

ID#250205

PUBLISHED ON
JANUARY 22, 2025

THE JEROME CHAZEN
CASE STUDY SERIES

Temu: Slow and Cheap Win the Race

BY WILL MA*

Temu's Beginnings

In a world where same-day delivery is no longer an impossible luxury¹ and standard delivery promises are becoming faster and faster,² a new marketplace has arisen to challenge the reigning "Speed Is King" model. Temu, an online marketplace that has taken the global e-commerce scene by storm, traces its roots back to the innovative Chinese platform Pinduoduo (PDD). Launched in September 2022,³ Temu skyrocketed to take over 17% of the US online discount store market share by November 2023,⁴ with its focus on low prices over shipping speed.

Temu is operated by PDD Holdings, the same company behind Pinduoduo's success.⁵ Pinduoduo revolutionized e-commerce in China by introducing a unique blend of social shopping and gamification. Pinduoduo's slogan, "Together, More Savings, More Fun,"⁶ encapsulates its core strategy of encouraging users to band together to secure group discounts. This social approach of crowd buying, combined with gamified features like daily check-ins, mini-games, and virtual rewards, helped Pinduoduo rapidly grow to rival e-commerce giants like Alibaba in China.⁷ While social shopping is Pinduoduo's unique selling point, its logistics efforts are not to be underestimated, from launching its own e-waybill systems⁸ to reengineering China's agri-friendly logistics systems.^{9, 10} Temu has inherited much of Pinduoduo's logistics and marketing learnings, adapting these strategies for international markets. While Temu has opted to focus on traditional e-commerce instead of social buying, it has continued Pinduoduo's gamified app features and invested heavily in advertising, even further developing marketing tactics by means of partnerships (see Exhibit 1) with international influencers and content creators.¹¹ With a keen interest to reach American consumers, Temu reportedly spent nearly \$2 billion on advertising with Meta and became one

Author affiliation

* Roderick H. Cushman Associate Professor of Business,
Columbia Business School

Acknowledgements

Wen Yeh Lee, MBA '25 provided truly excellent research and writing support for this case.

Copyright information

© 2025 by The Trustees of Columbia University in the City of New York.

This case is for teaching purposes only and does not represent an endorsement or judgment of the material included.

This case cannot be used or reproduced without explicit permission from Columbia CaseWorks. To obtain permission, please visit caseworks.business.columbia.edu/, or e-mail ColumbiaCaseWorks@gsb.columbia.edu

of Google's top five advertisers as measured by spending in 2023.¹² Temu's efforts have certainly showed results, with US monthly active users increasing from 12.9 million to 51.4 million within a year from January 2023 (see Exhibit 2). Temu has allocated an approximately \$3 billion budget for advertising and marketing in 2024 alone and put that budget to good use in the 2024 Super Bowl season, spending tens of millions of dollars on commercials and an additional \$15 million on coupons and giveaways.¹³

Temu's slogan, "Shop like a billionaire," combined with its longer shipping times of six to 22 days¹⁴ encourage customers to shop more impulsively for items they are not heavily desperate for, with the consolation that they are buying at rock-bottom prices.¹⁵ Purchasers are less likely to feel the need for expedited shipping when buying ultracheap goods that are not classed as necessities and are able to accommodate Temu's slower and more unpredictable shipping schedules.

Temu's Business Model

SUPPLIER BASE

Temu serves as a platform that connects many small, brandless suppliers in China to American consumers. The company aggregates consumer data from its platform and provides manufacturers with real-time data to predict consumer trends. Temu can inform its suppliers of which product iterations and specific stock-keeping units (SKUs) are likely to experience high demand, with the expectation that suppliers can quickly adjust their plans accordingly and produce more high-demand items for Temu. This approach allows Temu to test the market, minimize inventory risks, and facilitate rapid adaptation to shifting consumer preferences by continually providing feedback on inventory levels and demand patterns.¹⁶

However, many suppliers have expressed concerns about the challenges of operating under such a system. They face razor-thin profit margins and mounting pressure to slash prices¹⁷ due to intense competition among suppliers. Temu's ranking algorithm¹⁸ exacerbates this issue by predominantly displaying the lowest-priced sellers in search results, incentivizing suppliers to engage in price wars. Some suppliers reportedly operate at negative margins, relying on export tax rebates from the Chinese government to turn a profit.¹⁹

Adding to these difficulties is Temu's consignment-based business model, which shifts inventory risk entirely onto the suppliers. Suppliers are only paid for goods if they are sold on the platform, and payment is further delayed until funds are collected from consumers, straining cash flow. Additionally, Temu's search ranking algorithm penalizes suppliers who run out of stock, pressuring them to overstock in order to maintain their rankings. This forces suppliers to bear the financial burden of excess inventory while navigating an already challenging pricing environment.²⁰

Finally, Temu assigns responsibility for faulty products and customer complaints to suppliers, which can lead to strained relationships. The platform holds suppliers accountable for product defects, customer complaints, and inaccurate product descriptions, potentially resulting in financial penalties. While policies such as the refund-only option enhance customer

satisfaction by eliminating the need for returns, they can create financial strain for suppliers, since refunds are often issued without requiring proof of defect or damage. In July 2024, several vendors gathered at Temu's office in Guangzhou to protest harsh penalty policies.²¹ One merchant from Guangzhou mentioned that the fines could increase to five times the value of a sale when customers return their purchases for a refund.²²

CROSS-BORDER DISTRIBUTION

A fundamental strategy employed by Temu to maintain low prices is its highly optimized supply chain. The company leverages cross-border e-commerce to ship products directly from Chinese suppliers and manufacturers to overseas consumers.²³ This approach eliminates intermediaries, reducing costs and allowing for more competitive pricing.

According to the World Bank, airfreight is typically 12 to 16 times more expensive than sea transport.²⁴ Consequently, traditional businesses have long relied on ocean freight as their primary method of transporting goods, leveraging its cost-effectiveness for shipping large volumes across vast distances, albeit with longer transit times. In contrast to the traditional model of storing bulk-shipped Chinese goods in US warehouses to offer one- to two-day delivery promises, Temu stores all goods in Chinese warehouses, saving on warehousing costs in the United States but relying on more expensive airfreight to meet delivery promises in the range of six to 22 days.²⁵ Temu ships over 4,000 metric tons of cargo via air daily,^{26, 27} which would fill about 40 Boeing 777 freighters every day.

To optimize logistics, Temu consolidates orders by collecting products sent from Chinese manufacturers and storing them in its own warehouses in China. The company operates over 100 warehouses²⁸ near Guangzhou in Guangdong Province, strategically positioned for easy access to the Pearl River Delta and its robust transportation networks. Notably, Guangzhou's Baiyun International Airport ranks as the second-largest airport in China as measured by air cargo throughput,²⁹ with over two million metric tons of air cargo delivered in 2023.³⁰ This extensive infrastructure supports Temu's ambitious shipping operations and contributes to its ability to offer competitive pricing while maintaining efficient delivery timelines.

STORAGE AND PACKING

Temu's sophisticated inventory management system leverages data insights to optimize product storage and order fulfillment. By analyzing customer purchase trends and the relationships between different SKUs, Temu calculates the most efficient way to distribute and store unsold goods among its numerous warehouses. This proactive approach allows Temu to instruct suppliers to deliver products directly to the most appropriate storage facilities, grouping related items in close proximity for streamlined order consolidation at a later stage.

A typical customer order from Temu contains about six to seven SKUs. These individual items are collected and consolidated within Temu's warehouses based on customer orders, then packaged efficiently and prepared for international shipment to destinations such as the United States and the United Kingdom, where the end user is located. Temu has reportedly optimized these processes to such a high degree that they are three times faster than TikTok's.³¹ This efficiency can be attributed to Temu's more predictable volume flow (fewer unrelated viral product orders), and a better understanding of product pairing tendencies. These

optimizations significantly reduce additional labor and travel costs associated with order consolidation.

Furthermore, Temu employs an innovative packing strategy for airfreight, combining heavy goods with lightweight items to maximize the utilization of both the plane's volume and load capacity.³² Unlike many retailers that deal with standard SKU sizes, Temu has a diverse product range—varying in dimensions, density, and volume—allowing for creative pairing of items to optimize delivery within the constraints of airline space and weight limitations.

AIRLINE PARTNERSHIPS

The unavoidable hurdle of all cross-border commerce companies is a complicated and lengthy delivery process. A breakdown of this process estimates that a typical Temu product will be delivered from the factory to warehouses in Guangzhou for \$1 in cost and within a day, flown from Guangzhou to California and passing through customs within an additional three days, moved from the airport to a California depot over the next three days, and finally from the California depot to the customer through the US Postal Service for \$3 to \$5, taking at least two days, or longer for remote regions.³³

To make this process as economically viable as possible, Temu has negotiated several partnerships across its entire supply chain with Chinese third-party logistics companies, airlines, and US last-mile delivery third-party logistics companies. While airfreight is traditionally associated with higher costs, Temu has managed to significantly reduce expenses through innovative strategies. For instance, the company collaborates closely with freight forwarders to purchase unsold air cargo space on flights that are about to depart. This approach allows Temu to secure discounted rates for tail-end cargo that is otherwise unlikely to be sold.³⁴ The company's ability to capitalize on these opportunities is supported by highly optimized fulfillment processes and the strategic placement of its warehouses near air cargo hubs, enabling rapid delivery of goods to shipping facilities.

Additionally, Temu employs a unique pricing model with its logistics and airline partners. According to a consultant familiar with Temu's operations, the company requires providers to submit monthly fixed-price proposals that must be equal or lower than previous quotes, ensuring costs do not increase.³⁵ Given Temu's massive shipping volumes and its emphasis on cost efficiency, this policy fosters intense competition among providers. Airlines and logistics companies are incentivized to offer extremely competitive rates, creating a bidding culture that further drives down costs. These strategies collectively allow Temu to navigate the challenges of cross-border delivery while maintaining economic viability.

Temu's partnerships with airlines are characterized by a high degree of flexibility and time sensitivity, with both parties able to cancel cargo space reservations up to 48 hours before flight. This arrangement, while offering agility, has led to challenges for both Temu and the airlines. During periods of high air cargo demand, airlines may spontaneously cancel Temu's reservations in favor of higher-paying customers. Conversely, when air cargo demand is low, Temu can cancel its bookings to secure cheaper rates from other providers or even negotiate for using the market rate of the same airline rather than agreed monthly fixed prices. Such correspondence has caused unintended consequences for both parties, and reportedly there

has been an increasing effort to avoid cancellations close to flight times, to maintain both stability in air cargo flow and Temu's ability to meet fulfillment requirements.³⁶

Despite how vital its partnerships with logistics providers are, Temu still retains great bargaining power because of the size of its daily sales volume and the value to logistics providers of capturing this market. Temu has a robust legal team that strongly implements specific clauses to transfer risk in events of force majeure and customs inspection. For example, goods that are imported need to have their value declared for customs and tax purposes; Temu's agreements are drafted in a way to revert responsibility by stating that the declared value provided by Temu is only for reference, and it is its partners' responsibility to resolve inspection queries.³⁷

COMPANY CULTURE

Temu's core company values, inherited from its parent company, Pinduoduo, emphasize an intense focus on optimization, data-driven decision-making, and a highly competitive, fast-paced culture. Internal competition is a key mechanism used to identify high-performing teams and individuals. To further encourage this meritocratic and competitive spirit, the company has established a clear structure for promotions and demotions. In some cases, teams across several business departments are pitted against one another to compete to get the lowest price from the same supplier. Temu's strict performance criteria also include several key indicators and trackable metrics such as minimizing customer returns and lowering costs.³⁸ Even from its early days, Temu has reportedly demonstrated a strong commitment to process optimization by greatly focusing on minute details to improve its packaging and save on space, cost, labor, and materials. Temu's priorities and values allow it to capture small savings in each transaction that will ultimately add up to a large impact during rapid scaling.³⁹

Temu's Future

Despite its rapid growth, Temu faces several challenges that could impact future operations. The company currently benefits from the \$800 de minimis limit, which allows it to ship packages to the United States without paying tariffs, as long as they are under this threshold. It is estimated that Temu and fast-fashion retailer Shein alone are likely responsible for more than 30% of all packages shipped to the United States daily under the de minimis provision.⁴⁰ While the number of de minimis shipments is increasing yearly (see Exhibit 3), there has recently been regulatory action intended to reduce de minimis import volumes.⁴¹ This reliance on a potentially impermanent tax policy poses a significant risk to Temu's business model.

The company also faces concerns related to unethical labor practices, including allegations of forced labor, copyright infringement issues, US-China political tensions, and product safety concerns.^{42, 43} These issues could lead to increased regulatory scrutiny and potential changes in trade policies that may affect Temu's operations.

To mitigate risks and expand its offerings, Temu is considering several strategic changes. The company is exploring the possibility of opening warehouses in the United States or Mexico to reduce reliance on cross-border shipping and improve delivery times. Additionally, Temu can

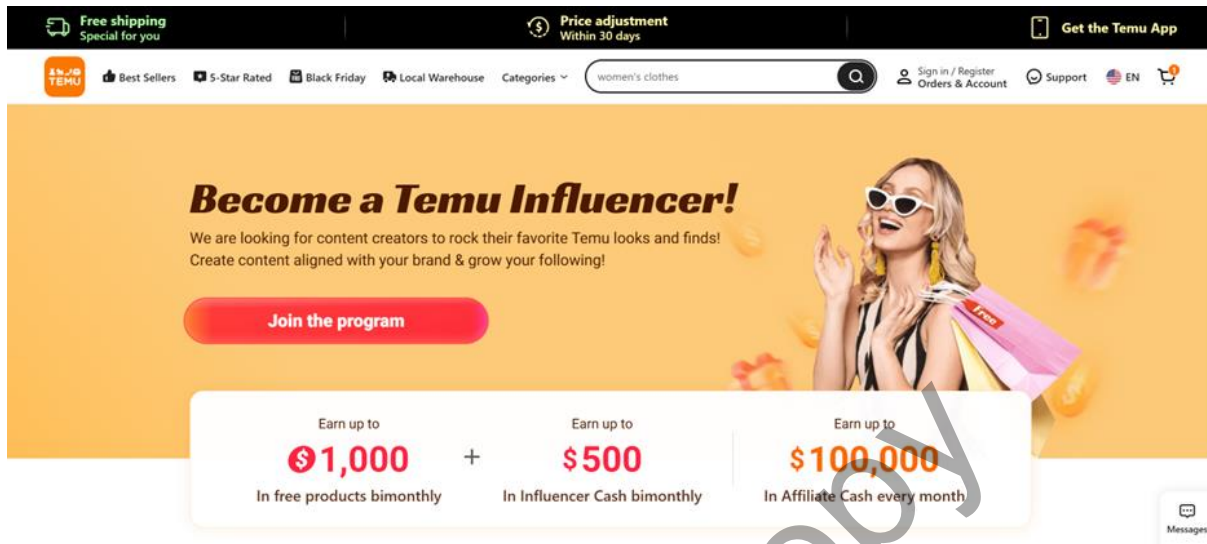
consider diversifying the supply region by recruiting sellers with local warehouses in the United States rather than shipping exclusively from China. This change could allow for faster shipping and a broader range of products. However, this will cause a great shift in the current flow of goods.

Temu has rapidly emerged as a formidable player in the US e-commerce market, carving out a niche for budget-conscious consumers willing to wait longer for deliveries. The company's focus on aggressively low prices, strict supplier policies, enormous ad spending, and strong data-driven approaches has allowed Temu to differentiate itself from e-commerce competitors, like AliExpress and Wish, that source primarily from China. Temu may have been able to acquire a much larger market share in the United States than its competitors have, but its high burn rate to acquire customers might not be sustainable for long, even with extensive support from its mother company, Pinduoduo. Additionally, Temu will need to consider how to compete with incumbent US companies, like Amazon, that already had a strong logistics network in the United States, in order to pivot its business model from prioritizing speed to focusing on recapturing budget-conscious consumers.⁴⁴

As Temu continues to grow and evolve, it will need to navigate complex regulatory environments, address ethical concerns, and continue innovating in a highly competitive market. The company's ability to balance its cost-cutting strategies with the need for quality, reliability, and customer satisfaction will be crucial for its long-term success in the global e-commerce landscape. But as regulations are changing, should it continue to adapt and refine its "slow and cheap" approach, or should it venture into incumbent "Speed Is King" competitor territories? Should Temu consider alternative supplier networks and pivot away from its highly optimized Chinese manufacturing and logistics partnerships, and, if so, how would that impact product price and the cost-conscious customer base? If Amazon decides to target budget-conscious customers, how can Temu retain its customer base?

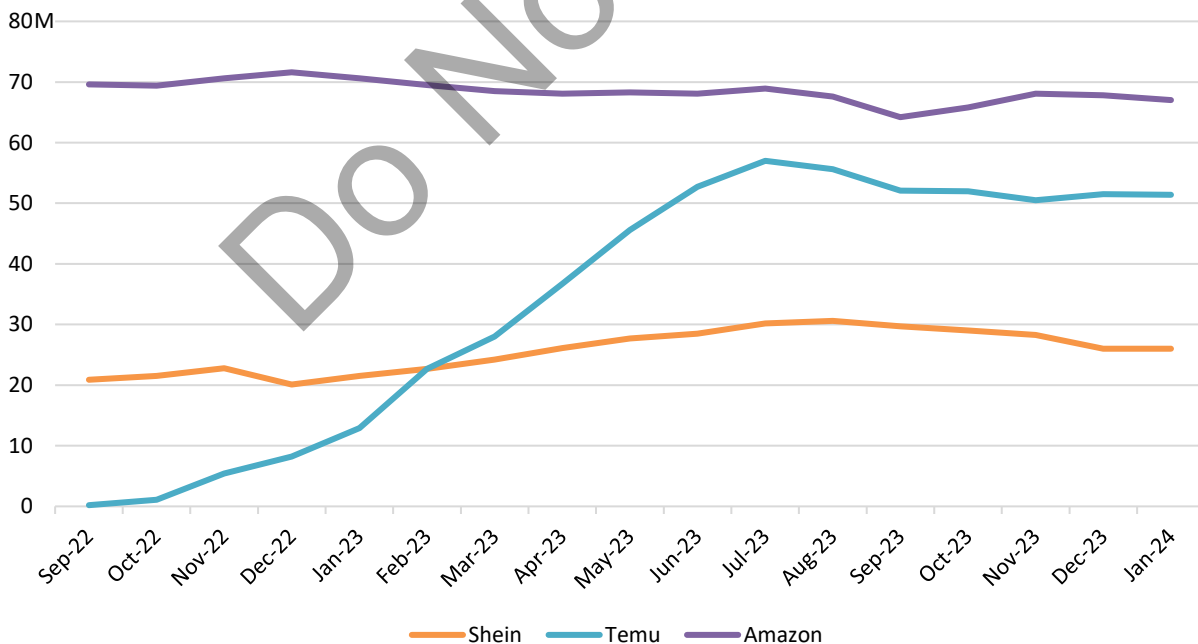
Exhibits

Exhibit 1: Temu Global Influencer Program Homepage



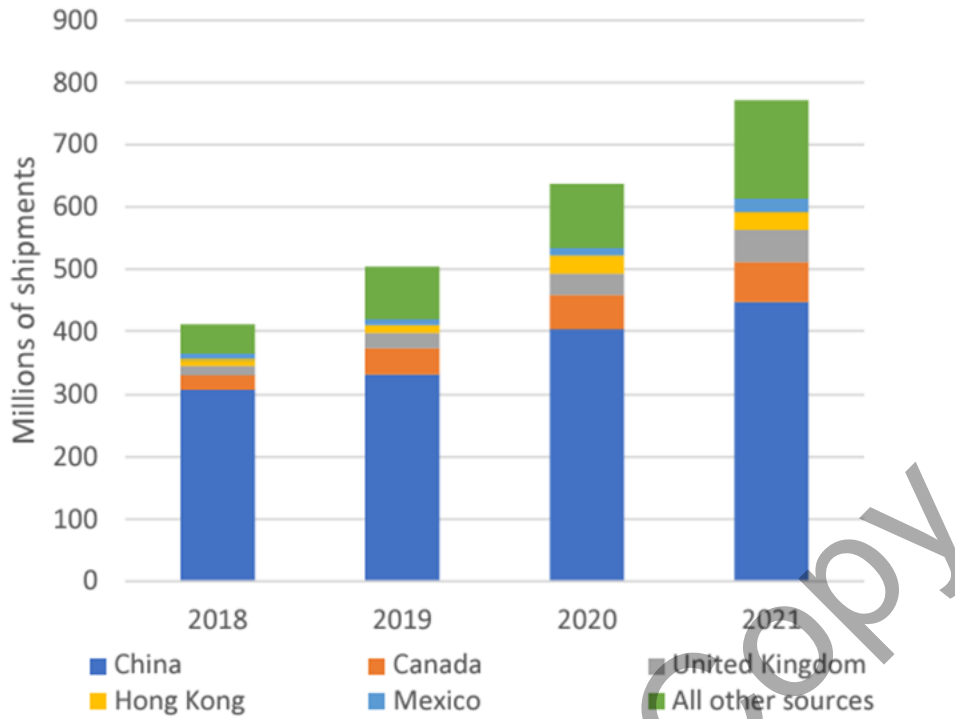
Source: "Become a Temu Influencer!," Temu (company website), 2024, <https://www.temu.com/influencer-collaboration.html>.

Exhibit 2: Monthly Active Users in Millions of Shein, Temu, and Amazon



Source: Lu, Shen, "The Spend, Spend, Spend Strategy Behind Temu's Rapid Ascent in America," *The Wall Street Journal*, updated February 10, 2024, <https://www.wsj.com/business/retail/the-spend-spend-spend-strategy-behind-temus-rapid-ascent-in-america-d2bdefc3>.

Exhibit 3: U.S. De Minimis Imports by Source, FYs 2018–21



Source: "U.S. Section 321 Imports Surge with Rising E-commerce Shipments From China," US International Trade Commission.

Endnotes

¹ Herrington, Doug, “Amazon is delivering its largest selection of products to U.S. Prime members at the fastest speeds ever,” Amazon (company website), July 31, 2023, <https://www.aboutamazon.com/news/operations/doug-herrington-amazon-prime-delivery-speed>.

² Garland, Max, “Deliveries keep getting faster. Will it last?,” Supply Chain Dive, June 12, 2023, <https://www.supplychaindive.com/news/faster-last-mile-delivery-speeds-project44/652165/>.

³ Kharpal, Arjun, “China’s e-commerce giant Pinduoduo quietly launches U.S. shopping site in Amazon challenge,” CNBC, September 2, 2022, <https://www.cnbc.com/2022/09/02/chinas-e-commerce-giant-pinduoduo-launches-us-shopping-site-temu.html>.

⁴ “Temu, the Chinese e-commerce platform, is drawing shoppers from U.S. dollar stores, data shows,” CNBC, December 7, 2023, <https://www.cnbc.com/2023/12/07/temu-the-chinese-e-commerce-platform-is-drawing-shoppers-from-us-dollar-stores-data-shows.html>.

⁵ Qu, Tracy, “PDD’s Temu opens shop in Europe with 6 new markets as it rapidly expands to take on rivals Shein, ByteDance,” *South China Morning Post*, April 24, 2023, <https://www.scmp.com/tech/big-tech/article/3218124/pdds-temu-opens-shop-europe-six-new-markets-it-rapidly-expands-take-rivals-shein-bytedance>.

⁶ “What is Pinduoduo (拼多多)?,” Pinduoduo (company website), 2023, <https://en.pinduoduo.com/group>.

⁷ Sentance, Rebecca, “The rise of Pinduoduo: How a group buying app grew to rival Alibaba,” Econsultancy, March 2024, <https://econsultancy.com/pinduoduo-growth-story-china-ecommerce/>.

⁸ Tam, Chelsey, “Pinduoduo Has Proven Its Unique Position Amid Challenging Environment in China,” Morningstar, September 23, 2022, <https://www.morningstar.com/company-reports/1114820-pinduoduo-has-proven-its-unique-position-amid-challenging-environment-in-china>.

⁹ Lidsky, David, “The 10 most innovative logistics companies of 2022,” *Fast Company*, March 8, 2022, <https://www.fastcompany.com/90724437/most-innovative-companies-logistics-2022>.

¹⁰ “Pinduoduo named top logistics company for farm-to-fork innovation,” Retail News Asia, March 25, 2022, <https://www.retailnews.asia/pinduoduo-named-top-logistics-company-for-farm-to-fork-innovation/>.

¹¹ “Become a Temu Influencer!,” Temu (company website), 2024, <https://www.temu.com/influencer-collaboration.html>.

¹² Mattioli, Dana, Suzanne Vranica, and Miles Kruppa, “Temu’s Push Into America Pays Off Big Time for Meta and Google,” *The Wall Street Journal*, March 7, 2024, <https://www.wsj.com/business/media/temus-push-into-america-pays-off-big-time-for-meta-and-google-f2721b32>.

-
- ¹³ Liu, Juliana, "Online superstore Temu doubles down on Super Bowl with TV ad and \$15 million in giveaways," CNN, February 12, 2023, <https://www.cnn.com/2024/02/12/tech/china-temu-super-bowl-ad-hnk-intl/index.html>.
- ¹⁴ "Temu | Shipping Info," Temu (company website), 2024, https://www temu.com/shipping-info.html?refer_page_name=support-center&refer_page_id=10318_1725330118525_pzx4shw13a&refer_page_sn=10318&x_session_id=owv0a9nbvh.
- ¹⁵ Imtiaz, Aysha, "'Temu is as addictive as sugar': How the ecommerce retailer drives a shopping frenzy," BBC.com, April 29, 2024, <https://www.bbc.com/worklife/article/20240426-temu-gamification-marketing>.
- ¹⁶ Deighton, John A., "How SHEIN and Temu Conquered Fast Fashion—and Forged a New Business Model," Harvard Business School, April 25, 2023, <http://hbswk.hbs.edu/item/how-shein-and-temu-conquered-fast-fashion-and-forged-a-new-business-model>.
- ¹⁷ Kubota, Yoko, Raffaele Huang, and Shen Lu, "Behind Cheap Stuff From Shein and Temu: A Hard Bargain With Suppliers," *The Wall Street Journal*, January 3, 2024, <https://www.wsj.com/business/retail/behind-cheap-stuff-from-shein-and-temu-a-hard-bargain-with-suppliers-fa7ba7c0>.
- ¹⁸ Yao, K., "Vol 06. 解析拼多多：错位竞争、极致效率、最强组织 | 对话乘风破浪," <https://www.xiaoyuzhoufm.com/episode/65661324ce2ee31e8fa4f10d>.
- ¹⁹ *Navigating Success: Temu's Supply Chain Mastery & Global E-Commerce Domination*, Ecommerce on Tap, YouTube video, 12:10, March 22, 2024, <https://www.youtube.com/watch?v=j3YEQUCvSJA>.
- ²⁰ Yao, "Vol 06. 解析拼多多：错位竞争、极致效率、最强组织 | 对话乘风破浪."
- ²¹ "China's Temu vendors protest over penalty policy," Reuters, July 31, 2024, <https://www.reuters.com/business/retail-consumer/chinas-temu-vendors-protest-over-penalty-policy-2024-07-31/>.
- ²² "China's Temu vendors protest."
- ²³ Gruet, Sam, "How Temu is shaking up the world of online shopping," BBC.com, March 19, 2024, <https://www.bbc.com/news/business-68563339>.
- ²⁴ "Air Freight: A Market Study with Implications for Landlocked Countries," World Bank, August 1, 2009, <https://www.worldbank.org/en/topic/transport/publication/air-freight-study>.
- ²⁵ "Temu | Shipping Info."
- ²⁶ Taylor, Glenn, "As Air Cargo Demand Rises, Shein and Temu Put Upward Pressure on Rates," Sourcing Journal, July 3, 2024, <https://finance.yahoo.com/news/air-cargo-demand-rises-shein-163725351.html/>.
- ²⁷ McLymore, Arriana, Casey Hall, and Lisa Barrington, "Focus: Rise of fast-fashion Shein, Temu roils global air cargo industry," Reuters, April 10, 2024, <https://www.reuters.com/business/retail-consumer/rise-fast-fashion-shein-temu-roils-global-air-cargo-industry-2024-02-21/>.
- ²⁸ Yao, K., "Brand AI Consulting Interview," November 14, 2024.

²⁹ Zhang, Wenyi, "China: leading airports by cargo throughput 2022," Statista, February 1, 2024, <https://www.statista.com/statistics/258235/leading-airports-in-china-by-cargo-throughput/>.

³⁰ Civil Aviation Administration of China, "2023 年全国民用运输机场生产统计公报 (2023 National Civil Aviation Transport Airport Production Statistics Bulletin)," March 20, 2024, https://www.caac.gov.cn/XXGK/XXGK/TJSJ/202403/t20240320_223261.html.

³¹ Yao, "Brand AI Consulting Interview."

³² Chao, Jerry, "An analysis of Temu's cross border supply chain & logistics," The Lowdown, December 10, 2023, <https://thelowdown.momentum.asia/an-analysis-of-temus-cross-border-supply-chain-logistics-2-2>.

³³ "Temu's global expansion now looks fraught with difficulty," *Financial Times*, August 27, 2024, <https://www.ft.com/content/ea2bf29b-dae9-4509-bf62-08805dc4560e>.

³⁴ Yao, "Brand AI Consulting Interview."

³⁵ Yao, "Brand AI Consulting Interview."

³⁶ Yao, "Brand AI Consulting Interview."

³⁷ Dai, Runze, "Inside Temu: the fiery culture and a perpetual efficiency," The Lowdown, April 10, 2023, <https://thelowdown.momentum.asia/inside-temu-the-fiery-culture-and-a-perpetual-efficiency-machine/>.

³⁸ Dai, "Inside Temu."

³⁹ Yao, "Brand AI Consulting Interview."

⁴⁰ Nova, Annie, and Gabrielle Fonrouge, "Biden targets Shein, Temu with new rules to curb alleged 'abuse' of U.S. trade loophole," CNBC, September 13, 2024, <https://www.cnbc.com/2024/09/13/de-minimis-shein-temu-biden-china-rules.html>.

⁴¹ "Biden-Harris Administration Announces New Actions to Protect American Consumers, Workers, and Businesses by Cracking Down on De Minimis Shipments with Unsafe, Unfairly Traded Products," The White House, September 13, 2024, <https://www.whitehouse.gov/briefing-room/statements-releases/2024/09/13/fact-sheet-biden-harris-administration-announces-new-actions-to-protect-american-consumers-workers-and-businesses-by-cracking-down-on-de-minimis-shipments-with-unsafe-unfairly-traded-products/>.

⁴² Chan, Kelvin, "Chinese online retailer Temu faces European Union investigation into rogue traders and illegal goods," The Associated Press, updated October 31, 2024, <https://apnews.com/article/temu-european-union-digital-services-act-c962ffad1b2b98477d182c2241aeffe6>.

⁴³ Palmer, Annie, "U.S. safety regulator calls for probe of Temu, Shein over 'deadly baby and toddler products,'" CNBC, September 4, 2024, <https://www.cnbc.com/2024/09/04/us-regulator-calls-for-probe-of-temu-shein-over-unsafe-products.html>.

⁴⁴ McMorrow, Ryan, and Tina Hu, "Amazon set to take on Temu and Shein with new discount section," *Financial Times*, June 27, 2024, <https://www.ft.com/content/40a393db-dfd6-4482-a494-0434721a20e3>.