

Life of Industrial Product between Success & Failure

At the beginning of June, the cultural committee held a seminar at Bavaria factory in “Horus Hall” under the title “Life of Industrial Product between Success & Failure”.

The seminar hosted Dr. Seifallah Khorchid, Professor of Mechanical Designing – Faculty of Engineering – Cairo University, where Dr. Nader Riad welcomed the guest and lauded his engineering contributions and achievements.

Dr. Seifallah Khorchid posed a question on the definition of the industrial product, describing it as a material manufactured of one or more parts. This product is then purchased, with the aim of performing a certain function or a specific service, in return for a reasonable price.

As for the cycle of the industrial product, this varies between a product with a specific form, function, use and specifications, such as size, weight, etc.

Then, there is the manufacturer, who is the source in charge of providing the product.

Next, there is the distributor of the product, who is the seller. Finally, there is the user of the product, i.e. the customer, who is the main source of demand and the one to accept the given price.

Last, but not least, in the cycle of the industrial product is the marketing lifespan, i.e. the period during which the product is in demand and available on the market.

Another question posed by Dr. Seif Khorchid is the “need for the product”. The customer is the source of need. The motive for a need varies between a functional or natural need (such as food), an intellectual need (such as books), or a psychological need (such as music).

The function of a product and its mode of use are determined by the outcomes of marketing researches. These researches determine the shape and design of a product, concerning its form, weight, dimensions, functioning and durability.

A third question posed by Dr. Seif Khorchid concerns elements of availability of the product. A displayed product can achieve more than one function and can guarantee the safety of customers through easy use and clear instructions.

The manufacturer and marketing manager should pose several questions, including: Who is in need of this product? When is he in need of it? Where does he expect to find it?

Also, the timing is important: Is the need daily or seasonal? They should also estimate the quantities, total need and available production potentials. Rates of a rising need for the product and its production should also be polled. The share of the product on the market is also to be determined.

There are other questions concerning distribution. Is distribution through outlets for distributing the product or does the customer come, himself, or does the producer go to the customer? During all this, costs of obtaining the product should be calculated.

Supporting the Need for the Product

According to Dr. Seif Khorchid, supporting the need for the product can be achieved through the ability of the product to assume its function during its expected lifespan at the lowest cost. This calls for a highly efficient post-sale service, with prompt response to market demands and an ability to maintain a certain competitiveness vis-à-vis similar products.

More important still is the impact of design and production on the efficacy of post-sale service (Classification according to standard specifications is the minimum accepted level for an industrial product).

Dr. Seif Khorchid added that local designs were suffering from weak designing impacts. For example, when I purchase a pen and try to disassemble it, then I fail to reassemble it, this is considered weakness in design of the product.

The next step after the emergence of the product and after establishing the need for it is its availability to the customer through one of the following sources:

External Supply

This means supplying the product in a complete form, ready for use, through the original supplier, to the commercial establishment. Here, the original supplier is the source of technical specifications and mode of use of the product. The role of the commercial establishment is confined to distribution and advertising, as well as reassembling and maintenance, if necessary.

External supply of separate sets and local final mounting SKD:

The product is provided in the form of separate sets delivered by the original supplier. Final assembling is done by the industrial commercial establishment, according to specifications of the original supplier, who is simultaneously the source of technical specifications and mode of use of the product. The role of the industrial commercial establishment is confined to final assembling, distributing, advertising, mounting and maintenance.

External supply of parts and local final mounting SKD:

The product is delivered to the industrial commercial establishment, through the original supplier, in the form of parts ready to be assembled. The supplier is also the source of specifications. The role of the establishment is again confined to assembling, distributing, advertising, mounting, etc.

Design, production, assembling and local mounting:

The product is provided in its full form, designed according to the request of the industrial commercial establishment and according to specifications set by the establishment. Here, the commercial establishment is the source of technical specifications and mode of use of the product. Its role is not only confined to producing parts, assembling and mounting, but extends to designing, modifying and developing.

In all the foregoing cases, for the product to remain on the market at reasonable rates, certain services need to be available, in order to help maintain an effective presence, such as post-sale service, product analysis & assessment, service of design, development and modification and service of assessment and development of suppliers.

Product Lifecycle

The lifecycle of the product starts at the phase of preparation and market study, followed by the phase of presentation and promotion of the first batches.

Then comes the peak phase, where the product obtains a share of the market, according to flexibility and efficacy of development, as well as its competitiveness.

After that, comes the out-of-date phase, with the emergence of new competitive products, in the absence of development, or with new technical demands of customers.

Finally comes the phase of oblivion, which starts with a drop in demand rates, loss of competitiveness and rise in relative costs. This leads to a question posed by Dr. Seif Khorchid on the necessity to develop the product.

The need for development is necessary, in order to resist pressures of competitiveness and to prolong the lifespan on the market.

As for realms of development, these include the development of shape, performance, packaging and cost elements.

The cost of developing the product helps achieve equilibrium between becoming out-of-date and its development. Thus, steps for developing the product and means of production are an economic requisite, in order that the industrial establishment might survive.

Modes of development are numerous. They vary from developing the actual product, to expanding in the same field of the product, with different sizes, shapes and capacities, to venturing into new domains of products with similar manufacturing and mounting possibilities.

Success & Failure

Dr. Seif Khorchid adds that studying reasons of failure is the way to know the road to success. Success is not to accept failure. Reasons of failure are attributed to bad planning of product operations, lack of efficacy in designing and developing the product, weak basic ideas, lack of accuracy and efficiency of information gathered upon studying the market, lack of technological potentials, bad timing for launching production and promoting the product, or miscalculation of powers governing market inclinations.

According to Dr. Seif Khorchid, the concoction for a successful product is safety upon use, durability throughout the lifespan of the product, reduced size and weight of product, together with proper functioning, appropriate form, colour and texture of product, resistance to atmospheric factors, ability to resist hazards of transportation, storage and assembly, easy detection of break-down, easy dismantling of worn parts, quick response to customer's service and, finally, presence of indicators revealing cease, operation and rates of

performance, which are indicators of the success of the manufacturer in achieving specific values.