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27 Lermontovskaya St., Kharkiv, 61024, Ukraine**THE ROLE OF MVP STRATEGY IN INCREASING COMPANY COMPETITIVENESS IN A
FAST-PACED ENVIRONMENT**

This article explores the importance of the Minimum Viable Product (MVP) strategy in enhancing the competitiveness of IT companies. The MVP strategy allows businesses to develop a simplified product version with only essential features, enabling faster time-to-market, real-world testing, and feedback gathering. This approach minimizes development risks, optimizes resource use, and helps companies move iteratively, through gradual testing of their hypotheses. By launching a lean product, companies can gain a first-mover advantage and to gain a foothold in the market faster. The article defines MVP as a minimal, functional representation of a product designed to test business hypotheses through customer feedback. This article also distinguishes MVPs from prototypes, which focus on testing functionality, and fully-fledged products, which are complete versions ready for commercial release. Through strategic market validation, MVPs allow companies to identify user needs early on and refine their offerings accordingly. The study also discusses the transition from MVPs to achieving economies of scale. As demand grows, companies can spread fixed costs over an increasing number of units, thereby reducing unit cost and increasing profitability. MVP strategy allows companies to focus on the essential product features and avoid spreading their resources on potentially unprofitable items, which contributes to efficient scaling. Case studies, such as that of Aardvark, illustrate how businesses can efficiently scale their MVPs into fully developed products. While the MVP strategy provides significant advantages, the article highlights potential downsides, such as underdeveloped products, biased user feedback and technical debt. Thus, while MVPs offer a valuable framework for growth and competitiveness, companies must apply them carefully, maintaining a balance between the possibility of short-term release accelerations and long-term scalability.

Keywords: **MVP, digital product, competitiveness, scaling.**

JEL Classification: O32, O33, M31.

Problem statement. The Information Technology (IT) industry is experiencing rapid and constant change, driven by technological advancements and evolving consumer demands. This dynamic landscape has intensified competition and forced IT companies to find innovative strategies to remain competitive.

One such strategy that has gained prominence is the development of a Minimum Viable Product (MVP). An MVP represents a basic product version that includes core features sufficient to attract early-stage customers and validate the concept. This article explores the critical role of MVPs in enhancing the competitiveness of IT companies by examining their impact on time-to-market, market validation, and resource allocation.

By understanding the principles and benefits of MVP development, this research aims to provide insights into how IT organizations can use a strategy of building an MVP to increase their competitiveness and get to the economy-of-scale effect.

Analysis of recent research. The concept of a Minimum Viable Product (MVP) has gained prominence as a strategic tool for software and hardware companies seeking to thrive in today's rapidly evolving market. While the precise definition of an MVP can vary across industries and



academic perspectives (Saadatmand, 2017; Reif, 2017), its core benefits are consistently recognized.

Research indicates that MVPs serve as powerful instruments for validating product hypotheses. By introducing a basic product version to the market, companies can gather invaluable feedback to refine their offerings and ensure alignment with customer needs. This iterative process, as highlighted by (Szpilko, 2021; Kuiko, 2021), is instrumental in achieving product-market fit. Case studies and researchers also indicate that MVP strategy offers a faster and more cost-effective approach to new product development in companies of any scale (Kuiko, 2021; Palma Santos Gomes, 2013). Some of the most advanced companies even take advantage of the AI-based MVP product development planning (Kulkov et al., 2023; Vinuesa et al., 2020; Mohite et al., 2024; Obschonka & Audretsch, 2020; Wu, 2023).

Moreover, MVPs play a crucial role in identifying untapped market opportunities. By exposing a product to early adopters, companies can uncover previously unmet needs and develop innovative solutions. This approach, emphasized by Palma Santos Gomes (2013) and Ramalingam, Christophe, Samuel (2018), is essential for creating products that truly resonate with customers.

Beyond product development, MVPs offer strategic advantages regarding market entry and resource allocation. By focusing on core functionalities, companies can accelerate time-to-market and gain a competitive edge (Klotins, Unterkalmsteiner, Gorschek, 2019). Additionally, MVPs help prevent resource wastage by avoiding overinvestment in features that may not be essential to product success.

Even though most authors describe an MVP as a strategy that works for startups, corporations also use it within the discovery phases for either new products or new branches of existing and scaled products (Sigrid, 2022).

Purpose. This article examines the role of the Minimum Viable Product (MVP) strategy in enhancing the competitiveness of IT companies. By focusing on MVP's ability to accelerate product development, validate market assumptions, and enable scalable growth, this article seeks to offer insights into how IT companies can leverage the MVP approach to optimize resource allocation, achieve economies of scale, and maintain a competitive edge in a rapidly evolving market.

Objectives are to:

- 1) Define the concept of MVP in the context of the IT industry;
- 2) Analyze how the MVP strategy helps companies accelerate time-to-market;
- 3) Investigate the role of MVPs in market validation, gathering customer feedback, and iterating product features based on real-world data;
- 4) Explore how MVP enables IT companies to optimize resource allocation and reduce development costs, leading to the scale effect economy;
- 5) Present case studies demonstrating how both startups and large enterprises have successfully leveraged MVP to achieve significant market growth and economy on scale.
- 6) Examine the limitations of MVP strategy, including scaling challenges, biased customer feedback, and the complexities of MVP development in specific industries.

The main results of the study. Since the definition of an MVP may vary across different sources and studies, we need to start this research with a clear definition of an MVP. Based on research done by (Saadatmand, 2017; Bosch et al., 2013), we define MVP as a minimal and sufficient representation of a new product idea or business hypothesis that enables learning from customers through scientifically validated experiments.

Such a definition provides a clear and concise framework for understanding MVP and its role in product development while remaining wide enough to be applied to any domain.

It is worth noting that MVP is often confused with a prototype and sometimes – with a fully-fledged product. To avoid such confusion, we also provide definitions of (1) a prototype as a preliminary model of a product, often created to test feasibility, functionality, or user experience (it can be a physical or digital representation and may not be fully functional); and (2) of a full-fledged product as a complete and final version of a product that is ready for general release and commercialization (it includes all features and functionalities intended for the target market).

The MVP strategy helps IT companies increase competitiveness by enabling faster product development and market entry. Focusing on essential features allows one to release and test products quickly, gather user feedback, and move iteratively basing on real-world needs. This

approach reduces development risks, optimizes resource use, and accelerates time-to-market, giving companies a first-mover advantage.

Let us dive deeper into the time-to-market part. Studies confirm that overscoring is a common product development mistake when companies hope to deliver more ground-breaking products before validating their product hypothesis (Klotins et al., 2019). On the contrary, by focusing on delivering the most essential features of a product, companies can rapidly test their core value proposition without waiting for a fully polished version. This approach shortens development cycles by allowing teams to prioritize what is immediately necessary for user testing, reducing the risk of prolonged design and production phases.

As a result, companies can enter the market earlier, which offers several strategic benefits. For instance, early market entry enables companies to gather real-world feedback sooner, allowing for agile adjustments to the product based on actual customer needs rather than assumptions. Additionally, early market presence establishes brand recognition and helps companies capture market share before competitors react. Furthermore, competitors are often forced to either follow in the leader's footsteps or face the challenge of differentiating themselves in an already crowded marketplace. These MVP strategy benefits are equally valid for beginners (e.g., startups) and big companies expanding to new markets or product lines.

When it comes to enhanced market validation, the MVP strategy offers companies another huge benefit: it allows them to incorporate customer feedback into the product development process.

The primary goal of an MVP is to release a product with just enough features to solve a core problem for users while allowing the company to test its assumptions about market demand.

MVPs facilitate gathering users' insights in a more focused and cost-effective manner. Instead of developing a fully featured product that might miss the mark, IT companies can use an MVP to test specific hypotheses about user behaviour and preferences. For example, a software company might release a simplified version of an app to test user engagement with a particular feature set. Based on actual usage patterns and customer feedback, the company can determine whether to expand, refine, or pivot its offering. This approach prevents the waste of resources on unnecessary development and ensures that the final product is closely aligned with customer expectations.

The iterative nature of MVP development is another key factor that strengthens IT companies' market position. Continuous feedback loop allows for incremental improvements, ensuring the product evolves in line with user needs. Each iteration brings the product closer to achieving product-market fit (Sudirjo, 2023), the point where the solution perfectly meets the demand of its target market. Such an iterative data-driven approach helps companies get more out of their limited resources. Effective resource allocation plays a critical role in determining a company's competitiveness in the rapidly evolving IT industry. A framework of the Lean Startup methodology appeared to address the question of company and product competitiveness via a prism of resource allocation (Bajwa, Wang, Nguyen Duc, & Abrahamsson, 2017; Hu, 2023). Eric Ries popularized it, and, in a nutshell, the framework encourages companies to focus on creating iterative versions of their product and testing assumptions in real time with minimal waste. Central to this approach is the concept of an MVP, a product with just enough features to satisfy early customers and provide valuable feedback for future development. This strategy allows companies to avoid the risks associated with overinvestment in features that may not resonate with the target market. In traditional development cycles, significant budget overruns often come from correcting or refining a product that fails to meet user expectations after its full release (Almeida, Espinheira, 2022).

To continue the topic of a final product release, let us dive into the transition from an MVP to achieving scale economy, as the MVP strategy has emerged as a crucial mechanism for IT companies seeking to achieve this effect.

Economies of scale, defined as the cost advantages gained when production volume increases, are particularly significant for digital and technology-driven companies. Once developed, digital products can be distributed and replicated with minimal additional costs. The MVP strategy allows companies to start small, minimizing risk while refining their offerings. Once validated, companies can scale up operations, expand their customer base, and distribute their products to broader markets more efficiently.

As an MVP evolves into a fully realized product, companies can leverage economies of scale to reduce costs and increase profit margins. In the early MVP phase, development is focused on a limited set of core features, often produced in small quantities or delivered to a niche audience

(Wijaya, Dhewanto, 2019). As the customer base grows and production volume increases, companies can spread fixed costs, such as software development and infrastructure investments, over a more significant number of units, thereby reducing the per-unit production cost.

This reduction in unit costs is crucial for enhancing margins and reinvesting in further growth. With increased demand, companies can also negotiate better terms with suppliers, invest in automated processes, and enhance operational efficiency. For example, software companies can benefit from distributing their product to additional users without high incremental costs, increasing overall profitability. By reinvesting these savings into research and development, marketing, and customer support, companies can continue to refine their product and expand market share, creating a cycle of sustainable growth.

One key benefit of the MVP approach is the ability to build infrastructure incrementally. Rather than investing heavily in infrastructure or operational capacity upfront, companies can gradually scale their resources in alignment with actual demand. In this sense, the MVP strategy ensures efficient resource allocation and builds a foundation for scalable growth. By focusing on core functionalities and gradually expanding their infrastructure and operational capacity, IT companies can position themselves to scale efficiently, meet rising demand, and achieve economies of scale without facing the risks associated with premature investment. This incremental approach ultimately leads to more sustainable growth and long-term success in a competitive and dynamic market.

Considering all the advantages that the MVP strategy brings to the table, it may seem that the MVP is the perfect (and only) strategy for modern IT companies to develop their products and retain competitive advantage. However, there are limitations and challenges when applying this strategy, which may make an MVP strategy less applicable in some instances. One of the primary downsides is the risk of underdevelopment, where the initial MVP may need more features or polish, leading to negative customer perceptions. A poorly executed MVP can result in weak market adoption, damaging the company's brand and credibility before a fully-fledged product is ready. Moreover, MVPs may not always capture the full market potential, as the lean approach focuses on core functionalities at the expense of broader, innovative features that could differentiate the product in a competitive landscape. This narrow focus might limit a company's ability to position itself as a leader in the market or respond quickly to competitor advancements.

Another challenge is that reliance on customer feedback from a small, initial user base can introduce bias into product development, as early adopters may not represent the broader target audience. It can result in misaligned product features that fail to meet the needs of a more extensive customer base, slowing down long-term growth and market penetration.

In addition, a common issue is the potential accumulation of technical debt, as MVPs often prioritize speed over long-term technical sustainability. Early design compromises may create bottlenecks or inefficiencies that complicate future scaling efforts, leading to costly refactoring or redevelopment. Hence, while the MVP strategy is a valuable tool for IT companies, it must be employed carefully to avoid these pitfalls, balancing speed and flexibility with strategic foresight.

Having established the core principles and benefits of the MVP strategy, it is essential to explore how these concepts have been successfully implemented in real-world scenarios. Facebook, Instagram, Twitter, and Amazon are worldwide-known examples of how the colossal company started from the MVP with only a core feature inside. However, these companies evolved not only by building on top of the initial MVP but also by adding side-products, which often became even more profitable (e.g., Meta's marketing tools). Hence, we suggest looking at a more niche example – the case of the social search service Aardvark (Ryan, 2010).

The MVP strategy played a critical role in the success of this product company, a social search platform that eventually caught the attention of Google. Aardvark's MVP approach focused on delivering the core functionality of allowing users to ask and answer questions in a conversational format, leveraging their social networks for responses. This lean approach enabled Aardvark to test its assumptions about user behaviour and refine the product based on real-world usage without committing extensive resources upfront.

By concentrating on developing only the essential features for its MVP, Aardvark quickly validated its key value proposition: providing relevant, timely answers to users' questions. This early version allowed the company to gather invaluable feedback about users' preferences, search accuracy, and the most effective ways to match users with their social networks for answers.

As the platform gained traction and the number of users increased, Aardvark used the insights gained from its MVP to scale efficiently. The incremental improvements made to the product during its MVP phase allowed the company to build a scalable infrastructure that could handle growing user demands. This approach enabled Aardvark to achieve economies of scale. As its user base expanded, the platform's per-unit costs decreased, allowing for more efficient use of resources and higher profit margins. The scaling process, supported by cloud infrastructure and optimized algorithms, ensured the company could serve a growing audience with minimal additional costs. Ultimately, Aardvark's ability to evolve from a simple MVP to a scalable, cost-efficient product led to its acquisition by Google in 2010 for \$50 million.

In summary, Aardvark's use of the MVP strategy highlights how starting with a lean product can help a company validate its market assumptions, iterate quickly, and scale the solution up. Such an approach allowed the company to become profitable, achieve an economy of scale effect, and successfully exit the market when the time came.

Conclusions. To summarize the thesis above, the minimum viable product strategy offers significant competitive advantages to modern IT companies by allowing them to validate product hypotheses with minimal resources and focus on essential features. The MVP approach enables quick iteration and user feedback for small startups and large enterprises, leading to more informed decision-making and efficient incremental product development and scaling. Such scaling leads to a competitive advantage and an economy of scale effect over time. A critical aspect in achieving such an effect is the need to design a scalable architecture from the outset, ensuring the product can grow without significant overhauls.

However, the MVP strategy has its challenges. Scaling remains a complex process, user feedback can be biased, and, in some cases, even an MVP may require significant time and resources to develop, limiting its cost-effectiveness for certain companies. Despite these limitations, the MVP approach remains a powerful tool for driving innovation and growth in the tech industry.

In the next studies, we want to explore more about how the MVP strategy differs for large enterprises and small startups, how IT companies deal with the accuracy and biases of users' feedback collected during the MVP phase, and its impact on product decisions and competitiveness.

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РОЛЬ СТРАТЕГІЇ MVP У ПІДВИЩЕННІ КОНКУРЕНТОСПРОМОЖНОСТІ КОМПАНІЇ В УМОВАХ ШВИДКОПЛІННОГО СЕРЕДОВИЩА

У цій статті досліджується важливість стратегії мінімально життєздатного продукту (MVP) у підвищенні конкурентоспроможності ІТ-компаній. Стратегія MVP дозволяє бізнесу розробити спрощену версію продукту, що містить лише необхідні функції, забезпечуючи швидкий вихід на ринок, тестування в реальних умовах та збір відгуків користувачів. Такий підхід мінімізує ризики розробки, оптимізує використання ресурсів і допомагає компаніям рухатися ітеративно, через поступову перевірку своїх гіпотез. Завдяки випуску мінімально необхідної версії продукту компанія може стати першопрохідником та швидше

закріпитися на ринку. У статті MVP визначається як мінімальна функціональна версія продукту, розроблена для тестування бізнес-гіпотез через відгуки клієнтів. Також у статті наводиться пояснення різниці між MVP, що зазвичай спрямований на перевірку ринкових гіпотез, прототипами, що мають на меті перевірку певної функціональності, та повноцінними продуктами, готовими до комерційного запуску. Зазначено, що через стратегічну валідацію ринку MVP дають змогу компаніям на ранньому етапі виявляти потреби користувачів та відповідно вдосконалювати свої продукти. У дослідженні також розглядається перехід від MVP до досягнення економії на масштабах. Із зростанням попиту компанії можуть розподіляти постійні витрати на дедалі більше число одиниць продукції, що знижує собівартість одиниці та підвищує рентабельність. Стратегія MVP дозволяє компаніям зосередитися на найважливіших функціях продукту та уникнути витрачання ресурсів на потенційно невігідні елементи, що сприяє ефективному масштабуванню. Кейси, такі як приклад компанії Aardvark, ілюструють, як бізнес може ефективно масштабувати свої MVP до масштабних повноцінних продуктів. Незважаючи на значні переваги стратегії MVP, у статті підкреслюються потенційні недоліки, такі як випуск недостатньо завершеного продукту, упереджені відгуки користувачів і технічний борг. Таким чином, хоча стратегія MVP надає цінну основу для зростання і конкурентоспроможності, компанії мають застосовувати її обережно, зі збереженням балансу між можливістю короткострокових прискорень випуску та довгостроковою масштабованістю.

Ключові слова: **MVP, цифровий продукт, конкурентоспроможність, масштабування.**

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