How are investments by enterprises linked to their position in the value chain?

The summary is based on the survey “Do investments by enterprises reach productivity?” commissioned by the Foresight Centre. The research was conducted by Kadri Männasoo, Mait Rungi, Heili Hein, Aaro Hazak, and Helery Tasane from the Tallinn University of Technology.


Did you know?

- At the lower levels of the value chain based development model, enterprises focus on making production more efficient by investing in machinery and equipment.

- At the middle levels of the development model (innovator, acknowledged supplier), investments are needed to introduce new technologies, and to develop quality and the company image.

- At the higher levels of the development model, more attention is paid to enterprises’ knowledge management, which includes the organization of R&D, cooperation and international networking, and the development of internal processes based on knowhow.

- The survey found that although enterprises are monitoring productivity, they do not consider productivity a priority.

- The cornerstone of the strategy is customer focus, i.e. enterprises focus on the needs of the existing customers, generally at the expense of a broader view of the markets.

- If we consider the strategic choices of an entrepreneur in four categories – architecture (the enterprise’s structure and geographical location), portfolio (diversity of services and products), personnel (recruitment, motivation, etc.), and processes (internal work organization, etc.), it is clear that an enterprise’s development strategy gives priority to developing processes and pays the least attention to personnel development.
The value chain development model is a unique model of value creation that allows enterprises to move higher up in international value chains. (see Fig. 1).

The nature and extent of the business and investment needs of an enterprise depend on its role in the value chain: the higher the enterprise rises in the value chain, the more difficult it will be to keep increasing productivity, and the more important will be its international reach and international networks.

The prerequisite for reaching the highest levels of the value chain – the creation of a global brand or an ecosystem – is the legal certainty of the economic environment, including up-to-date protection of intellectual property, access to high quality human capital, and R&D capacity.

- The main focus of the activities of enterprises on the first two levels is limited to increasing the efficiency of production by investing in machinery and equipment, and in other tangible fixed assets. Their aim is to increase production volumes, to keep costs under control, or to modernize the production process.

- The development of an enterprise that provides outsourcing services to recognized suppliers based on price advantage requires investments in the quality of the product or service (for example, acquiring ISO standards), reliability and recognition in the eyes of retailers and customers, development of specific skills and knowledge, and development of its own niche for increasing added value. The development strategy of recognized suppliers is supported by investments in the use of new technologies, quality development, and image development.

- At the middle level of the value chain (innovator, market creator), the priority is on product development or service design and end-user-oriented activities such as branding and advertising.

Fig. 1. The value chain-based development model reflects the enterprise’s development path through two dimensions, required by the development of the enterprise in different stages: local vs. global grasp of the value adding, and type of investment.
How is the development model of an enterprise related to funding and business cycles?

- The higher up an enterprise is in the value chain, the more its business model needs a longer-term and diversified financing model.
- Investments in innovation and development are profitable in the long term, although highly risky, and enterprises often lack the necessary liquid collateral, which is why enterprises finance these largely from internal cash flows.
- The business model of innovators requires a long-term, consistent, and reliable funding plan to avoid premature termination of innovation projects, or toning down their ambitiousness and innovativeness.
- At the lower levels, the investment horizon is shorter and most loans are financed with a loan. Acquired tangible fixed assets are acceptable loan guarantees.
- The business model of enterprises located at the lower levels of the development model is sensitive to price fluctuations and changes in demand. If such business models are prevalent in the sector, this is reflected in fluctuations in economic growth, and external shocks pose a major threat to the economy.
- Innovators who have a well-capitalized and long-term development strategy and can offer competitive products or services are less sensitive to short-term price fluctuations and thus contribute to the macro-stability and sustainability of the country’s economic development.
Incentives and obstacles to investment decisions of entrepreneurs ¹

While enterprises **monitor productivity, they do not see productivity growth as their top priority**. An important goal is customer focus, with the needs of the existing customers put first and a broader vision of the past and future markets kept in the background.

Investment patterns are **dominated by capital-intensive capital investments** initiated at the level of middle managers. Capital and real estate investments will be made to increase production volumes, and the objective of the so-called replacement investments is to replace old equipment and machinery.

Enterprises invest mainly their **own funds** (refinancing profits or using group funds). Refinancing is often funded by external loans, since it is considered cheaper than shareholders’ capital.

In innovation, the focus is on the **process innovation** as well as on customer centric product innovation. Although human capital is considered an essential component of the business model, the workforce is generally viewed as a **production input for an existing production process, and not as a bearer of competencies** based on value creation and productivity growth.

Generally, **entrepreneurs do not emphasise their role in training workforce**, although the lack of skilled workforce is regarded as a critical bottleneck in raising productivity. This attitude has a twofold negative impact: on the one hand, resignation to the lack of workforce may lead to the utilization of workforce that is underqualified and less productive; on the other hand, the enterprise will lack the sufficient number of capable staff who could drive the increase in productivity.

Estonian enterprises regard **unstable demand** as a major obstacle in investment activities. The vulnerability caused by demand fluctuation is due to the small size and openness of the Estonian economy, as well as the limited market power of enterprises, and high price sensitivity.

---

¹ The results are based on a series of case studies performed in the course of the survey. The involved enterprises were active in wood industry, metal industry, food industry, information and communication technology, and chemical industry.
Four key components of the enterprise’s development strategy are architecture, portfolio, workforce and process (*Pisano model*)

1. The **architecture** component of the strategy focuses on the construction, expansion, structure, and management model of the enterprise and the business model.

2. In the **portfolio** components, the important aspect is the range of investment projects made to diversify the product or service portfolio.

3. The **workforce** component places high priority on recruiting and motivating key personnel, developing and preserving excellence, and increasing the visibility of the enterprise thanks to the efforts of the workforce.

4. The **process** component focuses on establishing internal work organization regulations, developing and tracking control mechanisms, and monitoring systems and performance indicators.

Enterprises often use all four components in their development strategies, but with different proportions and emphases (see Fig. 2). The essential element in business development strategies of Estonian enterprises is the process component, which supports the goal of increasing the efficiency of work processes and improving customer satisfaction. Among all the cornerstones of development strategies, the surveyed enterprises focused the least on the activities related to architecture and staff.

Fig. 2. The proportion of four components of the Enterprise Development Strategy (*Pisano model*) based on the content analysis of interviews conducted with entrepreneurs.