



LIQUID PRODUCTS

"In a liquid modern life there are no permanent bonds, and any that we take up for a time must be tied loosely so that they can be untied again, as quickly and as effortlessly as possible, when circumstances change - as they surely will in our liquid modern society, over and over again." (Liquid Love – Zygmunt Bauman – 2003)

In the liquid world everything changes quickly and the future it is very uncertain, so even buying decisions tend to consider shorter time horizons. Often then clients prefer flexible and intelligent products which do not require a high initial investment to long-lasting, monolithic and expensive ones.

Flexible products

A product can be defined flexible, if it can be customized at the time of purchase, but also updated and modified later, during its whole lifecycle. Flexible products will be able to follow the evolving needs of ever-changing customers and to incorporate future technological improvements.

The key enabler for product flexibility is modular architecture, that is, the ability to create many different products from standard components designed as Lego bricks. Classical modularity often focuses on functions and interfaces: each function is implemented by a single module, and several modules are interchangeable because they have standardized interfaces. It is then possible to configure features and performance of a product. In the liquid world may be useful to make flexible also the appearance. This can be achieved by introducing "aesthetic" modules, possibly separated from the functional modules to reduce the replacement cost. The configurability of the appearance at purchase is not new for some products (e.g. kitchens). Innovations are the extension of this concept

to new types of products (eg. configurable Nike shoes or Pixie cover for Nespresso machine), the breadth of available choices, the ability to create custom forms and possibility to change the appearance of the products at a reasonable cost also after the purchase.

Smart products

In 2011 Marc Andressen stated that "[software is eating the world](#)". To understand the importance of this phenomenon just think how important and how valuable software is becoming in all business. Referring only to products, consider, for example, that today to run an automobile are used tens of millions of lines of code and that without software our smartphones would not run, as well as coffee machines in the offices, traffic lights, instruments for medical analysis and many other products.

The replacement of hardware functions with software-driven ones has three major benefits: software-driven functions are in fact more sophisticated, more flexible and often cheaper than corresponding hardware functions. An example may be the replacement of the car dashboard with a touch screen, which can be reconfigured at any time, even by the user himself.

The extensive use of software and the ability to connect products to the web (Internet of Things) is raising up a new generation of smart products, which are able to understand what users are trying to do and therefore act in the best way to facilitate the achievement of the objectives. These products "remember" contexts, objectives, actions and results, in order to learn from past experiences. They are then able to progressively improve their behavior and adapt to the habits and the characteristics of each individual user, without the need for complicated setup operations. These "learning" products allow companies to learn much more about their customers, to provide real-time personalized and contextualized services and to increase customer loyalty (to replace a product after it has learned our habits, would require a new learning process).

Scalable price

Flexible and smart products make more fuzzy the distinction between products and services and support the creation of new business models. It is possible in fact to reduce the investment required to get access to the products, by charging users a progressive price, proportional to the "amount" of usage or, better yet, proportional to the obtained benefits. Companies may generate in this way an expansionary effect, similar to what could be accomplished by lowering prices. The impact, however, is important: immediate profits are replaced by incremental profits and arises the opportunity/need to provide new value to customers after the sale of the products, in order to motivate them to continue paying the progressive price over a long period and to extend the use of the product itself.

Liquid products will therefore be very different from existing products and will require profound changes for firms who develop them: strategy, organization, processes and tools have to be adapted to the liquid customers and their liquid needs.



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