

engage



designing for emotion

February 2006

New look engage news

Welcome to the new look Engage newsletter. The Engage project, now hosted by the Design and Emotion Society, is progressing Well. Tools and methods are being added to the file library, enabling knowledge to be shared and increasing numbers of people from all over Europe and beyond are using the forum to discuss design, emotion and to pose questions.

The contents of this newsletter remains faithful to the original with the article offering up to date views and information on aspects relating to engage and designing for emotions. The events calendar also remains, and is checked and updated for every edition. However, if you feel we have missed an event or you would like to bring some news to everyone's attention please feel free to contact us using the e-mail below.

We hope you enjoy reading engage news ,

To contact engage news - j.d.mason@lboro.ac.uk



Front page Alberto Mantilla's Hug,
salt and pepper set

Open event 3 Early details and a date for
your diary

Article Results from the engage project

Dott07 Programme of design promotion

Events Calendar

This month...

engage open event 3

The third Engage open event will be held in the Ingvar Kamprad Design Centre at Lund University in Sweden on 25th September 2006. This has been organised in coordination with the 5th Design and Emotion conference (27-29 September) which is held at Chalmers University in Gothenburg.

The event will feature lectures and presentations of case studies where methods and tools for designing for emotions have been applied. Admission is free and the programme will be published soon, along with the procedure for reserving your seats.



The industrial context of affective design

Products that we prefer to buy today compete for our attention at a subjective level of emotional appeal or affect, beyond just functionality and usability. Designing for appeal or affect is the domain of interest of the ENGAGE co-ordination action. Its funded activities are organised into work packages. The main part of the second work package (WP2) has recently been completed. Its purpose has been to identify the needs for affective design tools and methods of people in industry who develop new products. This article reports on how that has been achieved and what are the results. The results will enable the champions of affective tools and methods to target where their tools and methods may be useful. They will also help to assess where there are currently gaps in support for affective design.

The ENGAGE consortium members with a main role in WP2 have had both academic and industry backgrounds. Academics from the University of Leeds have had research knowledge of new product development (NPD) processes in the mechanical engineering sector. Industry practitioners and researchers from Electrolux, Philips, Procter & Gamble and Volvo have contributed their views from experience of the home electrical and electronic, fast moving consumer goods and automotive industry sectors (though these have been at a personal and not a company-endorsed level). Their activities have been in two phases. Firstly a framework has been created within which affective aspects of NPD processes may commonly be described. Then affective needs have been positioned within that framework.

Early results from the  **engage**
project by Vassilis Agouridas and Tom Childs



Creating a framework

The starting point was the assumption from mechanical engineering functional design experience that a NPD process can be described as a series of stages, one after the other. A 10-stage process was drawn up, based on previous functional design research. Industrial practitioners were asked, using a questionnaire, to place their own affective design activities within those stages and to try and reduce the number of stages for affective NPD. They were also asked to provide comments on the original assumption. The conclusion was that 6-stages would suffice for affective NPD purposes but one a unidirectional process was a false view of what actually happens. Development usually included iterations between stages and empiricism (Figure 1).

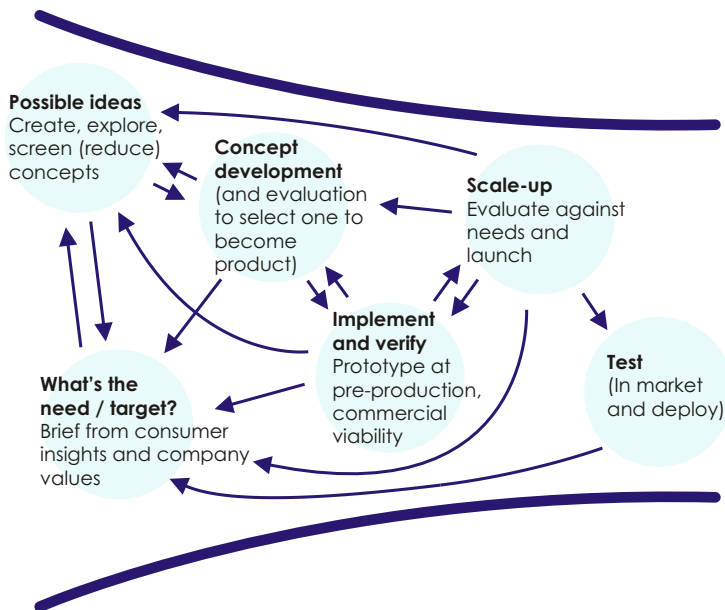


Figure 1. The 6 stages of Figure 2, recognising iteration and learning by doing

Functional design theory states that at least high-level requirements are defined before concepts are generated; however, the view from WP2 is that main affective requirements emerge as part of exploration of concepts. Therefore, there is a fundamental difference between the functional and affective methods of creativity in design.

Iteration (Figure 1) is certainly an inherent aspect of affective NPD in its first two "target" and "ideate" stages, and possibly in its third "develop" stage too. But thereafter iteration may arise more from the lack of appropriate affective tools and methods than from the nature of affective design itself. Iterations are time consuming and expensive; they are even more so the nearer the NPD process is to market.

Clarifying the nature of affective design systems, sorting out essential from avoidable iteration, and pinpointing key areas that need improved tools and methods, may be future achievements stemming from the framework presented here. But this article now advances to reporting the affective needs that have emerged from the second stage of WP2's



Affective Design Needs

In-depth interviews between the academic partner in WP2 and individual company personnel were the means of gathering information for this section. Affective needs may be described under three headings, formative, decision taking and communication needs.

Ideation stage

Needs are for tools and methods, qualitative and quantitative, to support concept generation. This includes scenario development, how to surprise customers in line with a product brief and the translation from product brief to product affective concepts and requirements that include brand and customer values.

Development stage

Needs are for detailed and time-efficient product feature / emotional reaction translation tools and methods, that are also able to balance affective constraints against engineering and manufacturing constraints.

Subsequent stages

The need increases to maintain affective qualities in the face of manufacturing and commercial pressures.

Figure 2 is a grid (A1 to D6), of six stages by four levels of adventure into which affective tools could be placed according to their fitness-for-purpose. Dividing adventure into four levels is the result of interviewing staff from global companies that have a clear view of their company or brand values as well as of how their customers live. Other companies may regard brand as less important than customer value; in that case the four levels of adventure may reduce to just two, high and low. The ENGAGE project is keen to gain new industry members who may help it strengthen its views regarding this grid as to whether it is detailed enough for a useful affective classification of formative tools and methods.

Adventure level	1 Target	2 Ideate	3 Develop	4 Implement	5 Scale-up	6 Deploy
A Create new market	A1	A2	A3	A4	A5	A6
B Market gap identified	B1	B2	B3	B4	B5	B6
C Extend range	C1	C2	C3	C4	C5	C6
D Refresh product	D1	D2	D3	D4	D5	D6

Figure 2. Affective formation tools and methods matrix

Communication needs

Affective communication needs occur in and between companies. Our interviews found that product development teams felt a need for clearer communication of brand values from senior management; these managers also needed a clearer understanding of concepts to ensure that everyone is committed from the start.



More affective communication between designers and engineers was also an expressed need. External communications to other organisations, such as market researchers, design and advertising agencies or suppliers, was also seen as a problem. Affective intent needs to be sufficiently defined and allow value to be added through external expertise. These problems are due to lack of a common language between the different groups involved and to the immaturity of affective sciences. The need for collaborative development of affective design briefs has emerged.

Decision taking needs

Affective decision needs range from balancing the affective needs with constraints on a product's form and function to the verification and evaluation against the affective intentions.

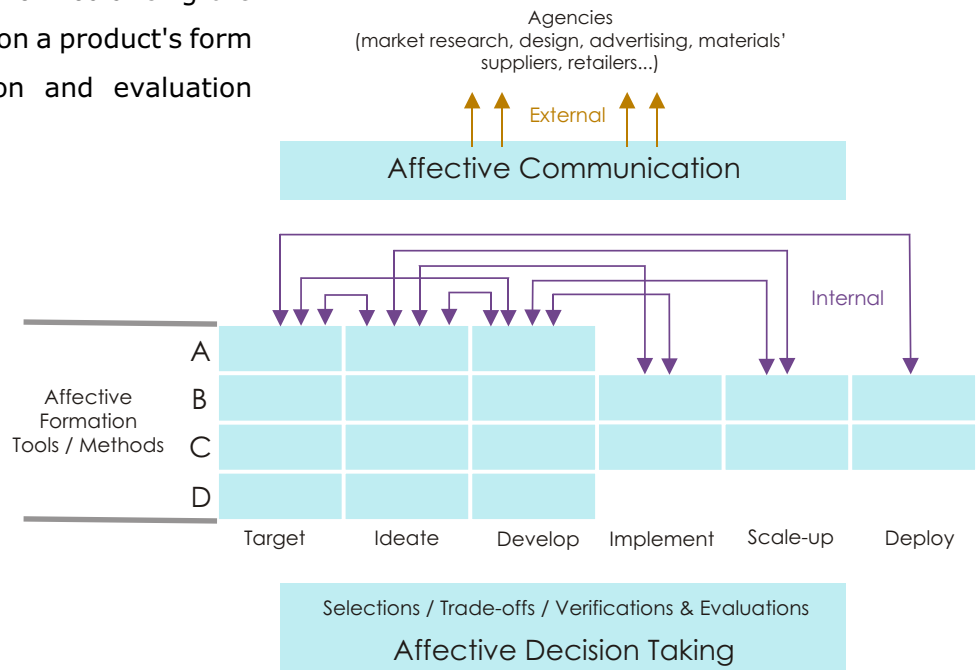
Figure 3 brings all the needs together into one diagram, and also reduces the number of grid elements of Figure 4 at the later stages of "implement" to "deploy". It can serve as the condensed output from WP2, around which the development of affective design needs and research can be discussed.

This article has been prepared by Vassilis Agouridas and Tom Childs, who would be pleased to hear from researchers and practitioners interested in the development of the ideas presented.

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Figure 3. Speculative scheme for a complete affective needs classification



dott07 is a programme in the North East of England that encourages designers, businesses and public service providers to engage with consumers and users. Through inclusive and participatory approaches to design the aim is to stimulate long term change and improve life.

www.dott07.com



dott07 is promoting this new approach to design and on their website you can find examples of how it has been applied to products and architecture. There you will also find details of how you can participate in this project.



Applied Ergonomics Conference 2006

6 - 9 March 2006

Location:

Lake Buena Vista (Orlando), Florida, United States

Website:

<http://www.appliedergo.org/conference/>

The 2006 Art Center Design Conference

23 - 26 March 2006

Location:

Pasadena, California

Website:

<http://www.artcenter.edu/designconference/>

1st International Conference on Happiness & Its Causes

12 April 2006

Location:

Sofitel Wentworth, Sydney, Australia

Website:

<http://www.terrapinn.com/2006/happiness/>

Ergonomics Society Annual Conference 2006

4 - 6 April 2006

Location:

Robinson College, Cambridge

Website:

<http://www.ergonomics.org.uk/events/AC2006call.htm>

International Symposium on Intelligent Environments

5 - 7 April 2006

Location:

Homerton College, Cambridge

Website:

<http://research.microsoft.com/ero/iep/isie06.aspx>

Cambridge Workshop on Universal Access and Assistive Technology (CWUAAT)

10 - 12 April 2006

Location:

Fitzwilliam College, Cambridge, UK

Website:

<http://rehab-www.eng.cam.ac.uk/cwuaat/>



Events calendar



CHI 2006

22 - 27 April 2006

Location:

Montréal, Quebec, Canada

Website:

<http://www.chi2006.org/>

**Good Experience Live
(GEL 2006)**

4 - 6 May 2006

Location:

New York City, USA

Website:

<http://www.goodexperience.com/gel>

InnoTown

29 - 31 May 2006

Location:

Ålesund, Norway

Website:

<http://www.innotown.com/>

**9th International Design Conference:
Design 2006**

15 - 18 May 2006

Location:

Dubrovnik, Croatia

Website:

<http://www.designconference.fsb.hr/?>

**5th International conference for
interaction design and children**

7 - 9 June 2006

Location:

Tampere, Finland

Website:

<http://www.cs.uta.fi/idc2006/index.html>

**Usability Professionals' Association - UPA
2006**

12 - 16 June 2006

Location: Denver/Broomfield, Colorado

Website:

http://www.upassoc.org/conferences_and_events/upa_conference/2006/index.html

DIS2006

28-29 June 2006

Location:

State College, Pennsylvania, USA

Website:

<http://www.sigchi.org/dis2006/main.php?page=news>

**16th IEA Conference 2006 and Symposium
of ergonomic analysis of work activity and
training.**

10 - 14 July 2006

Location:

Maastricht, Netherlands

Website:

<http://www.iea2006.org>

**5th International Design and Emotion
Conference**

27 - 29 September 2006

Location:

Gothenburg, Sweden

Website:

<http://www.designandemotion.org>

London Design Festival

15 - 30 September 2006

Location:

London, UK

Website:

<http://www.londondesignfestival.com/>



**ICDVRAT 2006 - International
Conference Series on Disability, Virtual
Reality and Associated Technologies**

18 - 20 Spetember 2006

Location:

Musikhuset Esbjerg, Centre for the
Performing Arts and International
Conferences, Denmark

Website:

<http://www.icdvrat.reading.ac.uk/>

ICSID/IDSA CONNECTING '07

17 - 20 October 2006

Location:

San Francisco, USA

Website:

<http://www.idsa.org/icsid-idsa07/connecting.html>

**2nd International Conference On
Universal Design**

22 - 26 October 2006

Location:

Kyoto, Japan

Website:

<http://ud2006.iaud.net/>

**WonderGround 2006 Design Research
Society International Conference**

1-5 November 2006

Location:

Lisbon, Portugal

Website:

<http://www.iade.pt/drs2006/index.html>

World Creative Forum

2006 to be confirmed

Location:

to be confirmed

Website:

<http://www.worldcreativeforum.com/site.html>

The next newsletter will be
released later in

March

Please contact

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if you would like to add to engage
news.... perhaps you would like to
submit an article, promote a
project, book, website (etc) that
may be of interest to our members.

