



**D-FACTO**

Leonardo Da Vinci

ES/09/LLP-LdV/TOI/149040

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## **D-FACTO Survey Results Analysis Report**

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## **EXECUTIVE SUMMARY**

This document contains Survey Results Analysis Report for the D-FACTO project. The objective of the report is to present the results of the survey carried out in project partner countries in Spring 2010. The analysis of the results presented in this document is to help in designing learning materials and methodology on emotional and accessible design. The analysis suggests that in the project a high emphasis should be placed on awareness raising and provision of basic knowledge on design for accessibility and emotion.

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## 1 INTRODUCTION

The D-FACTO survey was carried out using the Methodological framework and research tools developed in WP2.

As suggested in the Methodological framework, the aims of the survey were:

- To ascertain whether the responding companies make use of emotional design
- To identify reasons why the responding companies do/do not make use of emotional design
- To identify and classify methods or tools the responding companies use in emotional design
- To compare SMEs from different EU nations on their understanding of emotional design
- To determine whether the individual respondent appreciates emotional design in products
- To identify companies with an interest in training or participation in research
- To determine how any potential training should be delivered.

The Methodological framework suggested that the partners would aim to collect 20 questionnaires in each participating country (Cyprus, Ireland, Lithuania, Slovenia, Spain, UK), and would collect further data through structured interviews (5 per country). An online survey tool was developed using Google Docs, providing an opportunity to collect data online. Questionnaires in English, Spanish and Lithuanian were made available online. Some partners preferred to use this tool, the others sent out the questionnaires by e-mail. In many cases follow-up e-mails, telephone calls and/ or face-to-face meetings were necessary in order to try to increase the rate of participation in the survey.

As a result of partners' efforts, 92 questionnaires were collected: 15 in Cyprus, 25 in Ireland, 24 in Lithuania, 2 in Slovenia, 20 in Spain and 6 in the UK. The lower numbers of questionnaires from some partner countries are based on a number of reasons, including an assumption that emotional design is only important for manufacturers of consumer goods, limited interest in the survey and limited understanding of the subjects addressed, peculiarities of local culture – function versus design – and thus low interest in participating in the survey (in Slovenia), etc. This will be considered in further implementation of the project, placing more emphasis on dissemination and awareness building.

## 2 SURVEY RESULTS

This section presents the questions asked in the survey and the analysis of the responses received.

### 2.1 Business area and size

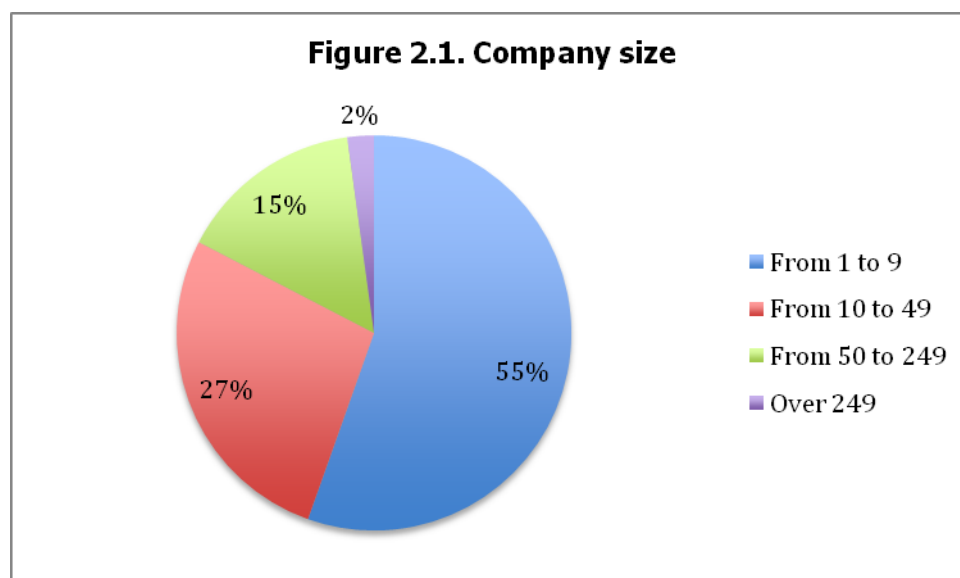
#### 2.1.1 Can you briefly describe the company's products?

The companies that took part in the survey came from the following business sectors:

- Manufacturing (furniture, food, porcelain, textiles, lasers, medical products, plastics, etc.) (19)
- Design (broad profile) (15)
- Web design, multimedia services (11)
- Research, consulting, training, business and technical support (11)
- Wholesale, retail, distribution (cosmetics, pharmaceuticals, computers, etc.) (7)
- Architecture and engineering (6)
- Tourism: accommodation providers, travel agencies (4)
- IT solutions (4)
- Advertising, publishing (2)
- Construction and real estate (2)
- Wellness and beauty services (2)
- Financial and accounting services (2)
- Packaging (1)
- Facilities management (1)
- Language courses (1)
- Other/ not specified (4)

#### 2.1.2 How many people does the company employ?

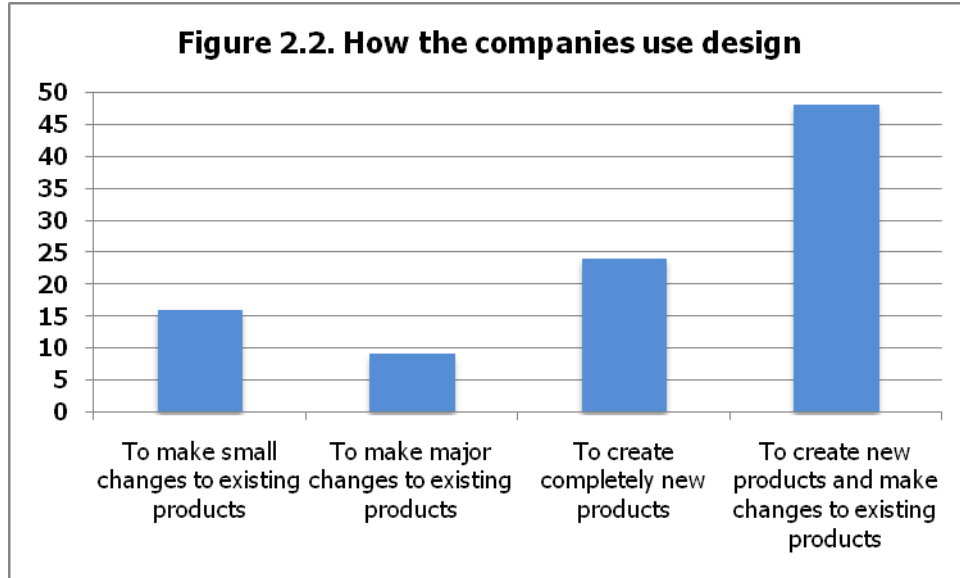
The majority of respondent companies are SMEs, more than half of them – micro companies with up to 9 employees. Average size of respondent's company is 29 employees.



**2.2 How does your company design its products?**

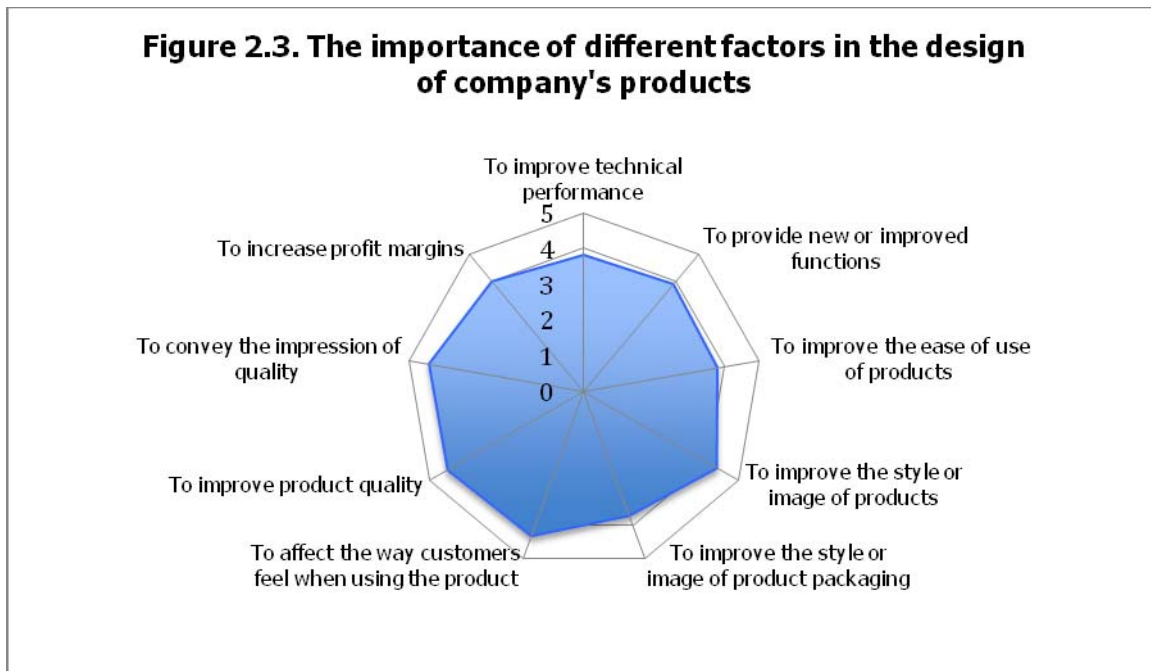
2.2.1 Which of these best describes how the company uses design?

More than half of the companies that took part in the survey claim that they use design both to create new products and make changes to existing products.



2.2.2 Rate the importance of each of these factors in the design of your company's products.

The figure below shows the average importance of different factors in designing companies' products and services. The respondents had to evaluate the importance on the scale from 1 to 5, 5 being the highest.



Although the improvement of quality, conveying the impression of quality, affecting the way customers feel when using the product and improving the style and image of product

## Analysis Report

scored highest, in general there is no big difference among the importance of different factors – all of them seemed important to the respondents.

### 2.2.3 Considering customers' feelings in the design of products

Most companies agree that it's worth taking customers feelings into consideration while designing products and services but about 20% think that it is too difficult to measure and 9% say it's too expensive. The distribution of responses is shown in figure 2.4 below. This was a multiple-choice question.



### 2.2.4 What tools does the company use to analyse customer requirements?

More than half of respondents use customer interviews and surveys in order to analyse customer requirements. About 25% rely on market, trends, competitor analysis and benchmarking, while almost the same number of companies use user/ customer observation and analysis. Brainstorming is also quite popular (18%). Most companies indicated more than 1 method of analysis, and only 3 said they didn't use any tools.

The respondents indicated the following tools:

- Customer interviews and surveys (54 respondents)
- Market, trends, competitor analysis, benchmarking (24)
- User/customer observation and analysis (22)
- Brainstorming (17)
- Focus groups (10)
- Customer feedback/ satisfaction surveys (6)
- Conferences and trade shows, exhibitions (6)
- Interviews with suppliers (4)
- Field testing (4)
- Prototyping (2)
- Sales analysis (1)
- Quality Function Deployment (1)
- Post project reviews (1)
- Social media (1)
- Awareness, usage and attitude surveys (1)
- Brand image surveys (1)



- Psychographic segmentation surveys (1)
- Shopping Habits & Purchasing Behaviour Surveys (1)
- Omnibus Surveys (1)
- Panel Surveys (1)
- Discussions with business support organizations and Government depts. (1)
- Common sense (1)
- None (3)

## 2.3 Emotional design

### 2.3.1 Have you ever heard of the term 'emotional design'?

51% of respondents said "yes".

### 2.3.2 How would you define 'emotional design'?

We received 73 definitions of emotional design, most from the companies that stated they have heard of emotional design but also some from those that haven't heard of the term before – they still described it according to their understanding.

Some definitions are presented below:

*"Designing a product that engages the user. Making the product faster; better; smarter than the others."*

*"Taking human emotion and carrying it into the world of design"*

*"The process of making your customers desire your product"*

*"To generate an emotional response from our customers about our products or services and so build a relationship"*

*"Search within the most inaccessible. That is the key to understanding customer needs. In short, valuing the intangible, the emotions we have. It is difficult to extract or define, but when we identify these emotions, success is assured."*

*"A customer centred design with a consideration of the customers needs and preferences"*

*"Feelings that cause the products and causes you to buy or not"*

*"It's how customers feel about our products"*

*"Creation of emotional bond between the product and its future users"*

*"Building in a wow factor into the product service offering; stimulating engagement"*

*"Form beyond function"*

### 2.3.3 Which emotions would you like your users to experience when using your products?

The respondents have listed a number of positive emotions desired from the users, partly depending on the type of products their businesses offer:

- Satisfaction

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- Pleasure
- Happiness
- Trust
- Confidence
- Quality
- Comfort
- Joy
- Excitement
- Love
- Pride
- WOW!
- ...

Only 2 respondents haven't/ couldn't answer this question. Although almost half of the respondents were not familiar with the concept of emotional design, they could quite easily identify the emotions their products should be related to.

### 2.3.4 What methods does your company use to incorporate customers' feelings into the design process?

63% of respondents do not use any methods to incorporate customers' feelings into the design process, 15% talk to their clients and analyse their needs. 7% of respondents use Quality Function Deployment. The other methods that are used by 1-2 respondent companies include:

- Kansei
- KJ analysis
- KPIs
- Easibind QUEMS
- UCD
- Usability testing
- Design reviews
- Research
- Intuition and experience
- Other own methods

### 2.3.5 Give an example of a product, which is designed with consideration of the customer's Feelings.

A number of well-known products were listed here, Apple products being the most popular

- Apple (iPhone, iPad)
- Google
- Ikea products
- Global knives
- Harley Davidson
- McDonalds
- Bugaboo
- Etc.

Some respondents assumed that they were asked to give an example of their own product; and some country/region specific examples were provided:

- Bokomo Cereal Range
- Carrera y carrera
- Medianell Virtual Press
- "Solan de Cabras" bottle
- Extremadura Claim
- Metro magazine chair
- Etc.

In general, most respondents were able to think of a product or several products, which were designed with consideration of the customer's Feelings.

### 2.3.6 How does considering the customer's feelings affect the product's success?

Most respondents agreed that considering customer's feelings has a positive influence on product's success. More specifically, 38% of respondents believe that considering feelings is extremely important, and less than 2% think it has little importance. Here are selected opinions on how product success is affected by emotional design:

"It's one of the factors that lead to successful product"

"It is very important for better or for worse"

"The perfect thing is to combine the client's feelings with the economic value of the product, but this is very difficult"

"Strengthens customer loyalty and forms long term revenue streams with existing customers"

"If customers love a product or experience they will return and tell their friends. There is no better metric for a small business"

"If a product endears itself to consumers through its use of functionality, beauty and imagination it becomes a status item/desirable by the masses"

"Increase sales due to USP and greater margins as people are willing to pay extra for that something special"

"100%. My customers feelings are key to my success"

"It's very important. All we do, all we think about, all we want is related to feelings"

"We believe that caring for customer's feelings is very important, if we care for their feelings they will care for our products"

## 2.4 Support and training

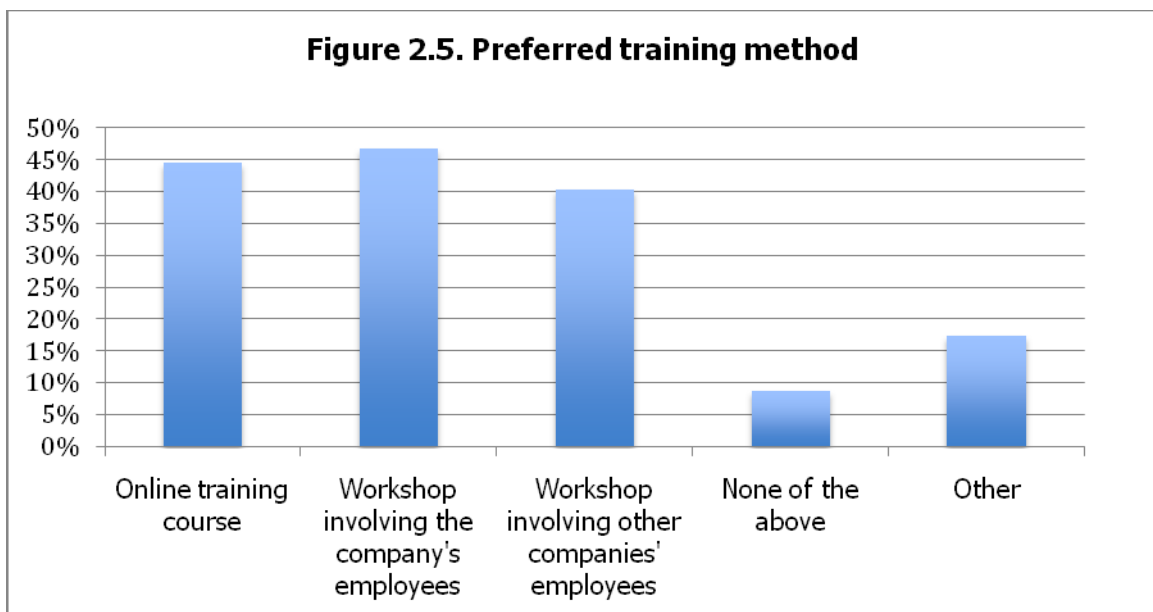
2.4.1 Some companies, such as Alessi, Apple and IKEA owe much of their success to emotional design. Is your company interested in the commercial benefits of emotional design? If so, why?

74% of respondents are interested in the benefits of emotional design, 8% are not interested, and 18% were not sure or didn't answer this question.

The main reasons for interest is the belief that emotional design could increase sales and profit by increasing customer satisfaction and loyalty.

There were some regional differences in regard to this question. Most companies from Spain, Ireland and Cyprus (80, 80 and 93%) were very interested in emotional design, while 38% of Lithuanian companies were not sure about it and only 45% provided a positive answer.

2.4.2 Which of the following would help your company to consider emotional design?



All 3 training options received almost the same number of votes, workshop involving the company's employees being slightly more popular. Some respondents marked several answers. Again, there are regional differences observed in the preferred way of training:

- The Spanish companies would prefer online training (55%) or workshop involving other companies' employees (45%),
- The Irish companies would like online training (52%) or workshop involving company's employees (56%),
- The Slovenian companies like online training and workshop involving company's employees equally,

- The Lithuanian companies don't give much preference to either online training (38%), workshop involving company's employees (41%) or workshop involving other companies' employees (50%),
- The Cyprus companies would like a workshop – either with company's employees (87%) or with other companies' employees (67%).

### 2.4.3 How do you like any training to be delivered?

There were 5 features of training/ training methodology to be evaluated:

- Easy access to training material
- Access and exposure to industrial cases
- Problem based learning and exercises
- Engaging with fellow participants
- Best practice tools and checklists

After summing up the responses and evaluating the average importance given to each of the features listed above, we can conclude that all 5 features are important, easy access to training material and engaging with fellow participants being slightly more important than the rest.

If we look at the features that the respondents marked as most important, i.e. gave 1 out of 3 (1-most important, 3 – least important) to a certain feature, easy access to training material is still leading but it is followed by access and exposure to industrial cases.

### 2.4.4 Do you have any other comments or observations?

There were only a few additional comments received. However, it's worth mentioning that the most usual comment was that emotional design is an interesting area and it would be good to get more information about it:

"It is a very interesting field and undervalued"

"I think that the area of emotional design is an extremely interesting as it can get to the root causes as to why some products are a success and others fail"

"Design for emotion is what we need! We'll be waiting for training"

"What is the date of the workshop?"

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### 3 CONCLUSIONS

The survey showed that companies in partner countries (Spain, Ireland, UK, Slovenia, Lithuania, Cyprus) do not have much knowledge about emotional design but they are willing to learn. Even those that haven't heard about this concept before believe that considering customers feelings in product design is beneficial.

There are some regional differences in regard to familiarity with the concept of emotional design and belief in its value. Spanish and Irish companies seem to be most familiar with it, the Lithuanian companies have more doubts whether emotional design would bring any commercial benefit. Absolute majority of Cypriot and Lithuanian companies do not use any methods to incorporate customers' feelings in the design process, while about half respondents from the UK, Spain and Ireland claimed they had certain methods in use. The Slovenian companies that took part in the survey have incorporated customers' feelings in their design process.

There was no strong preference for one training method over another expressed: online training or workshop would both be acceptable. The respondents would be happy if training material was easily accessible and training would include access to industrial cases. They would also like to engage with fellow participants and would appreciate problem based learning and exercises, and best practice tools and checklists.

We'd like to make a conclusion that there will be a demand for training on design for accessibility and emotion; the training material should include basic information explaining the concept as it is still not familiar in many SMEs; there should be an emphasis on awareness building and development of basic understanding and skills.

#### **4 APPENDIX – SAMPLE COVER LETTER AND QUESTIONNAIRE**

Dear xxx,

We are currently working on a project funded by the European Commission in the area of design for emotion and accessibility in SMEs.

The goal of our project is to better understand the attitude towards design for emotion and accessibility in a sample of European SMEs. We hope to determine whether the responding companies make use of emotional design, the perceived benefits of emotionally designed products and the methods or tools used in emotional design. We would also like to identify companies with an interest in training and determine how any potential training should be delivered.

We would be most grateful if you would help us with our research.

In order to gather some relevant data we would be grateful if you would complete a short survey. This survey should take roughly 10 minutes to complete.

Many thanks for your help and support,

The D-FACTO Team

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**The following questions are about the company you work in.**

1. What is the name of the company? \_\_\_\_\_

2. Can you briefly describe the company's products?

\_\_\_\_\_

\_\_\_\_\_

3. How many people does the company employ? \_\_\_\_\_

**The following questions relate to how the company designs its product.**

4. Which of these best describes how the company uses design?

- To make small changes to existing products
- To make major changes to existing products
- To create completely new products
- To create new products and make changes to existing products

5. Rate the importance of each of these factors in the design of your company's products.

|   | not important.....very important |   |   |   |   |
|---|----------------------------------|---|---|---|---|
|   | 1                                | 2 | 3 | 4 | 5 |
| To improve technical performance                        | 1                                | 2 | 3 | 4 | 5 |
| To provide new or improved functions                    | 1                                | 2 | 3 | 4 | 5 |
| To improve the ease of use of products                  | 1                                | 2 | 3 | 4 | 5 |
| To improve the style or image of products               | 1                                | 2 | 3 | 4 | 5 |
| To improve the style or image of product packaging      | 1                                | 2 | 3 | 4 | 5 |
| To affect the way customers feel when using the product | 1                                | 2 | 3 | 4 | 5 |
| To improve product quality                              | 1                                | 2 | 3 | 4 | 5 |
| To convey the impression of quality                     | 1                                | 2 | 3 | 4 | 5 |
| To increase profit margins                              | 1                                | 2 | 3 | 4 | 5 |



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6. Considering customers' feelings in the design of products is (tick as many as are appropriate)

- A good business strategy
- Not worth the effort
- Helps to build customer loyalty
- Too expensive
- A good way to attract new customers
- Too difficult to measure

7. What tools does the company use to analyse customer requirements? (e.g. user observation, customer interviews, focus groups, brainstorming...)

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**The following questions are about designing products according to how they make customers feel.**

8. Have you ever heard of the term 'emotional design'?

- Yes
- No

9. How would you define 'emotional design'? \_\_\_\_\_

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10. Which emotions would you like your users to experience when using your products?

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11. What methods does your company use to incorporate customers' feelings into the design process? (e.g. QFD, Kansei)

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12. Give an example of a product which is designed with consideration of the customer's Feelings.

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13. How does considering the customer's feelings affect the product's success?

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**The following questions are about support and training.**

14. Some companies, such as Alessi, Apple and IKEA owe much of their success to emotional design. Is your company interested in the commercial benefits of emotional design? If so, why?

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15. Which of the following would help your company to consider emotional design?

- |   |                          |
|---|--------------------------|
| Online training course                        | <input type="checkbox"/> |
| Workshop involving the company's employees    | <input type="checkbox"/> |
| Workshop involving other companies' employees | <input type="checkbox"/> |
| None of the above                             | <input type="checkbox"/> |

Other (please specify) \_\_\_\_\_

16. How you like any training to be delivered? Please rank the list below where 1 is most important, 2 is second most important and 3 is third most important.

- |   |                          |
|---|--------------------------|
| Easy access to training material        | <input type="checkbox"/> |
| Access and exposure to industrial cases | <input type="checkbox"/> |
| Problem based learning and exercises    | <input type="checkbox"/> |
| Engaging with fellow participants       | <input type="checkbox"/> |
| Best practice tools and checklists      | <input type="checkbox"/> |

17. Do you have any other comments or observations?

Many thanks for your help.