Why Established Companies Can Develop Successful AI Products but Still Fail at Business Model Innovation

By

Dr. Anastasios Stilianidis

Founder & Senior Partner

Contact: anastasios.stilianidis@arvien.co

Published: June 15, 2026

Why Established Companies Can Develop Successful AI Products but Still Fail at Business Model Innovation

Artificial intelligence is currently one of the most widely discussed topics in business. New AI models are emerging at an accelerating pace, their capabilities continue to improve, and almost every industry is assessing the potential implications for products, processes, and competitiveness.

At the same time, the public discussion is heavily shaped by technology companies. This often creates the impression that successful AI products are primarily developed by software companies and that traditional industrial businesses will inevitably fall behind in the age of AI. This assumption, however, is too simplistic.

Many established companies already possess assets that are often more important for developing successful AI products than the underlying technology itself. Decades of accumulated data, deep domain expertise, industry-specific knowledge, and established customer relationships represent resources that are difficult to replicate and can form the foundation of highly differentiated AI products.

The greatest challenge therefore often does not lie in developing the AI product itself. Many organizations are currently focused on how artificial intelligence can be applied from a technical perspective, while the implications for products, customer value, and business models receive significantly less attention. As a result, companies develop products that are technologically sophisticated and create customer value, yet fail to realize their full economic potential.

The key question is therefore not whether a company can develop an AI product. A far more relevant question is whether its current business model is capable of capturing the value that the AI product creates.

Product Innovation and Business Model Innovation

To understand this challenge, it is important to distinguish between a product and a business model.

A product is a tangible good, an intangible offering, or a combination of both that is offered to a market in order to satisfy customer needs. Products can therefore take many different forms, ranging from physical goods and services to digital solutions or combinations thereof. What matters is not the specific form of the offering, but its ability to satisfy a customer need and create a distinct customer benefit.

In this article, this distinction matters because the focus is not on internal AI applications, copilots, or productivity initiatives within an organization. While such initiatives can undoubtedly generate economic value, they are not the subject of this discussion.

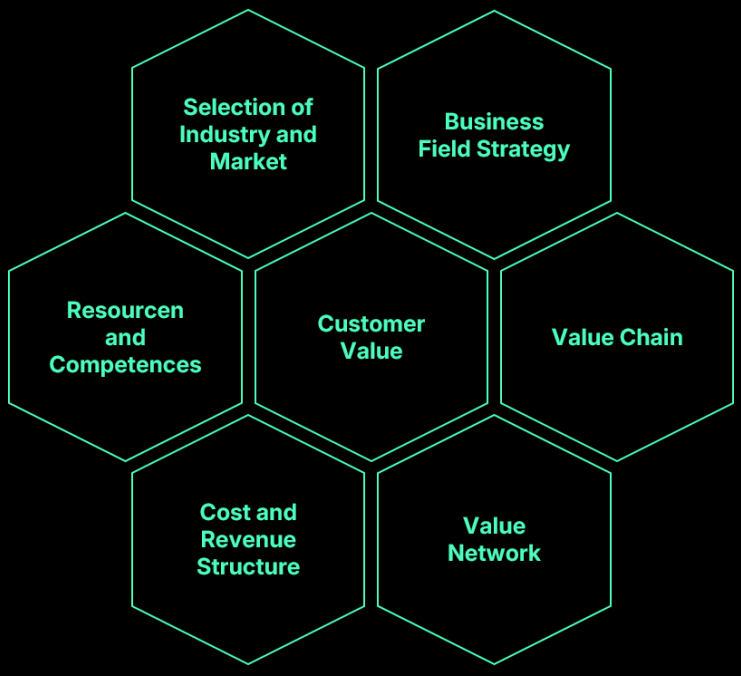
The focus is instead on AI products that are offered to external customers and therefore become a direct part of a company's value creation.

A business model, by contrast, describes the key strategic elements required to deliver a specific customer benefit through a product. It decipts which activities a company performs and how these activities are organized to create customer value while simultaneously generating competitive advantage.

A business model is not limited to a revenue model or pricing mechanism. Instead, it includes the full set of strategic elements needed to successfully bring a product to market. These elements include:

- Resources and capabilities
- The underlying value chain
- Cost and revenue structure
- Addressed industries, markets, and market segments
- The value network
- The customer benefit created
- The chosen business field strategy

Together, these elements represent the economic logic of a business and determine how customer value is translated into economic success.



While product innovation addresses the question of what customer value is created, business model innovation focuses on how this value can be commercialized, scaled, and captured.

Although the distinction appears straightforward in theory, it is often neglected when companies pursue innovation initiatives. In the context of AI, however, it is frequently underestimated. Many companies invest substantial resources in developing new products without questioning whether their existing business models are capable of successfully commercializing the newly created customer value. This is where the core argument of this article begins.

Why Established Companies Possess Strong Foundations for AI Products

Public discussions about artificial intelligence often focus on AI models, computing power, and technological capabilities. This can easily create the impression that developing successful AI products is primarily a technological challenge. Such a perspective, however, overlooks a number of critical factors.

Successful AI products require far more than powerful AI models. They depend on a deep understanding of customer problems, domain expertise, expert knowledge, and access to data that describes a specific use case and is not easily available to competitors. This is exactly where many established companies have a significant advantage.

Industrial manufacturers often own decades of operational and service data from their installed equipment base. Healthcare companies possess extensive diagnostic knowledge and application expertise. Industrial businesses frequently understand their customers' processes, challenges, and decision-making logic better than external technology providers. These resources are often considerably more difficult to replicate than the underlying AI technology itself.

At the same time, technological barriers to entry have decreased significantly over the past few years. Powerful AI foundation models are now available through both commercial and open-source offerings, allowing companies in many cases to avoid developing or training their own foundational models. The real value often emerges through adapting these models to specific use cases and combining them with proprietary data and existing expertise.

As a result, the primary constraint is increasingly no longer access to technology. Instead, it is the ability to translate existing knowledge and available data into marketable products. This trend is further supported by the ability to keep sensitive data within corporate boundaries. Modern AI solutions can be deployed within private cloud environments or on company-owned infrastructure, reducing concerns regarding data privacy and intellectual property protection.

For many companies, the key challenge is therefore not whether AI can be applied, but rather how existing assets can be identified and transformed into new products. This is precisely why many established businesses are in a stronger position than they often realize themselves.

From Data and Knowledge to AI Products

The practical implications of this development can already be observed across a variety of industries.

John Deere provides a compelling example. Over several decades, the company has accumulated extensive data related to agricultural processes, machinery, soil conditions, and farming practices. This data was not originally collected with the intention of creating AI products. It emerged naturally as part of the company's core business. Only through the combination of this proprietary data with modern AI technologies did solutions such as See & Spray become possible.

From the customer's perspective, AI itself is not the primary source of value. Farmers are not purchasing image-recognition technology. They are purchasing the ability to apply agricultural inputs more precisely, reduce costs, and maintain crop yields.

A similar pattern can be observed at Siemens. The company possesses decades of expertise in industrial processes, engineering, and automation. This knowledge serves as the foundation for AI-based products such as the Industrial Copilot. Once again, the company is not primarily selling technology. The customer benefit lies in accelerating complex tasks, increasing productivity, and improving the utilization of existing resources.

Roche demonstrates the same underlying logic within an entirely different industry. The company combines medical expertise, diagnostic data, and clinical experience with modern AI technologies to develop new diagnostic solutions. The primary value does not reside in the AI itself, but in the ability to improve medical decision-making and enhance diagnostic processes.

Despite operating in different industries, these examples share a common pattern. The starting point was neither a new AI model nor a breakthrough technology. The starting point was existing data, knowledge, and customer access. AI was subsequently used to transform these proprietary assets into new products and new forms of customer value.

The examples also highlight a second important observation. None of these companies limited themselves to developing an AI product alone. New capabilities were built, additional partners were integrated, and existing value creation structures were expanded. Even at this stage, it becomes apparent that successful AI products often

extend beyond pure product innovation and require adjustments to other elements of the business model.

This highlights one of the most important insights for established companies. The development of successful AI products rarely begins with the question of which AI technology should be used. A far more relevant question is which knowledge, data, and customer problems already exist and how they can be transformed into a differentiated product.

Why AI Products Create a Different Type of Customer Value

Historically, many industrial companies have differentiated themselves through the characteristics of their physical products. Performance, quality, precision, reliability, and durability have been at the core of value creation and have formed the basis of competitive advantage for decades.

These factors will remain important in the future. AI, however, adds an additional layer of differentiation. Customer value is increasingly created through information, predictions, and decisions. Companies are therefore no longer selling only a physical product. They are increasingly selling knowledge, recommendations, optimizations, and outcomes.

A machinery manufacturer, for example, no longer sells only a machine. It can additionally offer the ability to predict failures, optimize maintenance activities, or increase equipment availability. A diagnostics provider no longer sells only a diagnostic system. It can also improve the quality of diagnostic decisions. An agricultural company no longer sells only machinery or agricultural inputs. It can additionally provide recommendations for the optimal management of farmland.

As a result, customer value changes not only quantitatively but also qualitatively. Customers are not simply receiving more of the same value. They are receiving a new form of value that was previously unavailable.

This development is particularly important for established companies. AI often extends existing products with new digital value components that are based on data, knowledge, and predictive capabilities. Differentiation therefore shifts, at least in part, from the physical characteristics of a product to the intelligent utilization of that product.

This is where product innovation and business model innovation begin to intersect. When customer value changes, the conditions required to successfully commercialize, deliver, and monetize that value often change as well.

The Innovation Trap of Many Established Companies

Many companies are currently developing new AI products. Far fewer are questioning whether their existing business models are capable of successfully commercializing and scaling the customer value these products create. This represents one of the most significant challenges of the coming years.

AI products frequently create a different type of customer value than a company's traditional offerings. Nevertheless, they are often marketed through the same sales structures, incentive systems, and organizational mechanisms that were originally designed for physical products or traditional services. This creates a disconnect between the customer value being created and the strategic conditions required to successfully bring that value to market.

The consequence is not necessarily product failure. More commonly, the economic potential falls short of expectations. A product may be technologically successful while the company lacks the necessary conditions to translate the created customer value into sustainable competitive advantage and economic success.

Established companies are particularly exposed to this risk. Their business models have often been optimized over many years for existing products, customer relationships, and market dynamics. AI products, however, frequently follow different economic logics and affect multiple business model elements simultaneously. The real challenge therefore lies not only in developing the product itself, but in adapting the strategic and organizational conditions required for its long-term success.

This challenge is often underestimated because discussions around AI remain heavily focused on technical feasibility. Yet once a successful product has been developed, the considerably more difficult task begins: establishing that product sustainably in the market. This is where product innovation and business model innovation intersect.

Why Successful AI Products Often Require Business Model Changes

The most visible impact often emerges within the sales organization. A traditional machinery sales force sells machines, spare parts, and service contracts. Customer discussions revolve around technical specifications, performance characteristics, availability, lifespan, and capital expenditure.

AI products introduce entirely different conversations. Customers become interested in the origin of the data, the quality of the underlying models, integration into existing system landscapes, data privacy considerations, and the expected economic outcomes. Consequently, not only the product changes, but also the nature of the sales process itself.

Many sales organizations are only partially prepared for these changes. This is not due to a lack of commitment or capability. Rather, new products often require new skills. Sales professionals who have successfully sold physical products for many years do not automatically possess the expertise required to explain complex data-driven solutions or quantify their economic value.

A further challenge, often underestimated in practice, relates to incentives. Sales organizations typically operate within established compensation structures. These structures have been optimized around existing products and reflect the economic priorities of the business. New AI products therefore compete for attention with established offerings, even though their market potential, margin profile, and probability of success may still be uncertain during the early stages.

From a corporate perspective, these products may be strategically important. For individual sales representatives, however, it may appear economically rational to continue prioritizing the products with which they have already been successful. The challenge therefore lies not in the technology itself, but in the design of the business model and the associated incentive structures.

Similar questions arise regarding resources and capabilities. Many AI products require capabilities that have historically been limited within industrial companies. Examples include product management, customer success management, data management, software operations, and the continuous enhancement of digital products.

Whereas physical products are often updated only through larger development cycles after delivery, AI products evolve continuously. Customers expect regular improvements, new functionality, and ongoing optimization of results. Product development therefore does not end with the sale. It becomes part of ongoing operations.

This also changes the underlying value chain. Activities that previously played only a minor role become increasingly important. At the same time, new requirements emerge regarding organizational structures, processes, and responsibilities.

The value network often changes as well. Traditional industrial companies typically collaborate with established suppliers, distributors, and service partners. AI products frequently require additional collaboration with cloud providers, software integrators, data partners, and technology platforms. As a result, the existing network expands to include new actors that become relevant for product development, delivery, and scaling. In many cases, the target customers and decision-makers associated with the AI product also differ from those of the traditional offering.

The development of successful AI products can therefore require adjustments across nearly all elements of a business model. These include:

- Resources and capabilities
- Value chain
- Cost and revenue structure
- Addressed industries, markets, and market segments
- Value network
- Business field strategy

The more the newly created customer value differs from a company's existing offerings, the greater the business model adaptation required to successfully commercialize it.

ARVIEN Product and Business Model Innovation Matrix

The observations discussed so far can be summarized in a simple matrix. It is based on two dimensions of innovation that are critical to the long-term success of AI products.

The first dimension describes the degree of product innovation. It addresses the extent to which a company develops new products or new forms of customer value.

The second dimension describes the degree of business model innovation. It addresses the extent to which the strategic conditions required to successfully commercialize and economically capture that customer value are adapted.

The combination of both dimensions results in four fundamental situations.

Product and Business Model Innovation Matrix

Optimization Zone

In this scenario, the existing business model remains largely unchanged and the product itself evolves only incrementally. AI is primarily used to improve existing products, support existing offerings, or enhance existing product characteristics.

Many companies begin their AI journey in this quadrant. The risks are relatively limited and major organizational changes are typically not required. At the same time, opportunities for differentiation and the creation of new sources of value remain constrained.

Business Model Renewal

In this quadrant, the product remains largely unchanged while several elements of the business model are adapted. Companies may target new customer groups, address additional market segments, develop new revenue logics, or expand their existing value networks.

The customer value created changes only to a limited extent. Innovation is driven primarily by the way this value is marketed, delivered, and economically captured.

A typical example would be a company that introduces an existing product into new markets, offers it through new sales channels, or creates additional value through recurring revenue mechanisms without fundamentally changing the underlying product.

Business model renewal can have a significant economic impact. Since the product is already established, competitive advantages emerge less from technological innovation and more from adapting the economic logic of the business.

Innovation Trap

This quadrant describes a situation that can currently be observed in many companies. Innovative AI products are developed to create new competitive advantages and deliver a new or significantly enhanced customer benefit. At the same time, essential elements of the business model remain unchanged.

The company attempts to market a data-driven AI product through the same sales structures, incentive systems, and organizational mechanisms that were originally designed for physical products.

As a result, a disconnect emerges between product innovation and business model innovation. The product itself may be technically successful, yet the wrong, typically existing, customer groups are targeted. The necessary resources and capabilities are not developed at sufficient scale, appropriate new partnerships are not established, or other strategic conditions required for success remain unchanged.

From the perspective of many established companies, the innovation trap represents the greatest risk. The problem is rarely a lack of technology. More often, it is an insufficient adaptation of the business model that prevents the successful scaling of new AI products.

Competitive Pioneers

The fourth quadrant describes companies that successfully combine product innovation and business model innovation.

New AI products and the customer value they create are not viewed in isolation. Instead, they are developed alongside the necessary adjustments to resources and capabilities, value chains, partner ecosystems, cost and revenue mechanisms, target markets, value networks, and business field strategies. As a result, the newly created customer value is not only realized technically but also captured economically.

It is within this quadrant that the most sustainable competitive advantages emerge. Companies do not merely create innovative products. They simultaneously establish the conditions required to build successful businesses around them and create new barriers to competition.

The central insight of the matrix is that product innovation alone is rarely sufficient when an AI product differs substantially from a company's existing offerings. Only the combination of product innovation and business model innovation enables companies to realize the full economic potential of AI products.

Product Innovation Alone Is Not Enough

Many established companies are currently figuring out how AI fits into their business. In most cases, the primary focus remains on improving internal processes and increasing efficiency. In doing so, they often overlook a much larger opportunity: creating new AI products that generate novel competitive advantages and unlock new sources of revenue.

At the same time, many established companies already possess the most important prerequisites for developing successful AI products:

- Proprietary data
- Domain expertise
- Expert knowledge
- Existing customer relationships

Developing such products is therefore often not the greatest challenge. The more demanding task lies in successfully capturing the economic value that these products create. This is where business model innovation becomes increasingly important.

AI products frequently generate a new or fundamentally different type of customer value. That value does not automatically fit within existing business models. If this relationship is ignored, companies risk developing successful AI products without fully realizing their economic potential.

Many organizations still view AI primarily as a technology challenge. The long-term winners, however, will not necessarily be those deploying the most powerful AI models. More successful will be those companies that translate their data, knowledge, and customer access into differentiated AI products while simultaneously adapting their business models to support them.

For established companies operating in traditional industries, this creates a significant opportunity to play a leading role in the emerging AI economy.

Key Takeaways

- **Many established companies already possess the most important prerequisites for successful AI products.**

  Proprietary data, domain expertise, expert knowledge, and existing customer relationships often provide a stronger foundation than technology alone.

- **Developing an AI product is frequently not the greatest challenge.**

  The real challenge lies in transforming existing knowledge and data into marketable products and sustainable sources of value.

- **AI changes the nature of differentiation.**

  Companies increasingly compete through information, predictions, recommendations, and outcomes rather than solely through physical product characteristics.

- **Product innovation alone is rarely sufficient.**

  New AI products often create a different type of customer value that existing business models were never designed to commercialize.

- **Sustainable competitive advantage emerges when product innovation and business model innovation are developed together.**

About ARVIEN.

ARVIEN helps companies develop new digital and AI-based products and successfully translate them into sustainable business models.

Our focus lies on the development of digital and AI-driven products and business models, as well as the successful execution of the transformations required to bring them to life. We support organizations from the identification and evaluation of new opportunities through the development of product and business model strategies to the governance and execution of implementation.

Drawing on hands-on leadership experience from international transformation, digitalization, AI, and product initiatives across mid-sized and large enterprises, we combine strategic expertise with operational execution capabilities. This enables us to help companies transform existing data, knowledge, and customer access into new competitive advantages and sustainable value creation.

For more information, visit www.arvien.co.