

An innovation nursery

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The new frontier of a company which offers to its customers, all over the world, a global service covering all the product features.

There is a way to be a company which catches the markets attention thanks to its capability to reinvent the organization, with a business behaviour continuously aimed at achieving new competitive levels through the innovation. This is the way how Ae – Appliance Engineering interprets its post-industrial company role. It disposes of a singular capital which consists in competences, knowledge and organization rather than material features.

The progressive improving of the level of the service offered to the customers is a characteristic of this vanguard engineering company established in 1994 in Gavirate (VA) and it continuously shifts the activities along the forming chain of the added product value. In fact, if during the first years of activity Ae mainly devoted itself to the design of the product process for third parts, during the last years they enlarged their interest "upstream" and "downstream" of the product itself, catching new business opportunities. Starting from this intuition, the bench

marking studies based on the market analysis of specific products were born.

These studies which immediately met success by the new companies of underdeveloped nations, besides the big historical household appliance groups, includes the critical analysis of the existing products, focusing their strength and weak points, ending with a series of proposals aimed at the product improvement.

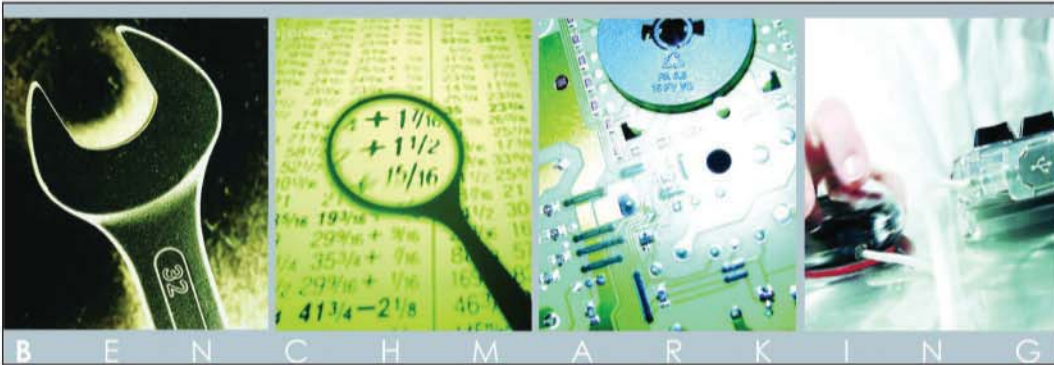
Often these researches precede the feasibility study and trend to define the functional, aesthetical and economical characteristics of the potentially successful product which is at this point proposed to the customer. If necessary, the customer can delegate to Ae the further development activities or continue working with his own internal resources.

The role of knowledge

The most interesting feature of the benchmarking studies done by Ae is its completeness. In fact, the company examines all the features



Federica Luzardi and Rolando Aries, sales manager and project manager of Ae.



The company realises benchmarking studies aimed at analysing the market of particular products.

which are basic for the positioning of a product on a market considering the customers specific reality and the country involved.

With these premisses the study is like a global project that includes a complex systemic analysis of technical, functional, aesthetical and economical type apart from the eco-environmental and safety features for which a singular education and the use of structured methods are required. Ae is advantaged in this by its deep multidiscipline experience - accumulated in about ten years -, the household appliance design for different type of customers and by the knowledge of different production organizations both in industrialized and emergent countries.

Moreover for the analysis of these projects, Ae cooperates with a technical organization among the most advanced in the field, with informatics technologies of last generation including modern Cad 3D mechanical design systems, with different modelling softwares like ProEngineer, Catia, Solid Edge, Unigraphics and Visicad, apart from other powerful FEM simulation systems like Patron, Marc, Ansys and Mould Flow (for the mould filling analysis). Recently, the company has been equipped with Adams system for the Multi-body analysis mainly used in the aerospace industries.

On this system basis, AE has developed a series of specific applications for the household appliance field, absolutely original, which allow to realise in a new way the design of the structures and achieving more reliable and cheaper product

components than the design realised through traditional systems. Moreover the use of these technologies allows to complete the project with an effective documentation, not only on the technical point of view but also for the presentation of the results.

This last feature has been deeply studied by the company, which today uses a system of communication towards customers largely based on really innovative images such to be defined of advanced media type. This presentation modality made the comprehension of the design contents therefore often complex become more efficient, easing the interaction with the customers and the fast achievement of shared conclusions.

The new goal

During a recent visit, we discussed with Federica Luzardi and Rolando Aries, the Ae sale manager and the project manager about the recent company evolution and the market prospects in a context which is deeply changed in comparison to the first years of activity.

How did Ae change at the beginning of its second ten-year period of life?

Federica Luzardi: "The organization has principally changed. In fact at the beginning its competences were concentrated in my father's figure who had established the company on the base of his knowledge. Then, a team of young engineer quickly began to cooperate with him learning the craft and gaining more and more important responsibilities. Today, Ae is a young dynamic company character



ised by team work with structured modalities, always keeping an absolutely informal atmosphere very similar to the one of a university campus.

Are you in touch with the research world?

Contacts are frequent because our activities strongly depend on technology. Moreover we have started a continuous collaboration with the universities, and principally with the "Politecnico di Milano" which foresees the presence of many university students (apprenticeship) in our laboratories. This practice has shown to be very useful for the innovation contribution these young researchers introduce to the company, especially related to the use of the advanced informatics technology.

Often it happens that these university students stay permanently working in AE.

How has your market changed?

The first activities of Ae concerned orders which foresaw the transferring of knowledge and the household appliance design for company's belonging to underdeveloped nations. Then this experience extended to several Eastern European and Mediterranean basin countries, among which Belarus, Poland, Egypt and Turkey, and also towards Asia. Just in a second time, the big historical groups of the field, like Bosch, Brandt, Whirlpool, Indesit Company, Arçelic, Olympic and Haier started their collaboration with us.

Which is the reason for your success with these big groups?

Partially it depends on the different conditions in which these companies work, being engaged with operations of productive delocalisation and contraction of their own central structures. From this point of view, the outsourcing operations of the engi-

neering activities towards external technological structure that can operate at international level, like Ae, have increased. At the same time, the success we met in the developing nations market with difficult and complex realisations which recently are in no way inferior to the solutions developed in Europe has also enhanced the professionalism level we had achieved to these groups.

Why are so many companies interested in your benchmarking studies?

These are very important analysis for a household appliance company because they can help to determine the success of a product. However they are very difficult and complex to carry out and above all they require a deep knowledge of all the features of the market, of the product and of the process.

At least for practical reasons, they require the availability of a specific work method and of advanced technological equipments for the data elaboration and the result assembling. The international structures able to carry out these project are very few.

Why have you chosen a way of introducing activities and projects based on images?

In our knowledge we understood how it is difficult to transmit to the customers in a fast and efficient way new ideas, especially in relation to complex and articulate realities which globally include all the market/product/process features.

This is the reason why we use a communication which supports the technological and analytic contents of the project (they remain basic) with an iconographical help, able to offer a synthesis of the reference idea or activity. The results has confirmed the efficiency of this approach.

Ae has a capital which consists in competences, knowledge and organization.