

Sustainable Innovation and Competitive Advantage in the Footwear Industry: A Case Study of Allbirds

Zhijie Yao

School of Commerce, The University of Sydney, Sydney, NSW 2006, Australia

Abstract

The footwear industry has become increasingly diverse, fast-fashion-oriented, and dependent on omnichannel distribution, but its environmental impact remains significant because of non-degradable materials and fast product turnover. Allbirds was founded to tackle sustainability issues in the footwear industry through renewable materials and a carbon-neutral business vision. This paper analyses Allbirds through the business model canvas, the VRIN framework, and a simple financial comparison. The analysis shows that Allbirds created value through sustainable branding, eco-friendly materials, and brand reputation, but these advantages became less rare and less difficult to imitate after the company shared key sustainability resources with competitors. The paper further identifies two reasons behind Allbirds' stagnant growth: the weakening of its competitive advantage and slow product innovation. It recommends that Allbirds protect selected proprietary supplier information while developing more product styles for different usage settings, so that the company can maintain its sustainable brand perception and improve long-term competitiveness.

Keywords

Allbirds; Sustainable Innovation; Footwear Industry; Business Model Canvas; VRIN; Competitive Advantage.

1. Introduction

The footwear industry has been developed over decades. The variety of styles, increasingly fast-fashion nature, and omnichannel distribution have become increasingly normal for customers. Nevertheless, both consumers and footwear manufacturers may not realise how polluted this industry could be. The materials used currently are non-degradable, and the fast turnover creates more waste. Allbirds was founded to tackle the sustainability issue of the footwear industry. The founders, Tim Brown and Joey Zwillinger, wish to create a carbon-neutral business in the footwear industry, hoping to revolutionise the industry by their sustainability endeavours. With some initial success, the brand has faced stagnant growth in recent years. This report aims to unveil the reasons behind the stagnant growth by using the business model CANVAS, the VRIN framework, to analyse the potential problems that Allbirds faces. Then, the two key reasons for failure will be identified, and key strategic recommendations will be given to the management team of Allbirds. To strengthen the analysis, this report uses three methods: business model analysis, VRIN analysis, and simple financial comparison. The financial comparison uses estimated cost and profit margin data to show how Allbirds' sustainability strategy may affect its profitability and competitiveness.

2. Business Model Analysis of Allbirds

Allbirds leverages an innovative business model that differs greatly from the traditional footwear companies. The business model CANVAS [1] will be utilised to analyse the business

model of Allbirds. Key areas of analysis include sustainable resources, brand perception, market expansion, and financial performance.

Customer Segments, Customer Relationships, and Channels: Allbirds' customer segments include environmentally conscious, especially those who prioritise sustainable products over other aspects, such as price, style, etc. Another target area is customers who value comfort and minimalist style. In this way, the target customer segments are 30-40 years old with certain social status customers. Allbird succeeded in finding its initial loyal customers, which is the tech population in Silicon Valley [2]. The product spreads across its target customers by using word of mouth, and the eco-friendly packaging also promotes people's sharing on social media such as YouTube, indicating that customers are satisfied and impressed by Allbirds' product [2]. As Allbirds started with a direct-to-customer sales model, it didn't hinder its sales growth due to its good customer relationships with PR efforts. Customers will proactively search for Allbirds on the Internet and place the order. However, the step to collaborate with Nordstrom breaks the pattern and the model of direct-to-customer. Although in a pop-up store format [3], a third-party distributor is introduced, breaking the pattern of direct-to-customer channels. As its sales decline in 2023 and 2024, the trial may present more possibilities for Allbirds to use a traditional distribution channel to reach more customer and increase sales [4].

Value proposition: The largest value proposition of Allbirds is the sustainability and usage of renewable materials. Allbirds indeed invest a lot of effort into finding raw materials that are 100% sustainable. For instance, the company is not satisfied with the EVA midsole and thus continues to find a sustainable source for its midsole [2]. Allbirds' value propositions align with their endeavours, and they successfully create products that align with their values.

Key Partners, Key Activities, and Key Resources: the key partners and key resources are indeed the suppliers of these sustainable materials and their methods for calculating carbon footprints. These are the competitive advantages of Allbirds. Based on Barney's perspective, for a firm to have sustained competitive advantage, the resources need to be heterogeneous and immobile [5]. However, Allbirds shares the resources with all the competitors, thus its competitive advantage is no longer heterogeneous and immobile. Its key resources are compromised, thus contributing to its decline in sales value in 2023 and 2024.

Cost Structure and Revenue Streams: the majority of Allbird's costs are the material costs and the R&D process of the renewable materials. These merino wool, eucalyptus fibres, and green EVAs tend to be more expensive than traditional materials, causing the cost of Allbirds to be higher than its competitors.

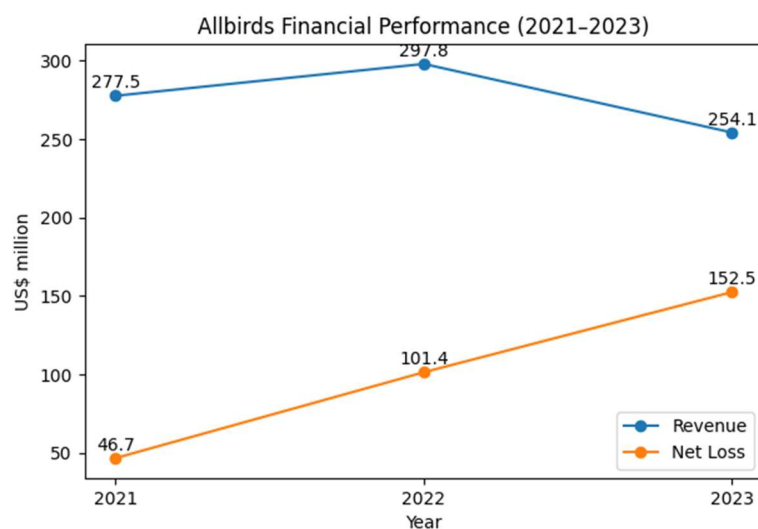


Figure 1. Allbirds Financial Performance (2021-2023)

On the revenue side, the direct-to-customer sales models and self-owned retail stores are the main revenue streams, given that Allbirds have limited SKUs compared to their competitors, given their belief in “slow fashion” [2]. This suggests that although Allbirds’ sustainability strategy creates environmental value and strengthens brand image, it also increases production costs and reduces profit margins. As a result, Allbirds may face difficulties competing with larger companies that benefit from lower production costs and economies of scale.

Figure 1 shows that Allbirds’ revenue increased slightly in 2022 before declining in 2023, while net losses continued to rise significantly over the same period. This indicates that although Allbirds successfully attracted environmentally conscious consumers during its early growth stage, the company struggled to maintain sustainable profitability. The increasing losses suggest that high production costs and limited product innovation weakened Allbirds’ long-term financial performance and competitiveness.

3. Product Development and Innovation Strategy Analysis Using VRIN

By using the VRIN model, the report leverages the resource-based view [6] to analyse the product and innovation of Allbirds.

Valuable: the product that Allbirds offers is valuable. Allbirds introduces the idea of sustainability into the footwear industry and attracts its loyal customers. Nevertheless, Allbirds introduced its LCA (life cycle assessment) tool with its competitors, making its competitors can also measure their carbon footprint using the tool, which in turn makes Allbirds’s value proposition in sustainability less valuable and less rare [2]. Thus, Allbirds must keep the exclusivity of its brand’s core value, which is the technology and channel of renewable material.

Rare and inimitable: Allbirds is proactively finding sources of sustainable materials. Although the suppliers help Allbirds develop new products such as the tree runner, wool runner, etc. [2]. However, the competitive advantages of Allbirds depend on the suppliers. In this case, although the material suppliers are rare, companies like Allbirds are not rare. As suggested in the book, “Are you sure have a strategy: how will we obtain our returns?” [7]. Five arenas will be focused on deciding the success of a business. Allbirds indeed succeeded in its arena, which is the most sustainable footwear in the industry, but failed to integrate all five elements together. It focuses much more on “arenas” and “differentiators” but fails to recognise the economic logic and staging of the firm, causing declines in 2023 and 2024. Its staging is off the speed, as it launched a lot of new products in the year 2021 but failed to keep the momentum in the following years. Only the updated version of Wool Runner 2 was introduced in November 2023, which contrasts with the fast-fashion nature of the footwear industry.

Non-substitutable: Allbirds succeeded in combining sustainability, comfort, and style to create an iconic product in the years when it started. In this case, Allbirds has already created a non-substitutable brand image for the public. However, Allbirds opens the secret and its competitive advantage to its competitors, making its products more substitutable. For instance, Adidas has partnered up with Parley to produce shoes made from ocean plastic. Thus, customers with a sustainability mindset but brand loyalty may in turn choose to purchase products from Adidas.

Table 1. VRIN Analysis of Allbirds

Resource	Valuable	Rare	Inimitable	Result
Sustainable branding	✓	✗	✗	Temporary advantage
Eco-friendly materials	✓	✗	✗	Short-term advantage
Brand reputation	✓	✓	✗	Short-term advantage

Table 1 shows that although Allbirds creates value through sustainability and brand reputation, most of these advantages are not rare or difficult to imitate.

4. Key Reasons Behind the Failure of Allbirds

Based on the findings, two key reasons that constitute the failure of Allbirds include its free giveaway of its competitive advantage and its stagnant innovation.

As Allbirds hopes to benefit. The whole footwear industry, it gives out its own agreement and findings of recyclable material. In this way, it loses its competitive advantage in sustainable growth. According to the article Rediscovering Responsible Innovation: A Roadmap Towards Corporate Sustainability, sustainable innovation needs to be considered carefully [8]. A corporation cannot solely focus on sustainability but neglect its development and improvement on the business side, especially an IPO company. The market will only believe the promising outlook based on the revenue and profits.

The second reason for failure is its stagnant innovation in the footwear style offerings. Although Allbirds wishes to fight against the fast-fashion nature of the footwear style offerings. Although Allbirds wishes to fight against the fast-fashion nature of the footwear industry, it is still one of the players in the industry. Indeed, Allbirds achieved success in just a few of the styles, but the players in the industry are constantly innovating and releasing new styles to follow the fashion style in the industry. The limited offerings by Allbirds hinder the choices of existing customers, given that they wouldn't buy the same second pair of shoes of the same style due to sustainability reasons. When the most targeted customer base is explored, Allbirds naturally faces stagnant growth with its limitation of style and precise target population.

5. Strategic Recommendations for Allbirds

For Allbirds to continue to thrive in the footwear industry, the report suggests that Allbirds recover some of its proprietary supplier information. In this way, Allbirds can keep the exclusivity of the competitive advantage of its products. Customers who truly care about sustainability will first think of Allbirds and purchase the products of Allbirds due to the brand perception and the comfort of the shoes. This is also proven by the article "Intellectual Capital as a key driver of corporate responsible innovation" [9]. It highlights the importance of responsible innovation, with key input from key personnel in the company. Secondly, Allbirds should develop more styles that are suitable to wear under multiple circumstances for loyal customers to repurchase the products of Allbirds. For instance, a customer who fully recognises Allbirds's brand value will repurchase another pair of tennis shoes. In this way, Allbirds cannot only increase the repurchase of its loyal customers but also explore new customer segments to achieve growth.

6. Conclusion

By analyzing the competitive advantage of Allbirds, its endeavours in finding sustainable materials are recognized. Nevertheless, due to the rather failure in business returns and continuous innovation, Allbirds faces various challenges to continue the momentum. The report analyzes that the key factors are giving up the competitive advantage of renewable materials and the loss of momentum to introduce new products to keep track of the industry. The report suggests that Allbirds improve on the previous aspects to achieve sustainable growth. For instance, Allbirds can introduce a new series of products that use the same renewable materials but target a different setting to let loyal customers purchase a new pair of Allbirds for a special occasion. In this way, Allbirds can keep its sales revenue momentum going, without losing its

initial brand perception. Future research could incorporate real financial data and consumer survey evidence to provide a more accurate evaluation of Allbirds' long-term competitiveness.

References

- [1] ThePower Education. (n.d.). Business model canvas explained: Free template + real examples (2025). ThePower MBA. <https://www.thepowermba.com/en/blog/business-model-canvas>
- [2] University of Sydney. (2026). Allbirds – Decarbonizing fashion [Case material]. BUSS1000 Future of Business.
- [3] Nordstrom. (n.d.). Get active and stay sustainable: Bringing Allbirds to Nordstrom stores. Nordstrom Press. <https://press.nordstrom.com/news-releases/news-release-details/get-active-and-stay-sustainable-bringing-allbirds-nordstrom>
- [4] Wassel, B. (2022, May 25). Nordstrom launches partnerships with Allbirds and ASOS as the retailer continues its evolution. Retail TouchPoints. <https://www.retailtouchpoints.com/topics/sustainability/nordstrom-launches-partnerships-with-allbirds-and-asos-as-the-retailer-continues-its-evolution>
- [5] Barney, J. B. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99–120. https://sydney.leganto.exlibrisgroup.com/leganto/public/61USYD_INST/citation/39291513690005106?auth=SAML
- [6] University of Sydney. (2024). Module 2.8: The resource-based view framework (VRIN). Canvas LMS. https://canvas.sydney.edu.au/courses/59930/pages/2-dot-8-the-resource-based-view-framework-vrin?module_item_id=2395717
- [7] Hambrick, D. C., & Fredrickson, J. W. (2001). Are you sure you have a strategy? *Academy of Management Executive*, 15(4), 48–59. https://sydney.leganto.exlibrisgroup.com/leganto/public/61USYD_INST/citation/39291513860005106?auth=SAML
- [8] Memon, K. R., & Ooi, S. K. (2023). Rediscovering responsible innovation: A roadmap towards corporate sustainability. *International Journal of Sustainable Strategic Management*, 10(1), 45–56. <https://doi.org/10.1504/IJSSM.2022.128925>
- [9] Saw, S. K., Ooi, S. K., & Amran, A. (2023). Intellectual capital as a key driver of corporate responsible innovation. *International Journal of Sustainable Strategic Management*, 10(1), 78–89. <https://doi.org/10.1504/IJSSM.2022.128928>