Abdullah AlSourav
*Peoples' Friendship University of Russia*
*117198, Moscow, st.Miklukho-Maklaya, 6*
*e-mail: sourav.odc@gmail.com*

**Product life cycle in respect to the technology life cycle**

Lifecycles are a very effectiveway to understand how a product or technology evolves over time. These are very useful for tracking product and process differentiation. They can be used to understand the development, growth and decline of ideas and phenomena in the physical world, the plant and animal kingdoms, and technology.

The most commonly used lifecycles in economics are the technology lifecycle and the product lifecycle. They are used to track the diffusion of technology and products. Diffusion is the acceptance, adoption, or awareness of a technology or product by individuals. The technology and product lifecycles are essentially the same, but the product lifecycle focuses on product sales while the technology lifecycle focuses on innovation. The technology and product lifecycle follows the traditional S-curve, consisting of four stages: technology awareness, technology growth, technology maturity, and technology declining interest (Figure 1).

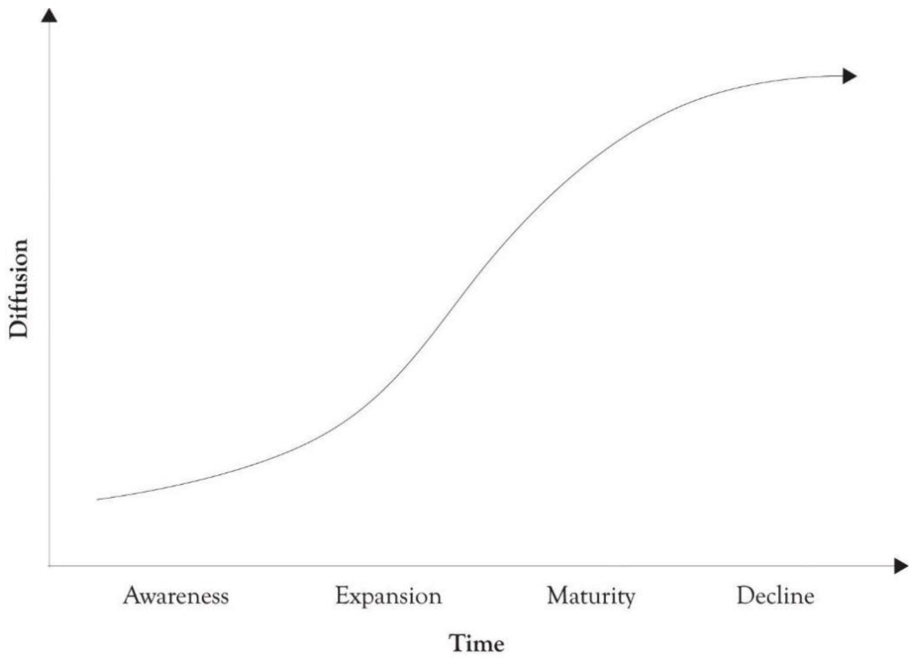


Figure 1. Technology Life Cycle (Source: Internet)

As new technology matures, so do the products and services that use it. Changes that occur during a technology's lifecycle have an unique impact on customers, and thus product lifecycles. At the dawn of a new technology, early adopters and tech enthusiasts drive the market. Because they only demand technology. This impulse and demand is interpreted by many companies as the phase of new product introduction. As technology becomes obsolete, customers are becoming more conservative, demanding quick fixes and convenience. In this case, the product usually enters the growth zone and matures over time.

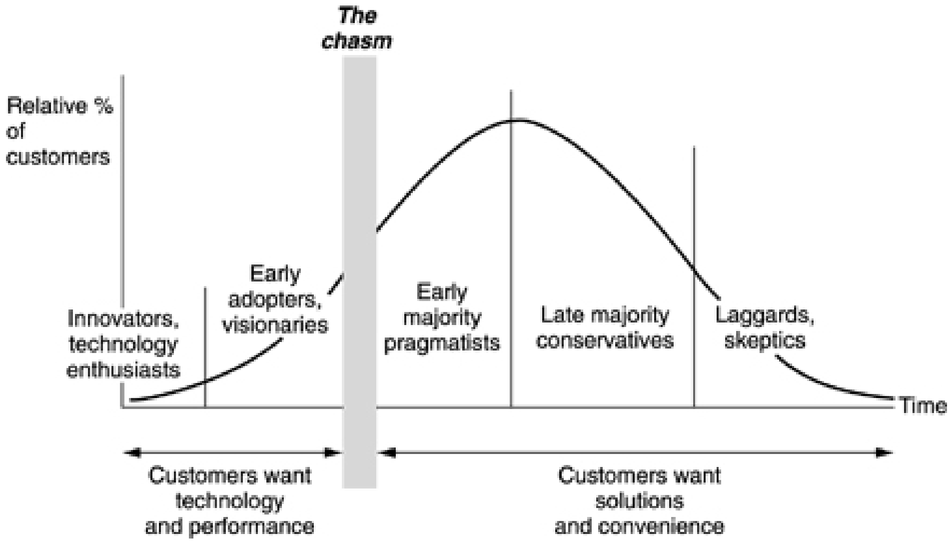


Figure 2. Change in customers as technology matures (Source: Norman D)

The "gap" shown in the diagram above shows the difference between early and late adopters. Each requires a different marketing strategy, and each translates into different stages of the product life cycle. Note that late adopters have the largest percentage of customers in the market. As a result, most products begin their lifecycle technology-driven and over time become customer-driven. A good example of this is the computer market. On the one hand, customers want ease of use, convenience, short documentation and good design. Customers, on the other hand, rush to buy new things regardless of their complexity. As a result, companies in the computer industry exit long before their products reach maturity. This is the moment when the product reaches its peak, when both early and late adopters buy the product.

The technologies are changing rapidly as well as customer requirements also changing faster. Those are producing shorter product life cycle.This rapid changing of technologies and customer requirements are forced to organizations to shorten product development cycle times.

**References**

1. Global University Alliance. "Product Lifecycle Management, https://www.globaluniversityalliance.org/research/product-lifecycle-management/." Accessed July 21, 2021.