THE ROLE OF INNOVATION STRATEGY IN THE ENTERPRISE LIFE CYCLE

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Abstract*: The development stages of a company are reflected in its life cycle. The life span of the company depends on the managerial strategies applied at key moments so that it can adapt to the turbulent changes in the external environment, especially in terms of competition on the market. In support of increasing the company's competitiveness and its life span comes innovation. The purpose of this work is to illustrate the three forms of the life cycle of the enterprise, as well as the role of innovation in this effort to extend the fruitful period of the enterprise.*

Keywords: *innovation, strategy, enterprise, life cycle, business management*

JEL Classification*: M21, O12.*

1. Introduction

There is a life cycle in the development of everything in the world, and companies are no exception. The life cycle of an enterprise is like a pair of invisible giants and always influences the development trajectory of the enterprise.

The so-called "enterprise life cycle" refers to the fact that an enterprise has the same life cycle as human beings and other organisms. However, the derivation of a company's life stage is different from that of a natural organism. It is not a one-way change. In general, businesses experience

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different stages such as entrepreneurship, growth, maturity and recession. Those in different stages will have different characteristics and have different external and internal risks (Chen & Chen, 2012).

Through a series of activities such as research and development and innovation, an enterprise can change from one stage of its life cycle to another, thus exhibiting reversibility (Zhou et al., 2016).

Innovation also has a kind of life cycle. It starts with idea generation, development, implementation, evaluation and adoption. Innovation involves improving the yield of input resources and creating new revenue sources (Ryu & Won, 2022).

In this context, the work aims to present the concept of the life cycle of the enterprise, to analyse the types of life cycles and to select suitable strategies in the three life cycles of the enterprise, respectively: the traditional life cycle, the business life cycle and the financial life cycle, highlighting at the same time the role of innovation in extending life cycles.

The research methodology is based on theoretical investigations, long-term observations and own opinions.

2. Literature review

Domestic and foreign researchers have carried out a lot of theoretical analysis and empirical research on the relevant influencing factors of the enterprise life cycle and the economic consequences of the enterprise life cycle on the operation, investment and financing activities of the enterprise, and have been a series of research results.

However, research on the measurement model and division method of the enterprise life cycle has not reached a consistent result. How to correctly and scientifically divide the life cycle of the enterprise is still a matter of great controversy (Lu & Wang, 2018).

Innovation occurs in all areas of an organization's activity, so different aspects of innovation are found in the value chain. These come from the implementation of the concept of open innovation, presented above.

Whether the innovation is carried out within the organization or acquired from outside, more and more new materials, products, technologies or systems and procedures appear, which intensify the competition in the market.

In the entire complexity of innovation, the essence is the innovation of new products because products are what create value for customers and for companies (Negulescu, 2020).

The innovation starts with an idea of one or more people, which is transformed by an iterative and chaotic process, by many returns and bottlenecks and becomes a prototype subjected to several technical tests, then through marketing activities to bring the customers life (Slimane, 2009).

There are three key reasons to innovate: energize your people, build growth and profit and survive (Maital & Seshadri, 2007):

- Energize your existing people and attract great new ones: Successful innovations are often a portfolio of new ideas, with some of them focussed on the product and some focused on the value chain supporting the product innovation;
- Build growth and profit (return on equity, total return to investors and profit margin): innovative products that achieve market success generally command higher prices and higher profit margin than competing products. Innovation comes from empowered individuals and teams who break rules to exploit their creativity. In order to achieve these results, organizations must produce, market, distribute, sell and provide services.
- Survive: Innovation is an adaptive competence that is necessary for survival in global markets. Those organizations that lack innovation will simply not last in the long run (their existence is in danger).

3. Results and discussion

3.1. The concept of the life cycle of the enterprise

The enterprise life cycle is a key concept in enterprise architecture, enterprise engineering (Konsake et al., 1999) and systems engineering (Giachetti, 2011). The Enterprise Architecture process is closely related to similar processes, such as the program management cycle or the systems development life cycle, and has similar properties to those found in the product life cycle (Bernard & Tichkiewitch, 2008).

The concept of the enterprise life cycle was first proposed by Mason Haire (1959). Adizes (1989) considered the enterprise life cycle theory to be outdated. He believes that with the continuous evolution of the life cycle, organizations will face various problems. If companies cannot solve problems and overcome difficulties through effective decision-making, blind repetition of the old way will hinder the organization's ability to develop.

Greiner (1972), based on the number of employees and sales revenue, developed a five-stage model based on their different performances in terms of organizational size and age, namely, the founding stage, the guiding stage, the decentralization phase, the coordination phase and the cooperation phase. Quinn and Cameron (1983) simplified the enterprise life cycle into four phases based on Greiner.

Daft (1999), based on Greiner, Quinn, and Cameron, presented a four-stage model of the enterprise life cycle, namely, the entrepreneurial stage, the collectivization stage, the standardization stage, and the refinishing stage. Greiner, Quinn, and Draft's discussion of life cycles is based only on differences in organizational structure.

Thompson (2019) considers the following four stages that make up the business life cycle: birth, growth, mid-life crisis and death or rebirth.

The birth of the enterprise

The phases in the business life cycle can be expressed as birth, growth, maturity and death. The birth phase, also known as the "pioneer" or

"creation" phase, is the stage when the company has just been founded and everyone involved in it is full of energy and new ideas. For example, if two software developers team up to design an innovative new application, they can be up and running in 80 weeks from a small office with no employees. The birth stage is characterized by creativity and energy.

Enterprise growth

The growth phase of the business life cycle is when the company takes off. Growth is usually rapid as the company expands into new markets and more customers learn about the product. For example, a software development company started by two programmers working out of a small office may expand to a team of 15 programmers working in a larger space as customers buy the software. In this lifecycle stage, programmers will focus on fixing bugs, improving features, and improving the company's product successfully.

The midlife crisis

The maturity phase is the mid-life crisis of a business venture. The company's growth and sales numbers begin to level off because most of the people who need what the company is selling have already bought it. The maturity stage, also known as "operation" or "renewal" of the business life cycle, represents both the danger and the potential for new opportunities. If the company focuses on operating its business according to the status quo, flat sales figures can eventually become declining sales figures, leading to the demise of the business. If the company can find a way to renew itself from within instead of keeping things the way they are, then a new cycle of growth is possible.

Death or rebirth

Companies that don't innovate regularly can fall behind the competition. To prevent this, the company must find a way to renew the energy it originally had in the birth or creation phase. One way to do this is to create new project teams within the organization. A new project team is responsible for creating and developing new innovative products, so

team members should be creative people with fresh ideas and talent. Although the company as a whole is an enterprise with a life cycle, each new project team is also an enterprise with its own life cycle.

According to the classical theory, in the market economy the company faces certain rules of the game. This type of enterprise goes through a cycle composed of: genesis, appearance on the market (launch), development, maturity, decline and liquidation (fig. 1).

Fig. 1. Enterprise life cycle

The duration of a company's existence is in a direct relationship with the possession of the capacity and resources necessary for rapid adaptation to the changes in the economic-social environment, that is, in the economic macro and micro environment.

The company can opt for suitable strategies in the different phases, as follows (Business life cycle, 2019).

In the launch stage, the entrepreneur can opt for one of the following alternatives: Starting a new business, (it is the most frequent way of starting a business, as a result of the independence regarding the choice of the nature of the business and the possibility of selecting the competitive environment within the desired limits); buying an existing

business (half of the businesses that are in the process of negotiating the acquisition process fail and over 50% of those that are finally acquired do not meet the expectations of the buyers. So, in the context where only 25% of the businesses that are the initial object of a negotiation buying and selling turn out to be really profitable businesses, buying a company can be particularly risky) or buying a franchise.

In the stages of development and maturity, you can resort to:

• Concentration strategies

Concentration strategies are achieved through market, product development or horizontal integration. There are many significant examples of the implementation of concentration strategies, they generally target small and medium-sized enterprises, but can also be found in the case of large concerns, such as IBM and General Motors.

• Concentric diversification

Product-based concentric diversification can be achieved in the situation where a company that sells clothing expands its range of products by including leather goods in its assortment. Similarly, market-oriented concentric diversification can occur when a company selling items for new-borns decides to sell toys for the same target segment.

• Conglomerate diversification

The adoption of these strategies can be achieved based on the company's own efforts (internal growth) or through mergers, acquisitions or alliances. For example: the penetration of a company that exploits and processes petroleum products, in the financial-banking sector.

In the decline stage, one can opt for:

• Downsizing strategies that include: turnaround strategies and partial or total liquidation strategies.

• Abandonment strategies: consist in the complete or partial elimination of a strategic activity area from the business portfolio through its liquidation or sale.

The enterprise life cycle concept helps implement an enterprise architecture and capital planning and investment control process that selects, controls, and evaluates investments. On top of these processes are human capital management and information security.

When these processes work effectively together, the enterprise can effectively manage information technology as a strategic resource and business process activities.

When these processes are properly synchronized, systems effectively migrate from legacy technology environments through evolutionary and incremental developments, and the enterprise is able to demonstrate its return on investment (ROI).

3.2. The business life cycle

The business life cycle of an enterprise is the progress of a business and its phases over time and is most commonly divided into five stages: launch, growth, shakeout, maturity and decline, according to Corporate Finance Institute (CFI Team (2023). The cycle is shown on a graph with the horizontal axis as time and the vertical axis as values (USD, Euro, or various financial values). In fig. 2 three financial metrics are used to describe the state of each phase of the business life cycle, including sales, profit and cash flow.

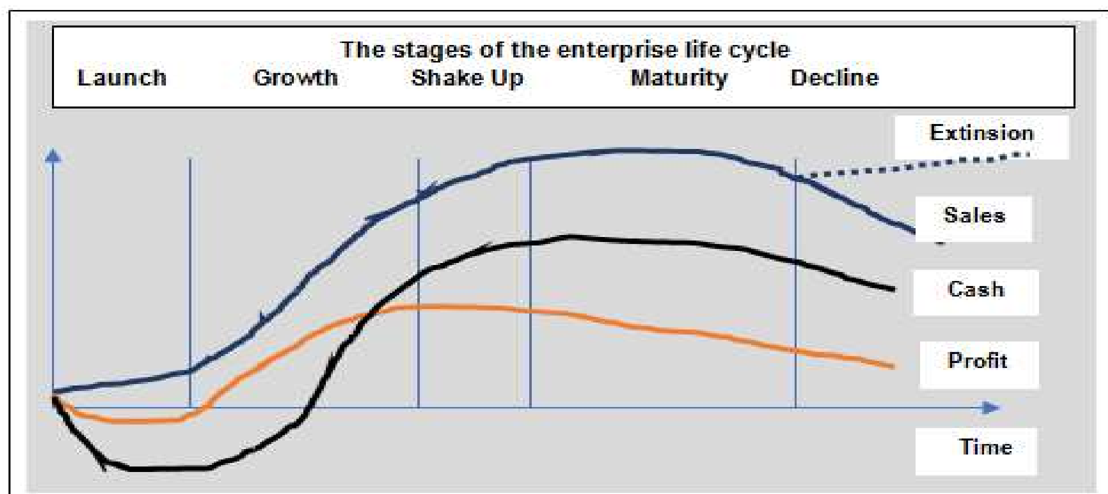

Fig. 2. The business life cycle

Source: According to the Corporate Finance Institute, 2023

Phase 1: Launch

Every company begins its operations, usually starting with the launch of new products or services. In the launch phase, sales are reduced, but slowly (and hopefully steadily). Businesses focus on marketing to their target consumer segments by advertising their comparative advantages and value propositions. However, as revenues are low and initial start-up costs are high, businesses are prone to incurring losses during this phase. In fact, throughout the entire life cycle of the business, the profit cycle lags behind the sales cycle and creates a time lag between sales growth and profit growth.

This gap is important because it relates to the funding life cycle. Finally, cash flow at launch is also negative, but falls even less than profit. This is due to the capitalization of the initial start-up costs that cannot be reflected in the profit of the enterprise, but are reflected in the cash flow.

Phase Two: Growth

In the growth phase, companies experience rapid growth in sales. As sales grow rapidly, businesses begin to see profit once they pass the breakeven point. However, since the profit cycle still lags behind the sales cycle, the level of profit is not as high as sales. Finally, cash flow in the growth phase turns positive, representing excess cash flow.

Phase three: Shaking

In the shakeout phase, sales continue to increase, but at a slower rate, usually due to either the market approaching saturation or new competitors entering the market. The sales peak is in the shaking phase. Although sales continue to rise, profit begins to decline in the shakeout phase. This increase in sales and decrease in profit represents a significant increase in costs. Finally, cash flow increases and exceeds profit.

Fourth phase: Maturity

As the market matures, sales begin to slowly decline. Profit margins are getting thinner while cash flow remains relatively stagnant. As firms approach maturity, major capital expenditures are largely behind activity, and thus cash generation is greater than profit on the income statement.

However, it is important to note that many enterprises extend their business life cycle during this phase, reinventing themselves and investing in new technologies and emerging markets. This allows companies to reposition themselves in their dynamic industries and thereby refresh their market growth.

Phase five: Decline

In the final stage of the business life cycle, sales, profit and cash flow decrease. In this phase, companies accept their failure to extend their business life cycle by adapting to the changing business environment. Firms lose their competitive advantage and eventually exit the market.

3.3. Enterprise financing life cycle

In the financing life cycle, the five stages remain the same but are placed on the horizontal axis, according to the Corporate Finance Institute (CFI Team, 2023). Across the vertical axis is the level of business risk; this includes the level of risk in lending money or providing capital to the business.

While the business life cycle contains sales, profit and cash as financial values, the financing life cycle consists of sales, business risks and debt financing as key financial indicators (fig. 3).

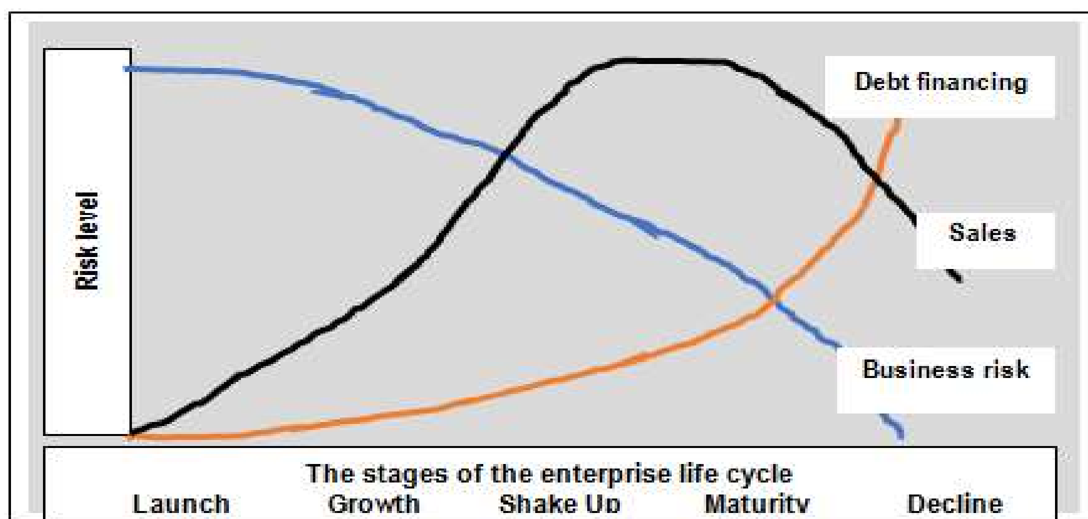

Fig. 3. Enterprise financing life cycle

Source: According to the Corporate Finance Institute, 2023

The cycle of business risk is the opposite of that of sales and debt financing.

Phase 1: Launch

At launch, when sales are lowest, business risk is highest. In this phase, it is impossible for a company to finance its debts due to its unproven business model and uncertain ability to repay the debt. As sales begin to slowly increase, the ability of corporations to finance debt increases as well.

Phase Two: Growth

As companies experience booming sales growth, business risks decrease while their ability to finance debt increases. In the growth phase, companies begin to see profit and positive cash flow, which proves their ability to repay debt. Corporations' products or services have proven value in the marketplace. Growth stage companies are increasingly looking for capital as they want to expand their market reach and diversify their businesses.

Phase three: shaking

During the shakeout phase, the sales peak occurs. The industry is witnessing sharp growth, leading to fierce competition in the market. However, as sales peak, the life cycle of debt financing increases exponentially. Companies prove their successful positioning in the market by demonstrating their ability to repay debts. Business risk continues to decrease.

Fourth phase: maturity

As corporations approach maturity, sales begin to decline. However, unlike earlier stages where the business risk cycle was inverse to the sales cycle, business risk moves in correlation with sales to the point where it is no business risk. Due to the elimination of business risk, the most mature and stable companies have the easiest access to debt capital.

Phase five: decline

In the final stage of the financing life cycle, sales begin to decline at an accelerated rate. This decline in sales shows the inability of companies to adapt to changing business environments and extend their life cycle.

In this life cycle, the analysis of the costs involved in the investments that require financing occupies an important place. The initial costs are those related to the design and execution; the others consider the use and the recovery period. It is desirable that they should be estimated during the phase of analysis of the alternatives for design and execution, the accuracy of their estimation depending on the accuracy of anticipation for the period of operation. Therefore, in determining the life cycle it is important to consider all the operating costs, because the costs of maintenance, repairing and the energy consumption costs are decisive (Munteanu & Mehedintu, 2016).

4. Innovation-source of expanding the life cycle of the enterprise

Innovation is one of the most charged terms in global business today, but exactly what it means can be nebulous. It is important to define how I think firms and entrepreneurs should look at innovation. Innovation can be described in different ways, through words, reactions, descriptions and strategic criteria (Greenwald, 2014).

Words: original, unexpected, fresh, never thought of before, never seen before, creative, new, useful.

Reactions: "Not really useful?", "What a great idea!" And "Why didn't anyone ever think to do it?"

Descriptions: Challenging conventional notions of how things have been done before and bringing ideas from one industry to another or from one geographic region to another

Strategic criteria such as:

- Creating significant points of difference for products and services compared to current alternatives;
- Meeting unsatisfied consumer needs by providing new ways to achieve goals or make lives or jobs easier, better, happier, more interesting, satisfying or more productive;
- Allowing brands to compete in new incremental markets or category segments;
- Engaging or capturing the imaginations of consumers to increase loyalty.

The consumers have become more and more used to looking for and wanting what's new, the best, the fastest, the most convenient or the most fashionable, and they tire of products much faster. This mentality applies to virtually all product categories. In this increasingly educated and talented world, with lower labour and production costs, successful start-ups can appear anywhere.

The foundations for new product and service innovation can be revolutionary and result from major new technologies, such as a self-adhesive hanger or bringing bright colours to previously monochromatic items. Innovations can also involve something that has long been used or enjoyed in a market, such as a food or face cream, and introducing it to a market that has never seen it.

Innovations that enable firms to profit by uniquely capturing product value will be a filter.

Limited profit in innovation was already noted by Schumpeter (1934) in his initial work. However, innovations influence all business processes as well as the life cycle of a company. From this point of view, innovations are an important factor of the development of value factors, moreover it may be possible to assume that they are an independent value driver (Tabas & Beranová, 2016).

Companies have a fairly predictable life cycle. They start with an innovation, find a repeatable business model, build the infrastructure for a company, then grow by effectively executing the model. Over time,

innovations from outside the company (demographic, cultural, new technology, etc.) overtake the existing company's business model. The company loses customers, then revenues and profits decline, and eventually it is acquired or goes out of business. Under these conditions, management must develop skills that enable them to identify valid opportunities and adapt their decisions to market changes (Negulescu, 2019).

”Five critical elements lie at the core of any successful innovation strategy: Innovation Culture, Leadership Buy-In, Enable Team Members, Reward and Recognize, and Defined Metrics and key performance indicators. These concepts are imperative to achieving results and maintaining a scalable, sustainable innovation model” (Goins-Cox, 2022):

Innovation Culture: Transparency plays a significant role in engaging all team members in innovation. Constant communication, training and check-ins at all levels help establish transparent dialogue on how innovation can create positive change – fuelling innovation culture.

Leadership Buy-In: A successful innovation strategy reinforces leadership buy-in by consistently highlighting the positive outcomes of innovation through team member engagement at all levels throughout the innovation process.

Enable Team Members: Innovative ideas come from those who do the work having available resources (structure, process and tools necessary to connect and share their knowledge).

Reward and Recognize: Recognizing individuals who contribute to the innovation goals is an essential piece of a successful innovation strategy and it reinforces the desired innovative behaviours, promoting an innovation culture, as well.

Defined Metrics and key performance indicators: Defined metrics and key performance indicators that are essential to tracking the company's goals for innovation (e.g., number of ideas submitted or executed, total revenue generation, total cost savings, etc.).

Clayton Christensen (1997) observed that there are two types of innovative strategies for a large company: sustaining and disruptive innovation. He believed that large companies are in the business of supporting innovation (evolutionary changes in markets or products) rated fairly well by their existing customers. But most large companies find it difficult to deal with disruptive innovations (radical changes in technology, customers, regulatory changes) that create new markets. These types of organizations find new niches in existing markets or create entirely new markets, as disruptive innovation in a large company tries to solve two unknowns simultaneously: the customer/market are unknown and the product feature set is unknown, at as in the start-up phase.

Blank (2010) opines that mastering disruptive innovation in a large company requires both different people and different processes. People need this type of innovation, like start-up founders (intrapreneurs), and the necessary processes are like initial developments.

In entrepreneurship, a special and complex association is born between the entrepreneur and the corporation. On the one hand, the entrepreneur is the employee of the corporation and is responsible according to his employment contract for all the stipulated obligations. From an entrepreneurial point of view, he/she provides the company with vision, personal business knowledge, passion, perseverance, leadership skills, creativity and the ability to link the idea or project with the organization's strategy and business, acting on behalf and benefit of the corporation for reasons ethical. On the other hand, the corporation transfers the responsibility for the project to the entrepreneur, with the inherent risks, but at the same time, it makes available the organization's resources and provides a framework in which it feels free to create and offer full choice to the idea (Negulescu, 2017).

5. Conclusion

The periodic analysis of the life cycle of the enterprise and especially of the business becomes more and more important for management because it reflects a state of fact and imposes new challenges, especially through innovations of products and/or technologies.

Of course, the way a business behaves during its life cycle depends on the type of industry, the size of the business and the market, and the management adopts strategies corresponding to each stage of the life cycle.

In the case of investments in innovations or the implementation of innovations that require external financing, the analysis of the financing life cycle will provide

Description and analysis of the enterprise life cycle theory are patterns of behaviour that are usually chosen during the development of the company, but the best behaviour that the company should choose to avoid the typical problems that can be encountered, are during growth and aging.

Understanding the business and financing life cycles is critical knowledge for managers, investment bankers, corporate financial analysts and other professionals in the financial services industry.

The enterprise life cycle is a useful tool in strategic planning to find out what stage the enterprise is in and adapt accordingly before the maturity phase to prevent decline.

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