

### **D-FACTO**

Leonardo Da Vinci ES/09/LLP-LdV/TOI/149040

# **R13 Validation and Testing Report**

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#### **DOCUMENT HISTORY**

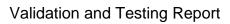
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02		
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#### **EXECUTIVE SUMMARY**

The aim of this document is to give information about the results of the D-FACTO Platform Pilot test, carried out with representatives of the target public, i.e. engineers designers and R&D staff of European SMEs in the participating regions.

The goal of this report is to detect faults and possible improvements in the materials, contents, tools and support system. The aim of this report is also to correct detected deficiencies and incorporate the indicated improvements. The assessment and validation allow content improvement of the self-learning system as well as the functionality and friendliness of the system itself, as it assesses its implementation.





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#### 1 Introduction

Emotional engineering can reliably guide the design of a product according to the perceptions, satisfaction and consumer needs by ensuring the success of the product. This methodology can help to strengthen the brand image of a corporation and is set to become a very important key to future business success.

D-facto aims to facilitate the integration of aspects of emotional and accessible design into the products and services of European SMEs. This is realized by providing the engineers designers and R&D staff, i.e. those involved in the processes of conceptualization and design of products and services, with the competences and skills to integrate emotional and/or accessible design principles into these products and services.

For that purpose D-facto Project has developed a self-learning platform, which integrates learning contents in the field of emotional and accessible design and will provide access to tools, case studies and relevant complementary information.

In this report, we include the results of the assessment carried out by representatives of target public, describing the strengths and weaknesses of the self-learning system D-FACTO. It also indicates which improvements must be implemented in the system.



#### 2 D-FACTO PLATFORM

The D-Facto Platform can be accessible from the project website, under the "development" part:



Once user clicks the link, access the platform:





#### Validation and Testing Report

Platform navigation is very intuitive and simple. Creativity and design are usually not linear processes. Ideas come from different sources, exploring different aspects of a product, one aspect giving birth to a completely different view. This nonlinear thinking represents the basics behind the idea of content navigation.

All of the **content** is represented by tags. Tags are keywords, a concise conceptualization of the content. By selecting the tags, we are narrowing the content of our interest. When first tag is selected, all documents containing this tag are shown in the list, while the documents without the selected tag are no longer shown. We have narrowed the scope of the content to only the requested concept.

When another tag is selected, the results are refined even further, showing only the content with both tags, meaning, that we have refined the selection to selected two concepts. The process of refinement can continue as long as we need.

But narrowing the results is only one part. We can remove already selected tag and new tags appear and selection can continue in another direction by adding or removing concepts.

This selection process maps the thinking process behind the exploration of new ideas, aspects and views during design of a new product.

#### 2.1. How to start?

There are three starting points in the platform:

- Case studies
- Learning materials
- Supporting materials

The links to these starting points are shown on the left side of the site. All the other tags are shown in the TAGS section after selection.

#### 2.2 Searching

Tag navigation can be used to explore the content. However, when the user already knows the items of interest, results can be easily obtained by using <u>search</u> form at the upper left corner of the site.

#### 2.3 Rating

Each content has a rating possibility. This ratings can be used to identify the quality or usefulness of the content.



#### 2.4 Adding Content

Only registered users are able to add content. We encourage all to share their knowledge of the subject using our platform, so, please, use the <u>registration form</u>. Once registered, the site administrator will confirm your registration and you will receive the e-mail with further login instructions.

Once registered, a new link **Add content** will appear in the left side. By using the link, a form for adding content will appear. Use **Save** button to store your information in the system.

**Note** that in order for your content to appear during the materials, at least one of the main tags **case study**, **learning material** or **support material** has to be used for first step of categorization.

Note, that your content might not appear immediately between the search results. This is due to periodic index update process. However, the content will be available for tag navigation immediately.

#### 2.5 Using ePUB

For off-line browsing of content or for use on mobile devices, ePubs are created and available on the following <u>link</u>. Epubs are created periodically from the content.

In order to see the ePub on the mobile device, you need appropriate application.

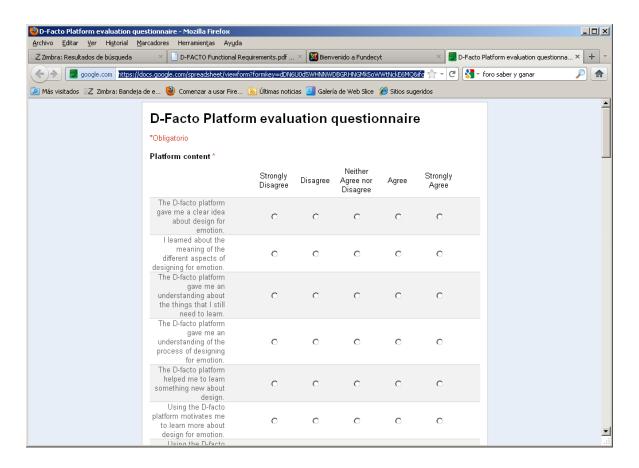
- On the **Android** one of such applications is <u>FBReader</u>.
- On the **iOS** devices you can use preinstalled **iBooks** application.



#### 3 PLATFORM VALIDATION

This questionnaire was uploaded on a website through a google application. Then users were invited to test the platform and fill in the validation questionnaires (the completed version is annexed in this report):

https://docs.google.com/spreadsheet/viewform?formkey=dDN6U0d5WHNNWDBGRHNGMk5oWWtNckE6MQ&ifq



All partners participated in this task; therefore the platform has been tested by representatives of target public of the project in the different countries participating in the project (Spain, Ireland, Slovenia, United Kingdom, Cyprus and Lithuania).

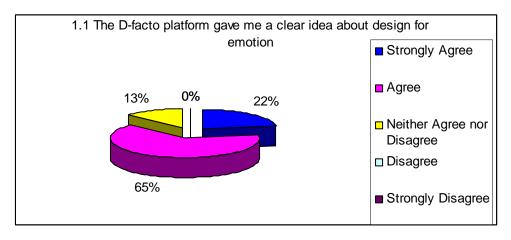
A total of 76 responses have been collected during the testing phase. The questionnaire was structured in several parts:

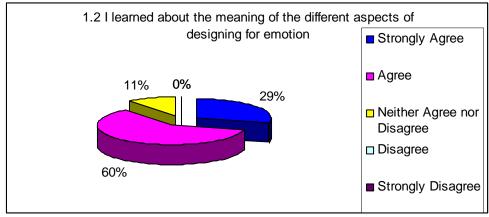
- 1.- Platform Content
- 2.- Usability
- 3.- Coverage
- 4.- Type of platform
- 5.- Background information of the participant

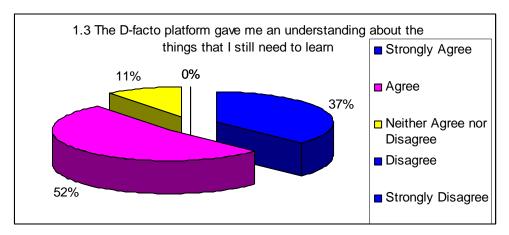


Below are represented the survey result question by question:

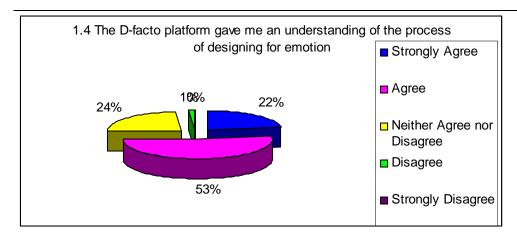
#### 1.- Platform Content

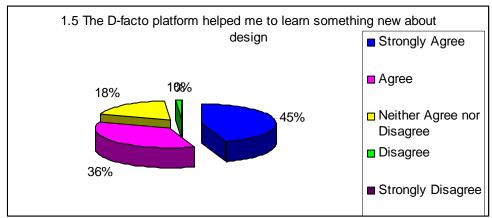


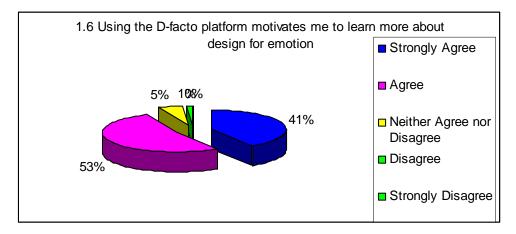




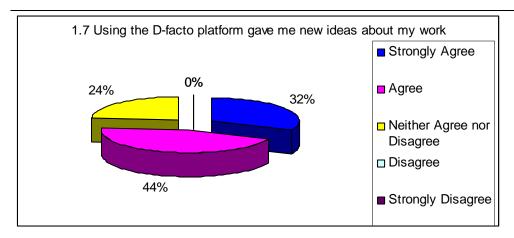


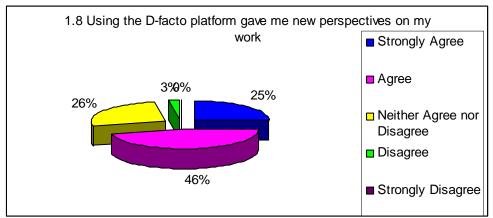


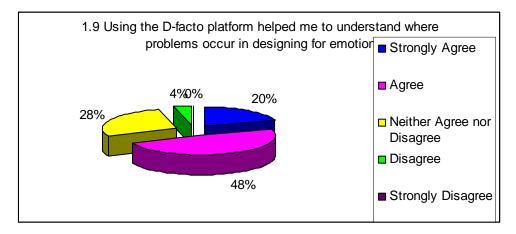




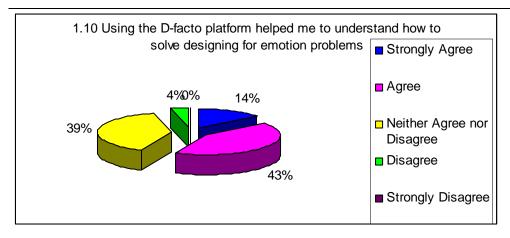




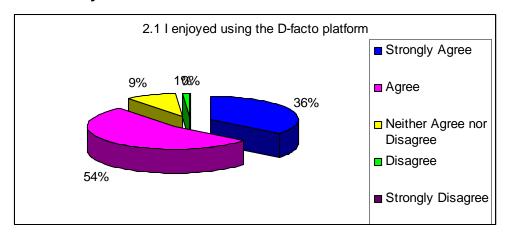


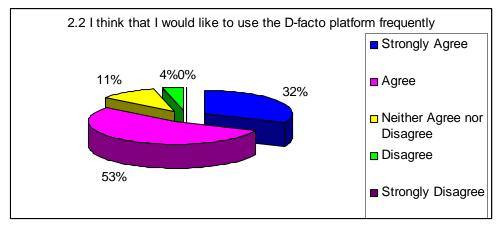




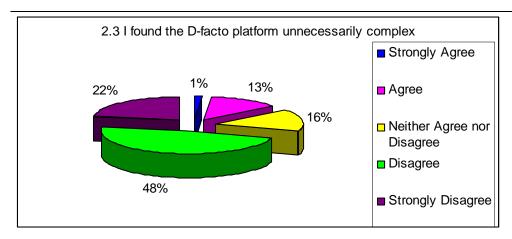


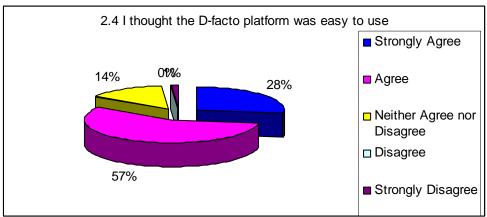
#### 2.- Usability

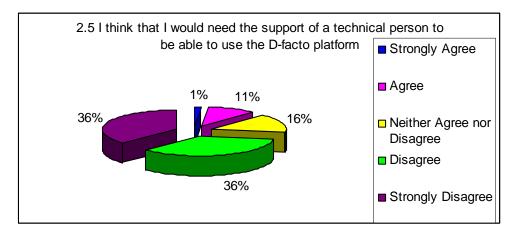




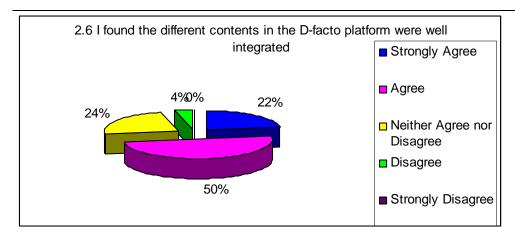


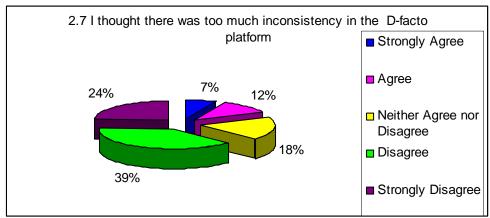


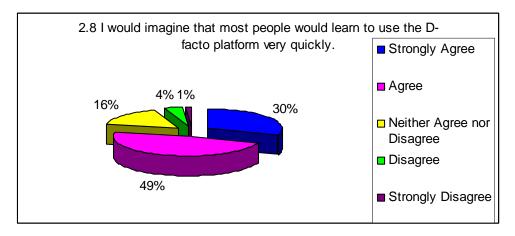




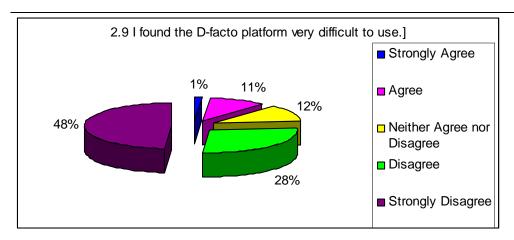


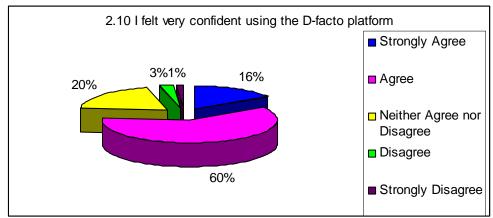


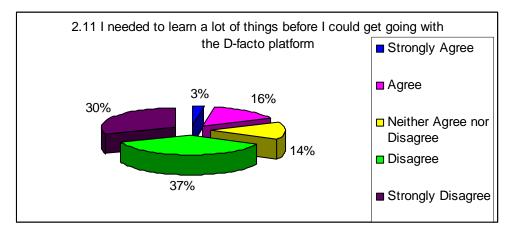




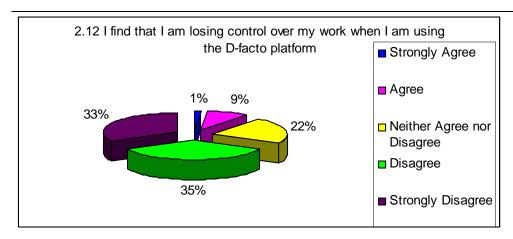


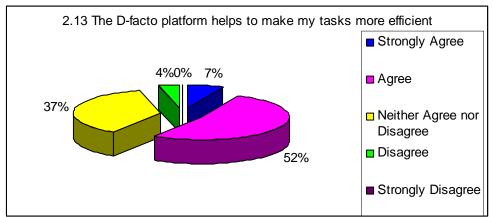


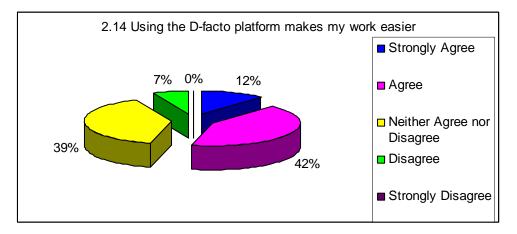






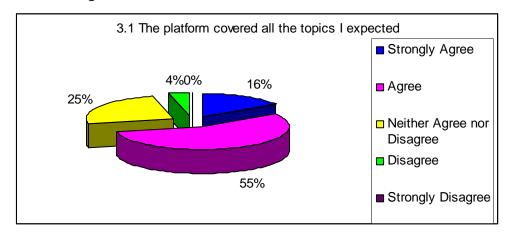


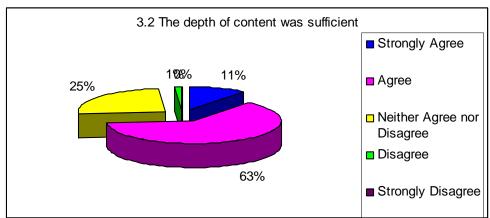


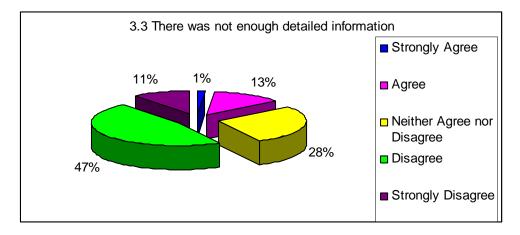




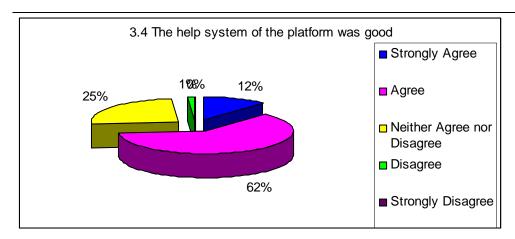
#### 3.- Coverage

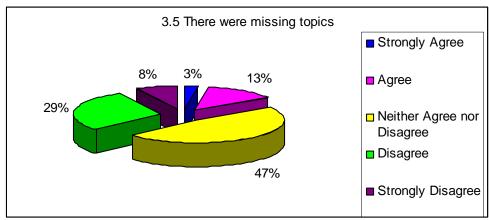


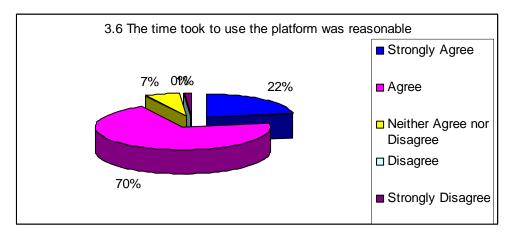




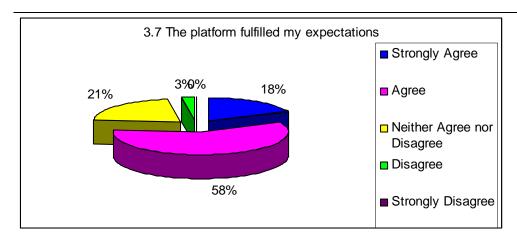


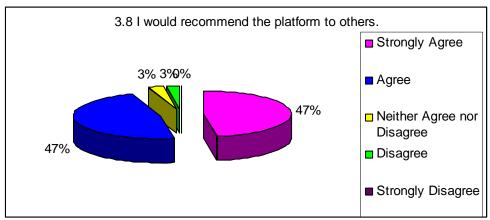




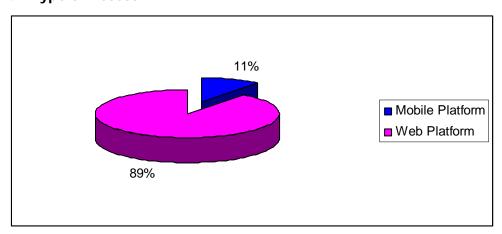








#### 4.- Type of Access





#### 4 CONCLUSIONS

In general terms, we could say that the D-FACTO Platform has been evaluated by potential users that tested the platform in a very positive way.

To consider a positive answer we have add results "Strongly Agree" and "Agree", and we have considered a "Neither Agree nor Disagree" answer a negative one.

Most of users tested the Web version of the Platform, only a 11 % tested the mobile version.

Regarding the **Contents** in D-FACTO Platform, we can conclude that the contents are useful and have met the needs of users. In general terms, users agree that the platform gave them a clear idea about design for emotion (87%) and they declared to learn about the meaning of the different aspects of designing for emotion (89%), on the other hand, platform gave them an understanding about the things that they still need to learn (89%). Regarding the process of designing for emotion, users declared to get a clear understanding through the platform (75%) and helped them to learn something new about design.

Related to the applicability of concepts in the work, in a 76 % of users gave new ideas about their work, a 71 % of users declared that the platform gave new perspective on their work, and finally in a 76 % of users the platform helped to understand where the problems occur in designing.

We highlight that in a 94 % of users, platform motivates to learn more about design for emotion, and on the other hand we have that only the 57 % of users declared that the platform helped to understand how to solve designing for emotion problems.

Related to the Platform **Usability**, we can confirm that the platform is really easy to use; quick to learn and the navigation is friendly and funny. They consider that it isn't necessary extra support to use it and quick to understand. 90% of testers declared to have enjoyed using the platform, and 85 % would like to use the platform frequently. In general terms users think that platform is easy to use (85%), without any complexity (70%) and they wouldn't need any support to be able to use it (88%). Users found contents well integrated into the platform (72%) and without any inconsistency among them (81%). It is important to stand out that users don't need to learn a lot of things before I could get going with the D-facto platform (81%).

Regarding the **Coverage**, platform covered the topics users expected in a 71 % of testers, they consider that depth of content was sufficient (85%) and that the information was detailed enough (75%), and in general terms the platform fulfilled their expectations (75%)

Related to the help system of the platform was well evaluated (74 %) and for that reason has been modified later.

Finally a 94 % of users would recommend the use of platform to others.



### Validation and Testing Report

## APPENDIX A.- QUESTIONNAIRE

#### **PLATFORM CONTENT**

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
• The D-facto platform gave me a clear idea about design for emotion.					
<ul> <li>I learned about the meaning of the different aspects of designing for emotion.</li> </ul>					
• The D-facto platform gave me an understanding about the things that I still need to learn.					
• The D-facto platform gave me an understanding of the process of designing for emotion.					
• The D-facto platform helped me to learn something new about design.					
<ul> <li>Using the D-facto platform motivates me to learn more about design for emotion.</li> </ul>					
<ul> <li>Using the D-facto platform gave me new ideas about my work.</li> </ul>					
<ul> <li>Using the D-facto platform gave me new perspectives on my work.</li> </ul>					
<ul> <li>Using the D-facto platform helped me to understand where problems occur in designing for emotion.</li> </ul>					
<ul> <li>Using the D-facto platform helped me to understand how to solve designing for emotion problems.</li> </ul>	′ 🗆				
USABILITY	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
I enjoyed using the D-facto platform.					
<ul> <li>I think that I would like to use the D-facto platform frequently.</li> </ul>					
I found the D-facto platform unnecessarily complex.					
• I thought the D-facto platform was easy to use.					
<ul> <li>I think that I would need the support of a technical person to be able to use the D-facto platform.</li> </ul>					
<ul> <li>I found the different contents in the D-facto platform were well integrated.</li> </ul>					
<ul> <li>I thought there was too much inconsistency in the D-facto platform.</li> </ul>					
<ul> <li>I would imagine that most people would learn to use the D-facto platform very quickly.</li> </ul>					
I found the D-facto platform very difficult to use.					
I felt very confident using the D-facto platform.					
<ul> <li>I needed to learn a lot of things before I could get going with the D-facto platform.</li> </ul>					
<ul> <li>I find that I am losing control over my work when I am using the D-facto platform.</li> </ul>	' <b></b>				



## Validation and Testing Report

The D-facto pla efficient.	atform helps to	make my tasks mor	е						
Using the D-facto platform makes my work easier.									
COVERAGE			Strongly Disagree		Neither Agree nor Disagree	Agree	Strongly Agree		
<ul><li>The platform cov</li><li>The depth of con</li></ul>	· ·	•							
• There was not en	There was not enough detailed information.								
• The help system	of the platform	was good.							
There were missi	ing topics.								
• The time took to									
<ul><li>The platform fulfilled my expectations.</li><li>I would recommend the platform to others.</li></ul>									
	ID INFORMAT								
Age <20	20-30	30-40 40-50	50-6	0					
Gender	☐ Female	☐ Male							
Education	□ school	□ college							
postgr	☐ undergradu raduate	uate - year	□ uni	versity d	legree		□		
Education or	n design								
No previous education	s education in de	esign 🖵 So	me design	education	<b>□</b> A	lot of d∈	sign		
Design Expe	rience								
☐ No previous experience	s experience in c	lesign   Some desi	gn experie	nce 🗖	A lot	of de	esign		
	ny other comment etc please write	nts about D-facto, the pethem here:	olatform, w	hat it was	like, criticisn	ns, or			
Thank you!				The D-facto Team					