

An Investigation into the Extent to Which AI-driven Automation Altered the Structural Economic Viability of Dropshipping as an Entrepreneurial Model.

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ARTICLE INFO	ABSTRACT
Received: 18 Apr 2026 Revised: 04 June 2026 Accepted: 17 June 2026	This study examines the extent to which AI-driven automation has altered the structural economic viability of dropshipping as an entrepreneurial model. While dropshipping has traditionally been characterized by low barriers to entry and minimal capital requirements, it has also faced significant structural limitations, including thin profit margins, high competition, and reliance on third-party suppliers. Using a qualitative research approach based on secondary data and conceptual economic analysis, this paper evaluates the impact of AI across three key dimensions: skill barriers, capital efficiency, and market competition. The findings indicate that AI significantly reduces the skill and knowledge required to operate a dropshipping business while improving capital efficiency through automation of marketing, product research, and content creation. However, these same developments contribute to increased market saturation, intensifying competition and raising customer acquisition costs through auction-based advertising systems. As a result, while AI enhances accessibility and short-term operational efficiency, it does not fundamentally resolve the structural constraints of the model. The study further identifies an emerging shift toward “branded dropshipping” as an adaptive response enabled by AI, allowing for greater differentiation and potential margin improvement. Nevertheless, this evolution does not eliminate underlying economic limitations. Overall, the research concludes that AI has not made dropshipping inherently more sustainable but has instead reshaped its dynamics, creating a more accessible yet increasingly competitive and uncertain entrepreneurial environment. Keywords: Artificial Intelligence (AI), Dropshipping, E-commerce, Capital Efficiency, Market Competition, Digital Advertising, Entrepreneurial Viability, Automation, Branded Dropshipping

1. Introduction

The convenience of purchasing products over the internet has caused a 55% rise in online spending and more than half a trillion more transactions compared to pre-pandemic levels. A popular method of selling goods online that is rapidly growing is dropshipping, a form of retail business in which e-sellers establish formal selling agreements with third-party suppliers or source vendors to fulfill customers’ orders without holding physical item stock (Arunasalam et al., 2024). Dropshipping has many appeals, some including not having to hold inventory, the low start-up cost, as well as the ease of creating an online store from anywhere (Wang et al., 2023).

Despite this, it has drawbacks such as the thin profit margins, as well as the steep learning curve that relies on extensive trial-and-error to achieve profitability (Auwwalu et al., 2025). This has led to debates online about its structural economic viability and whether the risks outweigh its benefits.

This raises an important question, though: if this is the case, why has popularity in the model recently increased, with the global dropshipping market expected to reach \$201 billion in 2024 and \$1,253 billion by 2030 (Grand View Research, 2025)? A contributor could potentially be the rapid adoption of AI around the world. AI has had a major impact on business operations, with opportunities such as more efficient operations, or the ability of AI to take over autonomous labour, lowering the operational costs of business. For dropshipping specifically, it has lowered barriers to entry and increased capital efficiency, but at a trade-off for increased competition and underlying limitations of the dropshipping model (Wang et al., 2023).

In spite of the rapid growth dropshipping is facing, while existing research has explored the growth of dropshipping and the impact of AI in digital commerce, there is limited analysis on how AI-driven automation has affected the dropshipping model and its structural economic viability. This study, therefore, discusses the following research question: To what extent has AI-driven automation altered the structural economic viability of dropshipping as an entrepreneurial model?

2. Literature Review

2.1 Dropshipping as an E-commerce Model

Dropshipping is a unique E-commerce model where sellers list and sell products without maintaining physical inventory (Gerhat, 2024). The main appeal is the low start-up cost involved, as you don't need to have a warehouse, and the fact that it can be done from home (Arif Siddiqui et al., 2025). The other main thing is the accessibility of dropshipping, since anyone with a computer could theoretically start a dropshipping business (Auwalu et al., 2025). However, while the barriers to entry are low, there are multiple factors that are often overlooked.

Because of the ease of start-up, the market is extremely saturated with many businesses often competing for the same product. In addition, the margins are very slim due to the reliance on third-party suppliers (Gerhat, 2024). This, combined with the online marketing expenses needed, raises costs significantly, causing average margins to be between 10%-30%, making success very difficult.

Another aspect to consider is the ethics of dropshipping and the risks involved (Arunasalam et al., 2024). Inexperienced dropshipping users might not understand the severity of inadequate quality assurance and customer chargebacks. Ensuring the quality of products can be difficult as suppliers are online, and the sellers cannot check the quality of the products in person. This could lead to a chargeback, which is when the customer does not inform the seller and reverses the payment directly by going to the bank. This is very serious, as having even a 1-2% chargeback percentage can cause the payment processor to ban any transactions, effectively banning the business from making any more sales.

2.2 Digital Marketing in E-commerce

The digital marketing ecosystem of E-commerce has changed over the last 5 years, with the majority shifting to social media marketing due to impulse buying and the increasing user base. The main platforms used for advertising are TikTok, Meta (Instagram, Facebook, Snapchat, etc.), and Google.

These platforms have lowered the barriers of entry, with Meta Advantage+, for example, which is an AI-powered option that finds and targets customers for you, regardless of your knowledge of marketing. While being very useful for lowering barriers to entry, Meta has created stricter regulations on what can be advertised. Misleading advertisements, such as making false claims or using before-and-after advertisements, can be a cause for the suspension of your account.

Additionally, there has been a rise in user-generated content (UGC), which is a popular social media marketing strategy that involves a normal person reviewing the product, making it feel more authentic and trustworthy (Zhang & Wei, 2021). These changes in the digital marketing landscape have led to significant changes in how Dropshippers advertise, with the added negative of the strict regulations.

2.3 AI and Automation in Digital Commerce

Building on the benefits already demonstrated by Meta Advantage+, AI and automation have had a significant impact on dropshipping. For instance, machine learning algorithms can be used to forecast demand patterns as well as the likely variations, which will in turn help in the management of stocks, leading to fewer instances of stockouts or overstocked merchandise (Arif Siddiqui et al., 2025).

AI can also be used for product research, often the most time-consuming part of the Dropshipping model. Generative tools such as Sora AI are used to create AI social media advertisements, reducing the time and resources required to create these advertisements, as well as the workload. This allows dropshippers to move much faster, testing many more products and stores in shorter amounts of time, making it much more efficient, and lowering barriers to entry even more.

This, however, can cause an over-dependency on AI, which is already fragile due to the large dependency on suppliers. While dependency on AI has no immediate consequences, it can make the market more saturated than the already saturated model that is dropshipping (Wang et al., 2023), due to the fact that everyone will be using the same generative AI advertisements, the same advice from language learning models, resulting in the same products being recommended from product research.

Overall, AI is making dropshippers much more efficient, as well as much more similar, due to the widespread availability of AI. This has changed the traditional dropshipping model from a quick cash grab to a more branded approach, giving a more sustainable source of income, which will be discussed later.

2.4 Research Gap

The main gap in the research is that there is research on AI and its impacts on business efficiency, as well as research on the viability of dropshipping as an E-commerce model. However, the very important and interdependent relationship between these two areas has little to no discussion. Dropshipping has evolved, and the relationship between AI and the model has grown.

This leads to the following research question: To what extent has AI-driven automation altered the structural economic viability of dropshipping as an entrepreneurial model?

3. Methodology

Research

This paper uses qualitative and quantitative secondary research, mainly done through search engines such as Google Scholar and ResearchGate. Rather than primary research, this paper synthesises a variety of sources such as academic journals, market analyses, and all relating to dropshipping, and the effects of AI on business operations. Secondary research was chosen because of geographical constraints, as well as a lack of need for primary research. This is because the study focuses more on the viability, rather than on the opinions of individual dropshippers. The qualitative research comes from the opinions and ideas provided by the literature and references, used to develop the argument of this paper.

Structure

The analysis is structured around three key economic pillars that influence the viability of the dropshipping model, including skill barriers, capital efficiency, and market competition. These dimensions are used as an analytical framework to evaluate how AI-driven tools have altered the underlying structure of the model. It will then end with an evaluation section where the structural economic viability will be taken into consideration, along with whether AI-driven automation has had a significant impact on the dropshipping model.

Limitations

However, the research does contain some limitations. The primary limitation is the lack of primary research, which may reduce specificity and contextual relevance. The other being that while AI has many research papers available to discuss, dropshipping is comparatively more niche, making it difficult to find relevant sources, limiting the source pool. Nonetheless, this paper will take into account these limitations and continue to explore the research question with the sources available to it. This study also assumes that current AI capabilities remain relatively stable, despite the rapid pace of technological development.

4. Analysis

A. Skill Barrier Compression

Although dropshipping is often characterized as a low-cost business model, a significant barrier exists in the form of information and experience. Traditional dropshipping depends on quickly changing and adapting to new trends in the market. This usually means researching the product, launching the store, and running ads all in one day to try to be the first in the market, which is very difficult for an inexperienced dropshipper to do. This leads to the creation of many different stores to try and gain the skills required to be able to compete for a potential chance at making a profit. Despite the low start-up cost for one store, the cumulative cost of repeated trial-and-error of many stores created the perception of low barriers to entry in the short run, but high in the long run.

However, while not a large impact, AI still has sizable effects on this. AI-driven tools have significantly reduced the time and expertise required to perform key tasks in dropshipping (Arunasalam et al., 2024). This includes conducting deeper, more effective product research, or auto-generating stores in a few minutes, and automated ad campaigns that target the best market segments with additional market research. This, while still being costly, has lowered the learning curve of dropshipping, as the substantial experience previously required to do these steps quickly can now be done by an inexperienced dropshipper through the use of AI. While experience still provides a competitive advantage, the increased accessibility enables a larger number of participants to enter the market, contributing to greater competition.

Decision-Making / Information Advantage Compression

In addition to reducing the technical experience required with dropshipping, AI has also compressed the informational advantages that previously differentiated the experienced from the inexperienced. Large Language Models (LLMs) such as ChatGPT, Claude, and Gemini have democratized access to marketing knowledge that previously required years of experience. This access has allowed inexperienced dropshippers to make more accurate decisions as the LLM can provide knowledge comparable to that of a data analyst.

This has not only narrowed the gap between the experienced and inexperienced, but also the gap in information between large companies and a sole dropshipper. This has allowed small and medium enterprises (SMEs) to enter markets dominated by large companies due to the similar access to information between them. However, it is worthwhile to note that while lowering the information gap makes it easier to compete, it still does not remove the large gap in capital between large and small enterprises, as large companies have much larger marketing budgets to outcompete smaller companies. This then leads to the next argument relevant to the economic viability, which is capital efficiency effects.

B. Capital Efficiency Effects

Capital inefficiencies were a major structural constraint, the major one being the previously mentioned slim profit margins. The main cause of this was the high operational costs associated with the resources needed for the creation of creatives and ad spend, as well as the dependency on an intermediary supplier, not a direct sourcer. Small dropshippers would have to find ways to create high-quality and converting creatives with the low start-up cost they had to work with, making it very difficult to compete with these larger companies that had large marketing teams. By trying to create these high-quality advertising creatives, money and time would need to be spent, potentially hiring editors, script writers, and influencers to market the product, increasing operating costs, and slimming down the profit margins further.

The emergence of AI has significantly reduced these costs. Generative tools, such as AI-based video creation and voiceovers, enable sellers to produce advertising creatives without the need for specialized teams. This not only lowers production costs but also reduces the time required to develop and launch campaigns. As a result, dropshippers can test products and deploy marketing strategies more efficiently, improving capital allocation and increasing the speed of operations.

Prior to the widespread adoption of AI-driven tools, many dropshippers relied on intermediary platforms for product sourcing due to limited access to information and supplier networks. These platforms, such as AliExpress, while convenient, often offer products at higher prices compared to sourcing directly from manufacturers or wholesale suppliers. As a result, sellers operated with higher input costs, further shrinking the already thin profit margins.

The reliance on intermediaries also limited the ability of inexperienced entrepreneurs to optimize their supply chains, as identifying credible and cost-effective suppliers required significant research and experience. However, AI-driven tools have improved access to information and supplier discovery, enabling dropshippers to identify more cost-efficient sourcing options. This has the potential to reduce input costs and improve overall capital efficiency, although such advantages may vary depending on the level of implementation and market conditions.

C. Competition Expansion & Algorithmic Market Dynamics

As a result of these reductions in the barriers to entry and an increase in capital efficiency, economic theory suggests that competition should increase. The effects can be visualized through a simple diagram.

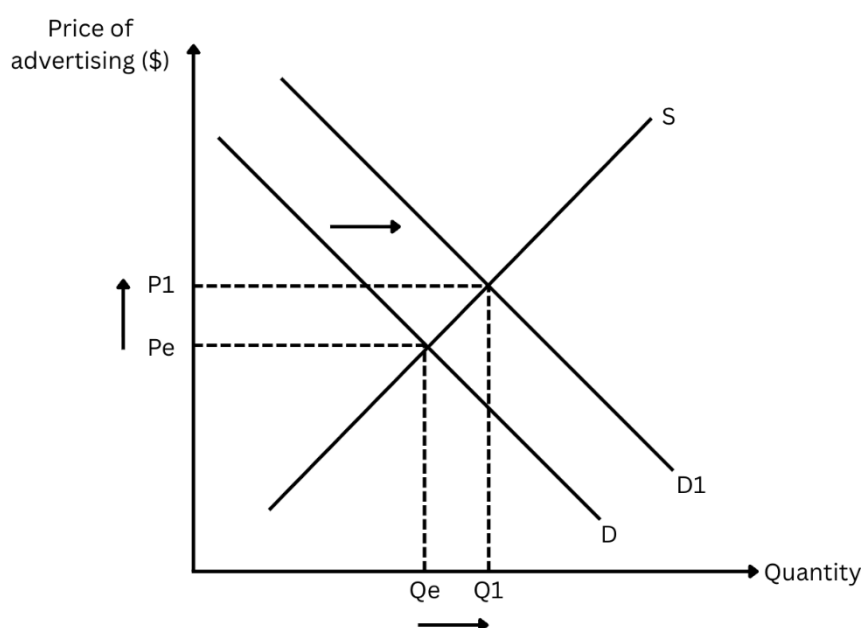


Figure 1: A demand and supply diagram with a shift in the demand curve.

Demand (D) represents advertisers (dropshippers bidding for ads), while supply (S) represents the ad space. It can be observed that before the effects of AI, the original equilibrium was at P_e and Q_e ; however, after, there was a shift to the right in the demand curve from D to D1. This is because as more dropshippers enter the market, there is an increase in demand for advertising, which will ultimately result in an increase in the price of advertising from P_e to P_1 and quantity of advertising traded from Q_e to Q_1 .

Because advertising inventory on digital platforms is allocated through auction-based bidding systems, an increased number of advertisers due to the lowered barriers to entry would be expected to raise equilibrium bid prices according to auction theory, increasing the costs of firms, making profit margins even slimmer. This idea is supported by the very recent increase in the Meta average price per ad by 12% in the first quarter of 2026 (Islas, 2026). This has economic implications as the larger, more experienced firms will benefit as smaller dropshipping businesses are unable to keep up with the increase in prices, as well as increase the barriers to entry in the market, as more initial investment will be needed to start a dropshipping business, increasing the cumulative expense of trial-and-error, as mentioned earlier.

Another aspect to consider is the variety of ways dropshippers can compete. As previously mentioned, dropshipping traditionally competes on the ability of the business to quickly adapt to changes in trends. This would mean thousands of businesses trying to be the first in the market, giving more experienced, larger firms a competitive advantage as they would have teams that would enable them to be more efficient, while suppressing the SMEs. However, the addition of AI, it allows inexperienced dropshippers to compete on other aspects besides being the first to a product. Competitive edges such as quality, services, new target segments, new advertising angles, different advertising hooks, and

adapting to metrics were all previously utilized by experienced marketers, but AI allows the inexperienced access to this knowledge. This could suggest that AI, while increasing competition, also allows for a more dynamic market with firms competing on aspects besides speed.

These complications make it very tricky to answer the research question, as there is a trade-off; on one hand, AI lowers the experience and knowledge barrier to start, in addition to the increased capital efficiency. On the other hand, this will increase the competition, making it harder for SMEs to compete as they slowly get forced out of the market. These complications will be further explored in the evaluation section.

5. Evaluation

D. Structural Economic Viability

Despite improvements in efficiency and accessibility, the structural economic viability of dropshipping remains constrained by several underlying factors. As mentioned earlier, dropshipping relies on slim margins; however, the effects on the quality and supply chain issues weren't covered. Because of the margins, sellers try to find the cheapest supplier in the market, sometimes at the expense of verifying its credibility, making it very susceptible to risks. The risk is customer dissatisfaction, which can lead to high chargeback rates, resulting in payment processors, such as PayPal and Shopify Payments, suspending transactions, effectively preventing businesses from continuing operations.

However, AI has partially mitigated these issues. This is particularly evident given the growth of on-demand delivery services, where the role of AI-based logistics platforms has been crucial in the reduction of delivery expenses and enhancement of customer satisfaction (Arif Siddiqui et al., 2025). Also, AI plays a part in tackling fraud and security elements involved in e-commerce logistics since it is able to detect possible issues with the transactional data and report any possible risks involved to the company so as to minimize their losses and increase transparency.

As a further add-on, AI can now also operate as customer service, which is another crucial addition. This can reduce the risk of chargebacks as customers can now go through AI-powered customer service, allowing for refunds instead of financial institutions. This has implications for the longevity of dropshipping businesses, allowing more businesses to remain in the market for longer.

The other underlying factor was the strict regulations by advertising platforms such as Meta, mentioned in the Literature review section. These, while aimed at the benefit of consumers by lowering the chance of scams and exploitation, can be a big concern for ethical dropshippers as well. The restrictions on the different methods of advertising can make it harder to compete through advertising, as there will be less differentiation. Another implication is that it can lower inexperienced dropshippers' confidence, as one mistake could lead to the suspension of the ad account.

AI also addresses this issue, while being unable to loosen restrictions, it still allows the double-checking of advertisements to see if the creative aligns with Meta's code of conduct. This, while having a small effect, can give inexperienced dropshippers the confidence they need, leading to less risk of suspensions and a higher lifespan of dropshipping businesses. However, these improvements do not eliminate the underlying dependence on external suppliers or the inherently low-margin nature of the model. As a result, while AI enhances operational stability, it does not fundamentally resolve the structural vulnerabilities of dropshipping.

E. Has AI Made Dropshipping More Viable?

These discussions lead to the question: To what extent has AI-driven automation altered the structural economic viability of dropshipping as an entrepreneurial model?

The impact of AI-driven automation has a clear trade-off. On one hand, it lowers the knowledge and experience barriers to entry, as well as improving capital efficiency through faster creation of creatives; on the other hand, it leads to increased market saturation, potentially raising effective barriers through cost pressure, and doesn't remove the underlying limitations with dropshipping as a business model.

Therefore, while AI has made dropshipping more accessible and operationally efficient, it has not made it economically sustainable. Instead, AI has shifted the nature of the model, improving the short-term

feasibility, while intensifying competitive pressures, resulting in a more complex and uncertain economic landscape.

This could also explain the recent trend in the emerging concept of “branded dropshipping”, where sellers would brand their products to gain the ability to charge higher prices, potentially fixing the original slim margins that were associated with traditional dropshipping. This would also allow for the implementation of customer loyalty and brand image for further differentiation, something traditional dropshipping stores didn’t have. Historically, such strategies were less accessible due to the significant knowledge and resources required to build and market a brand effectively. However, AI has enabled entrepreneurs to have access to high-quality creatives, high-quality service, and high-quality branding, making this approach, while still difficult, at least accessible to the average entrepreneur.

This can allow for a more sustainable model compared to traditional dropshipping, as the model leans more into building a normal, strong, trustworthy business, rather than the fast-paced, pump-and-dump dropshipping, while still keeping the original idea of not holding any inventory. The difficulty has ramped up, however, as dropshipping experience isn’t sufficient anymore, with in-depth knowledge about marketing, back-end economics, and employee management required. This conflicts with the original perception of dropshipping being easy and cheap to implement, as much more time will be invested.

This could lead to a more nuanced answer to the question. Where AI has made it less viable to continue with traditional dropshipping due to the intense competition and slim margins, AI has driven the evolution of the model itself, which branding is allowing for with more competitive advantages and long-term sustainability. This, while being a more nuanced answer, still reinforces the conclusion that AI, while having significant impacts, doesn’t fully eliminate the structural barriers with dropshipping, but shifts the nature of the model.

6. Conclusion

This study examined the extent to which AI-driven automation has altered the structural economic viability of dropshipping as an entrepreneurial model. The research has revealed that AI has had several impacts on dropshipping, ranging from the decrease in barriers to entry, increased capital efficiency, and still being unable to change the limitations of dropshipping, which are the slim profit margins and intense competition.

It has instead changed the competitive landscape of dropshipping by making firms more efficient, thus creating more fierce competition. This has even encouraged alternate approaches such as branded dropshipping, which offer more ways of differentiation, in spite of the larger amounts of knowledge required and limitations of traditional dropshipping.

Overall, AI has not transformed dropshipping into a consistently sustainable business model. Rather, it has altered its dynamics, creating a system that is easier to enter but more difficult to succeed in, reinforcing the trade-off between accessibility and long-term viability.

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