Chapter 2.1
Design and the Virtual Organization

Paula Rodrigues
Instituto Politécnico de Viseu Escola Superior de Educação, Portugal

The word *design* is of English origin and it is linked to the concept of plan or project, to ideas such as draw, intention, or configuration. The term implies the conjugation of two levels in permanent dynamic tension, the abstract level of conceiving/projecting and a more concrete, of giving form, materializing the idea. Furthermore the term does not refer only to manufactured objects; it can be used to refer to the design of a molecule, a structural arrangement, or the construction of curricula (Denis, 2000). It is also considered that a universal definition of design, valid independently of historical and socio cultural contexts, does not exist (Barnard, 1998). But, even if designing, as any other activity, is constrained by the social and cultural role assigned to the designer in a given society (Dormer, 1990; Downton, 2003; Manzini, 1993), that does not mean that we cannot present a general definition of design. So, although there are different areas of intervention for the designer, from common objects, to visual and verbal communications, services, systems, and environments, we can consider design as the conception and planning of the artificial (Margolin, 1995), having in mind the direct consequences for the consumer/user of this way of given material form to an idea (Bonsiepe,1999).

Discussing design in the scope of the networked and virtual organizations (NVO) implies that we have to regard design as an activity in the context of the market economy, where the designer func-

tions as stabilizing element (Baudillard, 1975), renewing/innovating the world of the objects at the level of the appearances and at the level of the use requirements. From this perspective we also have to consider that since the 80's the product started to be valued as a strategic factor in the context of global competition which redoubled the importance of design as an essential activity in creation of a competitive distinction between products (Lorenz, 1991). And finally because of this global competition, we must pay attention to the connection between design and manufacturing as nowadays activities like production and distribution depend frequently on outsourcing—a fact that enhances the importance of the information and communication technology **(**ICT) and recommends partnering between organizations in order to achieve the benefits of industry scale. Different organizations with different skills may start to work together and communicate without a planned structure but soon the need to a more consistent approach supported by standardization of business process and communication procedures will lead to a networked virtual organizations model.

DESIGN CONTEXT OF AFFIRMATION AND EVOLUTION

The work of the designer is today, visible through many of the objects that surround us, from furniture to posters yet, this is a relatively recent area of professional activity, whose affirmation is connected to the transformations that occurred in the sequence of the Industrial Revolution.

During many centuries the objects were mainly handcrafted. Their production was characterized by certain stability in terms of models, stability interrupted, from time to time, by a true innovation. Gradually, the production of objects passes from mainly handcrafted to mostly mechanized, and mass production system is adopted.

It was from the 19th century-on that this way of manufacturing became common, making it possible for an astonishing increase in production and a reduction of costs. Diverse objects and printed matters become thus accessible to an increasing majority.

The labor structure changed and those who conceive are not, any more, the ones that actually make the objects. The project is in the base of the mass production. The industrialization started the process that would lead to the affirmation of the designer as a professional specialized in the conception of objects suitable for man. We were talking about the changes in the productive process, but those do not constitute the only factor that would stimulate the development of design. From the middle of 19th century-on, design tries to affirm itself as an instrument capable to revert the critics to the bad quality of the industrial production, conceiving objects of aesthetic quality, namely with William Morris and the Arts Crafts Movement (Schmutzler, 1982).

Design can, equally, be seen as a way to innovate in the creation of forms for mass produced objects. Bauhaus, the most paradigmatic school of design known until today (Droste, 1992), followed this way and was responsible for the affirmation of a formal style that revisited a question always present in the creation of objects—the relation between form and function.

In the first 30 years of the 20th century, the question of the competition between manufacturers and nations gained importance; some institutions connected to education and promotion of design were determinant in the affirmation of the competitiveness of the national industries—schools as the Deutsher Werkbund or the already mentioned Bauhaus and great companies who bet on design as the AEG.

The acceptance of the designer as a professional responsible for the qualification of the products had still not occurred. Painters, sculptors, and architects thought the objects of daily use. From the 20's and until the 50's and 60's, these professionals are pledged in the quest of universal formal solutions applicable to the conception of

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