Contents

4          Brand image concepting
12         Special Signatures
14         Margin specifications and minimum size
16         Application with a single colour
18         Colours
20         Official backgrounds
22         Behaviour on image backgrounds
24         Behaviour on coloured backgrounds
26         Other graphical elements
28         Misuses
32         Typeface for communication

Graphic design: Bab&Nababdesign
Publishing: Paolo Antinori
The OPAALS project pursues an innovative approach to empowering the business environment at various levels, starting from the dense and local settings of small and medium enterprises up to very large companies. The business environment is seen as a world of business services and software applications that meet in a special ecosystem of theirs, made up for the purpose of having them mingle and evolve over time through reuse, composition, and feedback.

This intelligent ecosystem is modelled over organic schemes and advanced techniques of distributed information systems. The definition of OPAALS brand image was to render this peculiar blend of elements taken from three different domains: business economy, software engineering, and biology. Since this had to be done in a visual fashion, one good chance was to employ geometries that were somehow related to patterns of life.

We chose to start from Roger Penrose’s tiling. A tiling is a way of partitioning infinite spaces by a finite number of shapes that can be repeated and fit together with no blank spaces. Penrose discovered his tiling of the plane in 1974 by using two shapes only. Its beautiful appearance shows an amazing mix of simplicity and complexity arising from a 5-fold rotational symmetry and a quasi-periodic process that stands right between chaos and regularity.
Despite their origin as mathematical creations, many features of Penrose’s tilings confirm a deep kinship with natural systems. Their self-similarity is non-random and fractal in nature. Their pentagonal symmetry is well known in life.

They can be grown step by step with algorithms based on the Golden Mean and Fibonacci numbers, which again were found to apply to many life growth phenomena. The same clustering process can be found also in quasi-crystals growth and in the diffusion-limited aggregation of atoms. In fact, these tilings are at the same time natural systems representations, scientific schemes, and aesthetic patterns.

The latter aspect brings the matter farther. Using two or more colours for the tiles, a given portion of the so tiled plane brings about the gestalt of weird 3D structures with “impossible” perspectives reminding of M. C. Escher’s works.

We used a similar geometry, based on angles of 72° and its sub-multiples (down to 1/5th = 18° that is the smaller angle in the thin rhombi) to produce a living being shape, that of a butterfly.
This the natural evolution of a system made up of small rational pieces, which epitomizes the two approaches of Digital Ecosystems: software engineering (top-down description of business goals and technology) and economy-biology (bottom-up feedback of the ecosystem). This model was filled with 4 colours to give it a specific character.

Detached shapes have been added to mean both the arrival of new elements that come to join the ecosystem and enlarge its possibilities as a complex being, and the start of the future evolution. This stage will be carried on in the animated versions of the logo, which is ready for it.

The result was this 2-colour more dynamic, technology spirited flying object, bearer of energy and rationality.

To get to the final OPAALS logo we have taken on the butterfly figure to turn it into an advanced symbol, through a heavier fragmentation and a variation on the theme of the basic Penrose’s shapes, sticking to a simple outline that could work fine in colour as well as in black and white.
Eventually, the picture had to be coupled with the title of the project.

For this purpose a modern font was chosen, the Square 721 Ex BT. This font is a modern and elegant sans-serif type, with distinctive rounded corners. Its extended fashion, and the choice of reporting the project’s title in its entirety, brings yet more dynamics to the full OPAALS Signature.
Whenever possible, the Signature must include its colours. However, a special Signature was created for printing systems not allowing more than one single colour (one pantone colour, fax) or to be used on coloured backgrounds.

Another special Signature was created for printing systems allowing only gray scale (black=100%, dark gray=50%, medium gray=35%, light gray=15%).

Beside the official Signature, one official variant is defined where the project title is lowered down to the niche of the right wing. This option permits to enlarge the title using the same horizontal space and it is advised anywhere there be the need for higher compactness.
For an easy reading of the Signature, a defense margin was applied which protects the Signature from any other element. This layout illustrates the minimum area allowed, enlarge it whenever possible.

For the same reason, the signature cannot be smaller than 26 mm. In case of low resolution printing, larger sizes are recommended.
The Signature maintains the same structure and behaviour both in negative and positive.

The Signature in the Pantone® colour should only be used in monocromatic reproduction.
The colours of the Signature are an important identity element and must always be reproduced with maximum fidelity. This handbook establishes the standards by which the colours are defined. These will be reproduced according to the Pantone® system.

The colour of the writing will be black in each case.

The Pantone® process for colour reproduction must be used whenever possible. When not possible, the colours must be tuned according to the Pantone® catalogue.
Two special backgrounds were created for the pagemaking of all the official OPAALS communications. The first one is composed by thin horizontal lines over a white background. The vertical spacing of the lines is 9 pixels, at 72 dpi for electronic visualizations and at 300 dpi for printing. The stroke of the lines must be 1 pixel for electronic visualizations (72 dpi) and printing (300 dpi). The colour of the lines is 30C+30Y for printing and 190R+223G+196B for electronic visualizations.

The second one features just a coloured background filled with a gradient starting from a maximum colour density of 100Y+80C (printing) or 0R+172G+54B (RGB) at the top of page, down to a minimum of 70Y+56C (printing) or 116R+195G+118B (RGB) at the bottom.
The application of the Signature on a background is not always clearly definable and may lead to improvisation.

The basic principle is to maintain the Signature's colour integrity with a maximum of contrast.

We hereby present three colour possibilities depending of the background luminosity.
<table>
<thead>
<tr>
<th>dark backgrounds</th>
<th>medium backgrounds</th>
<th>light backgrounds</th>
<th>very light backgrounds</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1" alt="Logo" /></td>
<td><img src="image2" alt="Logo" /></td>
<td><img src="image3" alt="Logo" /></td>
<td><img src="image4" alt="Logo" /></td>
</tr>
<tr>
<td><img src="image5" alt="Logo" /></td>
<td><img src="image6" alt="Logo" /></td>
<td><img src="image7" alt="Logo" /></td>
<td><img src="image8" alt="Logo" /></td>
</tr>
<tr>
<td><img src="image9" alt="Logo" /></td>
<td><img src="image10" alt="Logo" /></td>
<td><img src="image11" alt="Logo" /></td>
<td><img src="image12" alt="Logo" /></td>
</tr>
<tr>
<td><img src="image13" alt="Logo" /></td>
<td><img src="image14" alt="Logo" /></td>
<td><img src="image15" alt="Logo" /></td>
<td><img src="image16" alt="Logo" /></td>
</tr>
<tr>
<td><img src="image17" alt="Logo" /></td>
<td><img src="image18" alt="Logo" /></td>
<td><img src="image19" alt="Logo" /></td>
<td><img src="image20" alt="Logo" /></td>
</tr>
<tr>
<td><img src="image21" alt="Logo" /></td>
<td><img src="image22" alt="Logo" /></td>
<td><img src="image23" alt="Logo" /></td>
<td><img src="image24" alt="Logo" /></td>
</tr>
</tbody>
</table>
Other graphical elements exist in the OPAALS communication stuff. The symbols " [ " and " ] " may be used to "protect" or to put in evidence some text.

The two overarching aims of the OPAALS NoE are to build an interdisciplinary research community in the emerging area of Digital Ecosystems, and to develop an integrated theoretical foundation for Digital Ecosystems research. A Digital Business Ecosystem is defined as "evolutionary self-organising system aimed at creating a digital software environment for small organisations" that support the regional and local development by empowering open, distributed and adaptative technologies and evolutionary business models for small organisations growth.
Altering the Signature damages the coherency and perception of the identity jeopardizing the objectives.

For a clear and objective identification, the Signature’s integrity, namely its formal and colour structure, must be respected. We hereby illustrate some of the most common misuses.
Incorrect lettering or colours

Alteration of position of the signature’s elements

Insertion of outlines or frames

Horizontal or vertical distortion
For graphical consistency in all communication material we have defined a primary and a secondary typeface family. These guarantee uniformity in OPAALS’s institutional communication.

‘Square 721’ is the chosen primary typeface family. ‘Tahoma’ is the secondary typeface family. They are illustrated in the following pages.

Square 721 Ex BT
abcdefghijklmnopqrstuvwxyz
ABCDEFGHIJKLMNOPQRSTUVWXYZ
1234567890&$?![.,;]

Square 721 BdEx BT
abcdefghijklmnopqrstuvwxyz
ABCDEFGHIJKLMNOPQRSTUVWXYZ
1234567890&$?![.,;]
The main objective of the OPAALS Network of Excellence is to develop an integrated theoretical foundation for digital ecosystems research (Table 2.1). The OPAALS project is characterised by a radically interdisciplinary research agenda combined with the emergence of a new paradigm that requires the development of new ways of working together across disciplinary boundaries.