
If any, how much has your company invested in design since the By Design grant?  

- £26,000 per company on average (101 companies)  
  £2,655,000 / 101
To what extent do you think that investing in design will contribute to your company?

- **It will improve our company image** | n = 173
- **It will improve our understanding of user needs** | n = 168
- **It will help develop new or improved products** | n = 172
- **It will help develop new or improved services** | n = 166
- **It will enhance efficiency/productivity** | n = 168
- **It will enhance competitiveness** | n = 170
- **It will increase employment** | n = 169
- **It will improve our strategy development** | n = 169
It will improve our customer service | n - 167

It will increase turnover | n - 173

It will improve our internal financial management | n - 165

It will help exports | n - 166

It will improve our internal operational management | n - 167

It will improve our environment performance | n - 165

It will increase profits | n - 170

It will increase market share | n - 171
4
By Design Impact
Did you increase your competitiveness as a result of the grant?

Did you improve a product, service or process as a result of the grant?

Did you enter new markets as a result of the grant?

Did you generate additional sales as a result of the grant?

Did you generate additional profits as a result of the grant?

Did you launch a new product or service as a result of the grant?

The following are based on questions in the By Design grant application form: n - 187
In your estimation, as a direct result of the By Design grant, would you say that:

**Your company's employment has:**  
- **Increased considerably:** 56%  
- **Increased slightly:** 29%  
- **Remained the same:** 10%  
- **Decreased slightly:** 2%  
- **Decreased considerably:** 0%  
- **Don't know:** 0%

**Your company's sales turnover has:**  
- **Increased considerably:** 40%  
- **Increased slightly:** 32%  
- **Remained the same:** 19%  
- **Decreased slightly:** 8%  
- **Decreased considerably:** 3%  
- **Don't know:** 1%

**Your company's profitability has:**  
- **Increased considerably:** 42%  
- **Increased slightly:** 58%  
- **Remained the same:** 31%  
- **Decreased slightly:** 1%  
- **Decreased considerably:** 10%  
- **Don't know:** 0%

**Your company's exports have:**  
- **Increased considerably:** 62%  
- **Increased slightly:** 16%  
- **Remained the same:** 16%  
- **Decreased slightly:** 5%  
- **Decreased considerably:** 0%  
- **Don't know:** 0%

**Your company's awareness of design has:**  
- **Increased considerably:** 92%  
- **Increased slightly:** 27%  
- **Remained the same:** 23%  
- **Decreased slightly:** 4%  
- **Decreased considerably:** 0%  
- **Don't know:** 0%

**Your company's investment in design has:**  
- **Increased considerably:** 64%  
- **Increased slightly:** 37%  
- **Remained the same:** 23%  
- **Decreased slightly:** 8%  
- **Decreased considerably:** 1%  
- **Don't know:** 0%
As a direct result of this project, what do you expect will be the total estimated value of cumulative sales (£) from new products and services in 3 years after project completion? | n 117

£240,000 on average (117 companies)

63% expect to make over £100,000 over 3 years
SUPPORT AGENCY

SURVEY

Part 1 - Support Agency Profile
Part 2 - By Design Impact
Part 3 - By Design Experience
1 | Support Agency profile

Nature of support your agency provided:  | n - 29

- Digital Marketing
- Web Design & Development
- Software Design & Development
- Branding
- Product Design & Development
- Prototyping, Sampling, Supply Chain Sourcing
- Service Design
- Graphic Design Services
- Market Research, Service Design, UX
- Copy-writing
- Technical Consultancy
- Design

What year was the agency established?  | n - 29

- 2 - 3 years
- 3 - 4 years
- 4 - 5 years
- 5 - 9 years
- 10 - 20 years
- + 20 years
Did engaging with companies through the By Design grant lead to:  | n - 29

The increased use of technology in your working practice?

- Yes (3)
- No (23)
- Don't know (3)

Improved relationship and network building for your agency?

- Yes (20)
- No (7)
- Don't know (2)

Further training and development of your staff capabilities?

- Yes (6)
- Don't know (5)
- No (22)

Follow-on business from other companies?

- Yes (14)
- No (10)
- Don't know (2)

10%
80%
10%
69%
24%
49%
76%
21%
34%
In your estimation, as a result of working with companies funded through the By Design grant, to what extent do you agree with the following?

**Your company’s employment has:**

- Don’t know: 2
- Increased considerably: 29%
- Increased slightly: 61%
- Remained the same: 6%
- Decreased slightly: 9
- Decreased considerably: 0

**Your company’s sales turnover has:**

- Don’t know: 2
- Increased considerably: 17%
- Increased slightly: 57%
- Remained the same: 23%
- Decreased slightly: 7
- Decreased considerably: 0

**Your company’s profitability has:**

- Don’t know: 2
- Increased considerably: 16
- Increased slightly: 61%
- Remained the same: 32%
- Decreased slightly: 10
- Decreased considerably: 6%

**Your company’s awareness of design has:**

- Don’t know: 3
- Increased considerably: 26%
- Increased slightly: 61%
- Remained the same: 10%
- Decreased slightly: 8
- Decreased considerably: 0

**Your company’s investment in design has:**

- Don’t know: 3
- Increased considerably: 30%
- Increased slightly: 9
- Remained the same: 10%
- Decreased slightly: 3
- Decreased considerably: 0

**Your company’s exports have:**

- Don’t know: 2
- Increased considerably: 24
- Increased slightly: 80%
- Remained the same: 0
- Decreased slightly: 0
- Decreased considerably: 0
3 | By Design Experience

How did you find the experience of engaging with companies through the By Design grant? | n - 30

- Extremely satisfied: 18 (60%)
- Moderately satisfied: 8 (27%)
- Neither satisfied nor unsatisfied: 3 (10%)
- Slightly dissatisfied: 1 (3%)

Did you continue to collaborate with the companies you supported? | n - 29

- Yes: 28 (97%)
- No: 1 (3%)

If yes, what percentage of the companies did you continue to collaborate with? | n - 28

- 100%: 10 (36%)
- 75 - 99.99%: 5 (18%)
- 50 - 74.99%: 9 (32%)
- 25 - 49.99%: 4 (14%)
Can you please describe any positive impacts that you have had from the experience of engaging with companies through the By Design grant:

**Capability development**
- 4
  - Learned and introduced new tools/skills into our working practice.
- 4
  - Gave us the opportunity to develop our design process.
- 2
  - It made it easier for us to demonstrate our value and the value of design.

**Getting Value**
- 7
  - New business leads with companies in early project phases, who could afford to pay.
- 4
  - Added new networks and helps in building relationships.
- 1
  - Boost to turnover.
- 3
  - Companies can be braver with their approach, and in turn we can be more creative.
- 2
  - Interesting projects with a lot of scope.
- 1
  - Speaking to innovative start-ups, is very valuable in working with established companies.

**Providing Value**
- 7
  - Providing value and increased sales for smaller companies.
- 4
  - Helping companies become more design and user-focused.
Can you please describe any negative impacts that you have had from the experience of engaging with companies through the By Design grant:

- **3** Funding is quite small.
- **2** Completing work before the client was able to claim the grant.
- **2** Clients have unrealistic expectations of what can be achieved.
- **1** Approval / payment times can be slow and delay the project.
- **1** Lack of design experience leads to lots of unpaid support.

**11 - None**
USER JOURNEY WORKSHOPS
Building on survey findings, two user-journey workshops were delivered at SE offices in Edinburgh.

The objective of these workshops was to develop a more in-depth understanding of the experience of stakeholders in utilising, and delivering the By Design grant.

The first workshop was open to companies who have previously availed of the By Design grant. The second workshop involved innovation advisors from SE who are involved in delivering the grant.
OBJECTIVE
The objective of the workshop was for the participant business owners to map their journey of engaging with the By Design grant to identify opportunities for improving the delivery of the grant in the future.

WORKSHOP PARTICIPANTS
The workshop included five companies who availed of the By Design grant, one Innovation Advisor from SE, one representative from the Marketing Department in SE and two workshop facilitators from PDR.
By Design Experience

WORKSHOP RUNNING ORDER

The workshop was set-up with flexibility in mind and aimed to offer an informal and relaxed setting that would encourage honesty from business owners.

During the first activity, participants were asked to briefly introduce themselves, their business, and their business needs from the By Design grant.

Following this, participants were asked to map their journey of engaging with By Design. First, they identified their journey steps and time that was required. Then they rated their experience at each touchpoint.

These tasks enabled participants to highlight difficulties that they encountered, which in turn provided them with the opportunity to explore how they might improve the experience going forward.

After completing the User-Journey Maps, participants shared their experience with the group, followed by an open discussion on the common ideas and themes that emerged.

Figure 3: Participant workshop tool - User-Journey Map
OBJECTIVE
The objective of the workshop was for innovation advisors from SE to identify a collection of personas who represent the companies who avail of By Design. After identifying a selection of personas, participants mapped the journey of chosen companies as they make their way through the By Design grant process, based on their own experience of delivering support.

WORKSHOP PARTICIPANTS
The workshop included six innovation advisors from SE and two facilitators from PDR.
SE Innovation Advisor Workshop

WORKSHOP RUNNING ORDER

During the first activity, participants had an open discussion on how they currently categorise the companies who utilise By Design. This lead to the identification of three main categories of companies: Pre-Trading, Trading, and Growth, followed by the creation of six personas that fit these categories.

In groups of two, participants selected one persona from each category and mapped the journey of the company as they engage with By Design and other SE innovation services.

Following this, participants rated the experience of companies at each touchpoint and the time required throughout. These tasks enabled participants to highlight areas of difficulty, which in turn provided the opportunity to explore how they might improve the experience going forward.

After completing the User-Journey Maps, participants shared the journeys they created, followed by an open discussion on the common ideas and themes that emerged.
MASTER JOURNEY MAP
BY DESIGN GRANT

Pain points

Business owners don’t know what design services they want or need.  
There is a lack of communicating project expectations by SE to businesses at the start.  
There is a need to communicate the higher value of the grant (internally and externally).  
Business owners don’t understand what services the grant can be used for.  
The relationship with the BGA is critical.  
BGA has to identify business needs, potential and wider engagement at the start.  
BGA advisors do not have a good understanding of the By Design grant.  
Businesses find it challenging to find a relevant design agency.  
It takes a long time to acquire quotes; “when getting them, I’m not making money”  
Businesses find it challenging to communicate what they want to do to the design agency.  
Unprofessional practices and late replies are more difficult for small businesses.  
The accounts/claims team had a very tick-box approach.  
There are inconsistencies between innovation support advisors: BGA, A/C managers, etc.  
There is no access to design experts in SE.  
There is a skills gap in the applications that are submitted.  
There is no visibility of the project progress for the business owner.  
The business owner is not supported if the application is rejected.  
Businesses find it difficult working with designers - delays and poor communication.  
“We were left with a digital product that we could not manage ourselves”  
Businesses have cash-flow issues in paying for the projects  
There is low visibility of referrals into wider innovation team and By Design.  
There is a lack of follow-on support, particularly if the idea does not have potential  
Previous impact and successes of the grant are not shared.  
“They’re still asking me for more information, over a year after completing the process”  
Innovation Advisors have different opinions on: what is innovation?  

Initial Engagement

Business seeks support

Engage with BGA by phone

Referral to SE IS & email exchange

Possible F2F meeting with IS

Download & develop application

Find suppliers & determine costs

Engage directly online with SE

Download & develop application

Find suppliers & determine costs

Submission & Appraisal

Submit application online

Appraisal

20 days

Approved

80%

Rejected

20%

Project Implementation & Claim

Contract sent

-9 weeks max and possible extension available

Project starts

Project completed

80%

Pay supplier

Submit claim

Receive payment

Follow On

Further access to SE support

-65%

No further SE support

-35%

Other form of SE support

-65%

Growth pipeline

-35%

IPSE SMART etc

Key Account Managed by SE

SE - Scottish Enterprise  
BGA - Business Gateway Advisor  
IS - Innovation Specialist  
F2F - Face to Face  
IPS2 - Innovation Project Support 2
Ideas for Improvement

- Provide recommended design resources and reading list.
- Provide webinars: general skills (process, tool, writing a brief, etc.) and specialised skills (software, applications).
- Provide information on IP rights, materials and manufacturing processes.

- Create language and content that promotes the strategic capabilities of By Design.
- Share opportunities for further business support after By Design.
- Showcase past examples of By Design success stories;
  - Their journey and the impact of By Design;
  - The cost and time-frame in getting to market and growing.

- Visualise the grant process – digital timeline and journey booklet
- Tool/framework to determine companies starting point = filter and shared understanding
- Bring back the pre-qualification round
- Make the BGA more personal, transparent and accessible – such as an online platform

- Guidance on finding designers.
- Directory of designers - piggyback on existing platforms, such as Creative Scotland etc.
- Provide assistance to help businesses in communicating what they want from the designer.

- Dedicated and engaged support from SE - such as online technical support.
- Design buddies.

- Visibility of process for customers - feedback system and track progress.
- Point of contact to bridge the initial acceptance and design support.
- Develop a structure and system to re-engage prospects and ones rejected.

- Offer guidance on working with designers. The relationship is critical.
  - Support agency input and relationship is critical,
  - A bad project can set us back 18 months;
  - Excellent software developers does not mean that they have business acumen;
  - In some cases, support agencies may be only capable of delivering some aspect/s of the project work.

- Track referrals between teams.
- Training on review process to ensure consistency (for specialists).
- Demonstrate previous impact better – case study template.
- Longer term evaluation.
- Post grant meet-up to network and share experiences.
RECOMMENDATIONS
Initial Engagement

- Business owners don’t know what design services they want or need.
  - Provide recommended design resources and reading list.
  - Provide webinars; general skills and specialised skills
  - Provide information on IP rights, materials and manufacturing processes.

- There is a lack of communicating project expectations by SE to businesses at the start;
- There is a need to communicate the higher value of the grant (internally and externally);
- Business owners don’t understand what the grant can be used for.
  - Create language and content that promotes the strategic capabilities of By Design;
  - Share opportunities for further business support after By Design;
  - Showcase past examples of By Design success stories;
    - Their journey and the impact of By Design;
    - The cost and time-frame in getting to market and growing.

- The relationship with the BGA is critical;
- BGA has to identify the business needs, potential and wider engagement at the start;
- BGA advisors do not have a good understanding of the By Design grant.
  - Make the BGA more personal, transparent and accessible, such as an online platform;
  - Tool/Framework to determine companies starting point = filter and shared understanding;
  - Bring back the pre-qualification round.
Project Implementation & Claim

- Unprofessional practices and late replies are more difficult for small businesses;
- The accounts/claims team had a very tick box approach;
- There is inconsistencies between innovation support advisors: BGA, A/C managers, etc.;
- There is no access to design experts in SE;
- There is a skills gap in the applications that are submitted;
- There is no visibility of the project progress for the business owner.

  - Visualise the grant process, including a digital timeline and journey booklet;
  - Dedicated and engaged support from SE, such as online technical support;
  - Feedback system and track progress.

Submission & Appraisal

- Businesses find it difficult to find the relevant design agency;
- It takes a long time to acquire quotes; when getting them I’m not making money;
- Businesses find it difficult to communicate what they want to do to the design agency;
- Businesses find it difficult working with designers - delays and poor communication;
- We were left with a digital product that we could not manage ourselves;
- Businesses have cash-flow issues in paying for the projects;

  - Point of contact to bridge the initial acceptance and design support;
  - Guidance on finding designers;
  - Directory of designers - piggyback on existing platforms, such as Creative Scotland etc.;
  - Provide assistance to help businesses in communicating what they want from the designer;
  - Design buddies.
Follow On

- The business owner is not supported if the application is rejected;
- There is a low visibility of referrals into wider innovation team from By Design;
- There is a lack of follow on support, particularly if the idea does not have potential;
- Previous impact of the grant is not communicated;
- They are still asking me for more information, over a year after completing the process;
- Innovation Advisors have different opinions on: what is innovation?
  - Develop a structure and system to re-engage prospects and ones rejected;
  - Offer guidance on working with designers. The relationship is critical;
  - Track referrals between teams;
  - Training on review process to ensure consistency (for specialists);
  - Demonstrate previous impact better - case study template;
  - Longer term evaluation;
  - Post grant meet-up to network and share experiences.
Summary

The money is often the main incentive for these small businesses when utilising the By Design grant. However, research suggests that the process of working with a designer can have a multiplier effect for businesses.

Through working with a professional designer in various domains, businesses are able to develop prototypes and deliver them to the market to get feedback. This feedback and the process of working with the designer can influence several aspects of their business from day to day operations, the development of news strategies and business models, increased articulation and understanding of brand and key relationships.
ANNEXES
Participant Company Survey

This survey is part of a study on the By Design grant and is disseminated on behalf of Scottish Enterprise. The survey examines four areas:

1. Company profile
2. Use of design prior to the By Design grant
3. Experience of the By Design grant
4. Use of design after the By Design grant

The survey should be completed by a company director or someone directly involved in the By Design grant process. The results will be treated confidentially and will not be disclosed on an individual company basis. They will be used, in aggregate form, in a final report that will help Scottish Enterprise shape future support for Scottish businesses. The survey should take approximately 15 to 20 minutes to complete and is intended to provide insight to improve the By Design service.

Company info

1. Company name:
2. In which sector does your company primarily operate?
   - Aerospace, Defence & Marine
   - Chemical Sciences
   - Construction
   - Creative Industries
   - Energy – Low Carbon/Renewables
   - Energy – Oil & Gas/Thermal Generation & CCS
   - Financial & Business Services
   - Food & Drink
   - Forest Industries
   - Life Sciences
   - Technology & Engineering
   - Textiles
   - Tourism
   - Other, please specify
3. Are you predominantly a product or service-based company?
   - Product
   - Service
   - Equal
   - Don’t know
4. What year was the company established?
5. When applying for the By Design grant did your company export?
   - Yes
   - No
6. If Yes, what percentage of sales came from exports?

Use of design prior to By Design grant

7. Which of the following describes your design activities prior to the By Design grant?
   - We had never used design before.
   - We used external design consultants on an occasional or ad hoc basis.
   - We used external design consultants on a regular basis.
   - We employed our own designer(s) or had a dedicated design team.
   - Other, please specify.
8. Which of the following statements best describes your understanding of design prior to receiving the By Design grant? Please select up to two options:
   - Design is for styling, finishing touches and aesthetics.
   - Design is for function and form.
   - Design is for marketing and promotion.
   - Design is for creative problem-solving.
   - Design is for new product/service development.
   - Design is for better understanding user needs.
   - Design is for innovation and competitiveness.
   - Design is for strategic decision-making.
   - Other, please specify.
9. How did you find out about the By Design grant?
   - Direct promotion by Scottish Enterprise
   - Scottish Enterprise website
   - Recommendation
   - From the design agency
   - Local media (radio, newspaper, television etc.)
   - Innovation advisors
   - Business Gateway advisor
   - Other, please specify.
10. For what type of design activity did you use the grant?
   - User insights
   - Market research
   - Network building
   - Prototyping
   - Brand development
   - Concept development
   - Web development
   - Packaging
   - Product development
   - Service development
   - Strategy development
   - Social innovation
   - Other, please specify.
11. How did you find the experience of collaborating with the design agency?
   - Very satisfied
   - Mostly satisfied
   - Neither satisfied nor unsatisfied
   - Mostly unsatisfied
   - Very unsatisfied
   - Don’t know
12. If you were unsatisfied with the experience of the service provided by the design agency, please provide further details below.
13. How did you find the experience of this service provided by Scottish Enterprise?
   - Very satisfied
   - Mostly satisfied
   - Neither satisfied nor unsatisfied
   - Mostly unsatisfied
   - Very unsatisfied
   - Don’t know
14. If you were unsatisfied with the experience of the service provided by Scottish Enterprise, please provide further details below.
Use of design after By Design grant

15. The following are based on questions in the By Design grant application form:
   - Did you launch a new product or service as a result of the grant?
   - Did you improve product, service or process as a result of the grant?
   - Did you enter new markets as a result of the grant?
   - Did you generate additional sales as a result of the grant?
   - Did you increase your competitiveness as a result of the grant?

16. In your estimation, as a direct result of the By Design grant, would you say that:
   - Your company’s employment has:
   - Your company’s sales turnover has:
   - Your company’s profitability has:
   - Your company’s exports have:
   - Your company’s awareness of design has:
   - Your company’s investment in design has:

17. As a direct result of this project, what do you expect will be the total estimated value of cumulative sales (£) from new products and services in the 3 years after project completion?
   - Year 1 after project completion (£)
   - Year 2 after project completion (£)
   - Year 3 after project completion (£)
   - Cumulative (sum of the figures for each year)

18. Which of the following statements best describes your understanding of design after receiving the By Design grant? Please select up to two options:
   - Design is for styling, finishing touches and aesthetics.
   - Design is for function and form.
   - Design is for marketing and promotion.
   - Design is for creative problem-solving.
   - Design is for new product/service development.
   - Design is for better understanding user needs.
   - Design is for innovation and competitiveness.
   - Design is for strategic decision-making.

19. Which of the following describes your design activities after receiving the By Design grant?
   - We employ our own designer(s) or have a dedicated design team.
   - We use external design consultants on a regular basis.
   - We use external design consultants on an occasional or ad hoc basis.
   - We have not used design systematically since the grant.
   - Other, please specify.

20. Which of the following design disciplines has your company used since receiving the By Design grant? (Decreased considerably – Increased considerably)
   - Communication and branding (e.g. graphics, print, packaging, identity).
   - Product and industrial design (e.g. physical objects, artefacts, consumer products).
   - Interior and exhibition design (e.g. retail design, office/workspace, lighting, displays).
   - Fashion and textile (e.g. clothes, materials).
   - Digital and UX (e.g. websites, animation, interaction design).
   - Service design (e.g. new services, processes).
   - Strategic design (e.g. system change or strategy development).
   - Eco-design (e.g. circular economy, sustainability).
   - Urban design (e.g. built environment).
   - Other, please specify.

21. Which of the following design disciplines might your company use in the next 12 months?
   - Communication and branding (e.g. graphics, print, packaging, identity).
   - Product and industrial design (e.g. physical objects, artefacts, consumer products).
   - Interior and exhibition design (e.g. retail design, office/workspace, lighting, displays).
   - Fashion and textile (e.g. clothes, materials).
   - Digital and UX (e.g. websites, animation, interaction design).
   - Service design (e.g. new services, processes).
   - Strategic design (e.g. system change or strategy development).
   - Eco-design (e.g. circular economy, sustainability).
   - Urban design (e.g. built environment).
   - Other, please specify.

22. Did you continue to collaborate with the design agency?
   - Yes
   - No
   - Don’t know

23. If any, how much has your company invested in design since the By Design grant?

24. To what extent do you think that investing in design will contribute to your company? [Not at all - To a great extent]
   - It will improve our company image
   - It will improve our understanding of user needs
   - It will help develop new or improved products
   - It will help our customer service
   - It will increase turnover
   - It will increase market share
   - It will increase profits
   - It will improve our environment performance
   - It will improve our internal operational management
   - It will improve our internal financial management
   - It will help exports
   - It will enhance efficiency/productivity
   - It will enhance our competitiveness
   - It will increase employment
   - It will improve our strategy development

25. What were the main challenges for your business when using design in the development of the product or service?

26. What additional support would have been useful during the product/service development process?

27. Having received By Design, would you be more or less likely to engage with additional Business Gateway or Scottish Enterprise services?
   - More likely
   - Less likely

Participant Company Survey
Participant Company Survey

The objective of this survey is to understand the impact that working with companies who have received funding through the By Design grant, has had on the businesses that have supported them i.e. the support agencies.

1. Support agency name:
2. Nature of support your agency/business provided:
3. What year was the support agency/business established?
4. In your estimation, as a result of working with companies funded through the By Design grant, to what extent do you agree with the following: [Decreased considerably - Increased considerably]
   Your company’s employment has:
   Your company’s sales turnover has:
   Your company’s profitability has:
   Your company’s exports have:
   Your company’s awareness of design has:
   Your company’s investment in design has:
5. How did you find the experience of engaging with companies through the By Design grant?
   Extremely satisfied
   Moderately satisfied
   Slightly satisfied
   Neither satisfied nor dissatisfied
   Slightly dissatisfied
   Moderately dissatisfied
   Extremely dissatisfied
6. Did you continue to collaborate with the companies you supported?
7. If yes, what percentage of the companies have you collaborated with further
8. Did working with the companies result in any follow-on business from other companies?
9. Did engaging with companies through the By Design grant lead to further training and development of your staff capabilities?
10. Did engaging with companies through the By Design grant lead to the increased use of technology in your working practice?
11. Did engaging with companies through the By Design grant lead to improved relationship and network building for your agency?
12. Can you please describe any positive impacts that you have had from the experience of engaging with companies through the By Design grant?
13. Can you please describe any negative impacts that you have had from the experience of engaging with companies through the By Design grant?
The By Design grant takes the risk out of the first investment in design for businesses and provides the opportunity to work on a range of services that can contribute to the development of new and improved product, services, and business processes. Significant knowledge transfer takes place during the By Design grant process. This is evident in a broader understanding of design for participant companies, increased practice and investment in design after the grant process, and a greater desire to engage with design in the future. This poster provides a snapshot of findings from the ongoing project. The final report will be published in September.

**Impact on Business Performance**

- **64%** launched a new product or service
- **56%** improved a product, service or process
- **41%** increased their competitiveness
- **39%** generated additional sales
- **30%** generated additional profits
- **27%** entered new markets

**Total estimated value of cumulative sales on average per company in 3 years as a result of By Design.** £240,000

**Impact on Business Practice & Culture**

- **75%** increased awareness of design
- **71%** increased investment in design

**Average amount invested in design since the By Design grant.** £26,000

**Further Collaboration**

- **68%** of companies collaborated further with the design agency.
- **97%** of companies are more likely to engage with additional Business Gateway or SE services, as a result of By Design.
Contact

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