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From Premium Lock-In to Inclusive Growth: Apple's Strategic Evolution with the MacBook Neo

Abstract

The global technology market has long been shaped by major disruptions, including the COVID-19 endemic, economic pressures, and rising ESG expectations from consumers. This paper examines Apple's strategic evolution from a premium ecosystem lock-in model to a more layered, inclusive ecosystem through the release of the 2026 MacBook Neo. Using frameworks such as VRIO and STEEPLE, this study conducts a comprehensive comparative case analysis of traditional Apple silicon (M-series) MacBooks and the MacBook Neo. Findings indicate that the Neo was able to successfully extend Apple's foundational ecosystem lock-in strategy by incorporating affordability and advanced sustainability as extensions of its strategy. This shift has broadened market access into education and budget segments while also maintaining long-term customer value through services. The analysis is able to highlight both opportunities for growth in addition to challenges that Apple faces, such as supply chain constraints and brand perception risks. This study is able to contribute to the literature on platform ecosystems, blue-ocean strategy, and sustainability-driven innovation by reflecting how premium brands have the ability to adapt to changing environments. Practical recommendations for Apple are also discussed.

Keywords: Strategic positioning, Apple Inc., market entry strategy, VRIO, ecosystem, lock-in effects, case study analysis, product pricing

1. Introduction

MacBooks are one of the world's most renowned pieces of technology. They are known to be reliable, lasting well over five years (Apple, 2025), and they have evolved to become widely adopted tools for professionals requiring high-performance, high-quality, reliable devices for work (Apple, 2025; PCMag, 2025). Since the release of the first MacBook in 2006, Apple has

evolved in making the MacBook a tool to capture and lock many users into the Apple ecosystem (Gawer & Cusumano, 2014; Jacobides et al., 2018). This included the integration of services such as iCloud and other Apple platforms, which strengthened the attractiveness of joining and remaining within Apple's ecosystem (Gawer & Cusumano, 2014; Jacobides et al., 2018). However, MacBook sales were never too stagnant. With various global events, MacBook sales saw big changes that eventually led Apple to make a strategy change to continue to stay at the top of the industry.

During the COVID-19 pandemic, Apple's MacBook sales boosted from 25.7 billion US dollars prior to the pandemic to its peak at 40.2 billion US dollars (Business of Apps, 2026). However, Apple's MacBook sales continued to decline with the end of the pandemic, back down to 29.4 billion US dollars (Business of Apps, 2026). Yet, Apple's services revenue continued to reflect a strong growth throughout, with over 109 billion US dollars being generated from services revenue (Business of Apps, 2026; Yahoo Finance, 2026). By 2025, although Apple's MacBook revenue has recovered back to 33.7 billion US dollars (Business of Apps, 2026), the revenue remained below the pandemic-era highs, signalling saturation in the premium segment. This sales shift set the stage for Apple's strategic shift with the launch of the MacBook Neo in March 2026 — Apple's most affordable laptop ever, priced at USD $599 (Apple, 2026b). The move to release the MacBook Neo reflects a change from a high-margin, ecosystem lock-in focused strategy to a more inclusive approach emphasizing affordability and sustainability, aimed at capturing students, first-time buyers in the price-sensitive segment.

This paper critically analyzed two case studies, one examining the M-series MacBooks and the other, the newly-released MacBook Neo. The paper utilized analytical frameworks such as STEEPLE and VRIO to better understand individual circumstances for each product. Findings from the comparative case study analysis reveal the reasons for Apple's strategy shift away from focusing largely on high-margin, premium products to entering the budget industry and focusing on sustainability and affordability.

2. Literature Review

The global technology market has been influenced by various destabilizing events, including the COVID-19 pandemic, geopolitical conflicts, trade tariffs, and ongoing cost-of-living crises. These events have greatly influenced consumer preferences and buying behaviors, and have thus created both challenges and opportunities for companies operating in highly competitive industries (Kim & Mauborgne, 2005; Gawer & Cusumano, 2014).

Customer Acquisition, Price Sensitivity and Market Strategy

Market expansion theories, including blue-ocean strategy, emphasize the importance of creating new demand by targeting underdeveloped markets rather than competing directly for the red-ocean markets — which are heavily saturated (Kim & Mauborgne, 2005). Disruptive innovation theory further corroborates the argument that companies can achieve growth by introducing simpler, more affordable solutions that target overlooked customer groups before moving upward (Christensen et al., 2015). These frameworks highlight how organizations respond to global events by expanding into new demographics to sustain long-term growth.

From the consumer perspective, price sensitivity remains a critical factor influencing customer acquisition, particularly among younger demographics (Gen Z) and in emerging markets, where economic pressures and high cost-of-living crises have heightened demand for more affordable yet high-quality products (Siam University, 2019; Kotler & Armstrong, 2018).

From the company perspective, balancing premium positioning with accessible pricing options can better enhance market penetration without eroding brand equity, though it requires careful management of perceived value (Atlantis Press). Consumer value theories underscore that affordability, when combined with strong ecosystem benefits, can drive acquisition among price-sensitive segments while maintaining loyalty.

Marketing Mix (4Ps) and Strategic Positioning

The marketing mix framework (McCarthy, 1960; Kotler & Armstrong, 2018) continues to remain as a foundational tool for understanding how firms position products in competitive markets. Product decisions involve features, quality, and branding. Pricing decisions balance accessibility with the perceived value of the product. Place affects market reach, and promotion shapes brand perception and influences customer acquisition. In technology markets, premium brands often emphasize product differentiation and high pricing to maintain exclusivity, while other companies will adopt more inclusive strategies such as adapting price and promotion to attract a broader market segment. However, despite the 4Ps serving as the foundation for many marketing analysis, this paper considers the release of the MacBook Neo from an overall perspective, thus utilizing more advanced frameworks (VRIO & STEEPLE).

Ecosystem Strategies, Customer Lock-In, and Sustainability and Ethical Consumerism

Platform ecosystem theory emphasizes how companies are able to create value through interconnected products and services that increase the switching costs and also customer retention (Gawer & Cusumano, 2014; Jacobides et al., 2018). Research on brand communities and subcultures of consumption demonstrates that strong identification with a brand's lifestyle and values leads to higher loyalty and advocacy (Muñiz & O'Guinn, 2001; Schouten & McAlexander, 1995). These theoretical perspectives highlight the power of ecosystem design in creating sustained competitive advantage amid market instability.

Additionally, growing environmental awareness and ethical consumerism have increased demand for sustainable practices. Corporate social responsibility (CSR) and sustainability communication theories show that companies addressing carbon footprints, recycled materials, and ethical production can enhance brand perception and customer acquisition, particularly among younger, ESG-conscious consumers (Du et al., 2010; Kotler & Lee, 2005). Global events have amplified these expectations, pushing organizations to integrate sustainability into core strategy.

Current Gaps in Literature

Despite these strong theoretical foundations, significant gaps remain. Much of the existing research is based on pre-2026 data and does not fully account for the dynamism of the current environment — including wars, escalating tariffs, trade policies, and the cost-of-living crises before and after the pandemic. These factors have rapidly changed consumer behavior and purchasing patterns, yet theory has not fully caught up. Traditional premium brands now face pressure to rethink strategies in price-sensitive markets amid steep technological advancements (e.g., AI integration) while managing supply chain costs and global instability. Few studies apply comprehensive multi-framework analysis at the individual product level to evaluate how companies balance ecosystem lock-in with broader accessibility. This study addresses these gaps by examining Apple's MacBook Neo through theoretical lenses of ecosystem lock-in, market expansion, price sensitivity, and sustainability, assessing the effectiveness of its strategic shift into the budget segment.

3. Methodology

This study uses a comparative case study approach focusing on the two core Apple MacBook generations: the traditional M-series MacBooks (2020-2025) and the MacBook Neo (2026). Data was collected from a variety of secondary sources, including Apple's official reports, industry analyses (IDC, Counterpoint, Business of Apps), academic literature, and product reviews. Analytical tools were also applied, including VRIO (to assess competitive advantage) and STEEPLE (to examine external influences) (Barney, 1991; 1995). The comparison integrates theoretical frameworks such as platform ecosystem theory, blue-ocean strategy, and sustainability. Limitations include reliance on only publicly available data and the recency of the MacBook Neo launch, leading to lack of long-term reviews and studies.

4. Analysis & Findings

Traditional MacBooks

Apple's MacBooks, well-known for their integrated software, premium hardware, and emphasis on user experience, have consistently been positioned as premium devices within the laptop industry (Apple, 2025; PCMag, 2025). Since the release of the first MacBook in 2006, Apple has evolved the MacBook into a platform that captures and retains users within the Apple ecosystem through integrated hardware, software, and services (Gawer & Cusumano, 2014; Jacobides et al., 2018). A turning point was in 2020, when Apple launched the Macbook with their very own M1 chip (Apple, 2020), instead of relying on Intel chips for their Macbooks. Since then, the price tag has continued to stay at the hefty price of $999 (Apple, 2020–2025), which made it difficult for many to approach Apple's Macbooks as their first laptop. A VRIO analysis (Barney, 1991; 1995) of traditional MacBooks (Table 1) highlights the sources of competitive advantage during this period.

Table 1: VRIO Analysis of Traditional MacBooks (2020–2025)

Resource/ Capability	Value	Rarity	Imitability	Organization	Competitive Advantage
Ecosystem Lock-In	High switching costs	High	Difficult (hardware-software integration)	Fully exploited	Temporary
Vertical Integration	High (cost control + performance)	High	Very difficult	Fully exploited	Sustained
Premium Brand & User Experience	High (loyalty & WTP)	Medium to high	Moderately difficult	Fully exploited	Sustained
Supply Chain Mastery	High (resilience)	Medium	Moderately difficult	Fully exploited	Temporary

Sustainability Practices	Medium	Low	Easy	Partially Exploited	Competitive Parity
Product Quality & Reliability	High	Medium	Difficult	Fully Exploited	Temporary

As shown by Table 1, the VRIO analysis reflects that ecosystem lock-in and vertical integration were the primary sources of sustained competitive advantage for traditional MacBooks, consistent with the VRIO framework's emphasis on valuable, rare, and difficult-to-imitate resources (Barney, 1991; 1995). These resources, by creating high switching costs and better performance compared to competitors, made Apple's strategy difficult to imitate. Premium branding and user experience continued to reinforce Apple's position within the technology industry, yet sustainability continued to remain only as competitive parity. This table supports the argument that Apple's pre-2026 strategy was heavily reliant on ecosystem lock-in as its foundational strategy, delivering strong profitability within the premium segment but lacking the ability to expand into more price-sensitive and education-focused markets.

Building on these internal strengths, Apple maintained its strategy of ecosystem lock-in, allowing it to retain existing customers through interconnected hardware, software, and services (Gawer & Cusumano, 2014; Jacobides et al., 2018). Apple's MacBooks, offering services such as iCloud, iMessage, and Apple ID, work in conjunction with other Apple devices, strengthening ecosystem integration and increasing switching costs for users (Gawer & Cusumano, 2014; Jacobides et al., 2018). As many users who used Macbooks began to become more reliant on Apple's services, it became more costly for them to switch out of the Apple ecosystem, especially if they were heavily reliant on services such as iCloud (Gawer & Cusumano, 2014; Jacobides et al., 2018). Apple, with one of their revenue streams being the subscriptions that they earn profit from through their services, utilized this as a way to ensure that Apple users would continue to use Apple's Macbooks.

Historically, sustainability played a less central role in Apple's product differentiation strategy compared with performance, design, and ecosystem integration (Apple, 2025). Progress existed at different stages, such as increasing recycled content in their Macbooks to around 55% in newer models (Apple, 2025), and aiming to achieve carbon neutral goals by 2030. Yet, the increase in sustainability was viewed as more of a brand image enhancement rather than to expand their products to a new demographic, or a new segment.

This strategy has been beneficial for Apple, resulting in brand loyalty from customers, higher margins on their revenues, and the ability for them to maintain a stronger brand image. Many users and tech critics regarded Macbooks as having excellent battery life, providing smooth multitasking, and thermal efficiency for the Pro models in tasks such as video editing, coding, and graphic design (PCMag, 2025). MacBooks were also praised for their premium build quality, including aluminium chassis designs, keyboards, trackpads, and integration with Apple devices (PCMag, 2025). This has contributed to Apple's adoption among both individual consumers and businesses seeking reliable computing solutions (Apple, 2025; PCMag, 2025). For many businesses, reliability is key, and due to Macbook's ability to offer one of the best reliable experiences in the laptops industry, Apple excelled at both providing products for the everyday consumer and also businesses (Apple, 2025; PCMag, 2025). To gain a better understanding of Apple's circumstances during the period when Apple prioritized ecosystem-lock in as a strategy, a STEEPLE analysis was conducted by looking at the time period of 2024-2025.

Table 2: STEEPLE Analysis of Traditional MacBooks (2024–2025)

Factor	Key Points
Social	Growing demand from professionals and creatives; rise of remote/hybrid work; limited appeal to younger and education segments
Technological	Advances in AI and chip performance; increasing component costs due to AI demand
Economic	Premium segment saturation; post-pandemic demand normalization; rising component costs
Environmental	Increasing regulatory pressure on e-waste and carbon emissions; rising ESG expectations
Political	Geopolitical tensions and trade tariffs; push for supply chain diversification
Legal	Stricter right-to-repair regulations in the EU and other regions
Ethical	Growing societal concern over ethical sourcing and environmental impact

Note. Information adapted from Apple (2025), American Enterprise Institute (2025), Moor Insights & Strategy (2025), and Reuters (2025).

Table 2 highlights the external pressures that Apple faced in their traditional MacBooks between 2024 and 2025. Social demand was heavily concentrated among professionals, while economic saturation and rising component costs continued to limit growth in the premium segment (Business of Apps, 2026; Moor Insights & Strategy, 2025). Environmental and ethical concerns were increasing, but Apple's response was gradual, treating the concerns as burdens. These external conditions are consistent with Apple's strategic shift, and appear to have set the foundation for Apple to extend its ecosystem lock-in strategy with new elements within affordability and sustainability. Price-sensitive markets proved to be quite important, with the price-sensitive markets in the laptops sector to be 55%. This means that Apple was operating within just the remaining 45%, which meant that there was room for Apple to eventually expand into.

MacBook Neo

With the release of the MacBook Neo in 2026, the budget laptop industry experienced a new competitor. Priced at USD $599, the MacBook Neo reflected Apple's attempt to expand beyond its traditional premium positioning and enter more price-sensitive market segments (Apple, 2026; Reuters, 2026). Apple began emphasizing affordability, positioning the MacBook Neo as a device designed for students, families, and first-time Mac users (Apple, 2026). This reflects product-line extension strategies, where firms create differentiated offerings across price points to capture multiple consumer segments while reducing internal competition (Kotler & Armstrong, 2018). By creating separate distinctions, Apple's release of the

Macbook Neo does not harm any of the other products that are offered by Apple. Rather, these products all complement each other to become much more attractive to customers within the different demographics.

We can now take a look at a VRIO analysis on the MacBook Neo, analyzing the product in a more specific lens.

Table 3: VRIO Analysis of the MacBook Neo (2026 onwards)

Resource/ Capability	Value	Rarity	Imitability	Organization	Competitive Advantage
Repurposed A18 Pro Chip + Vertical Integration	High (enabled USD $599 pricing)	High	Difficult	Fully exploited	Sustained
Affordability + Product Ladder Strategy	High (new segment expansion)	Medium	Moderately difficult	Fully exploited	Temporary
Advanced Sustainability Features	High (ESG appeal)	Medium to high	Moderately difficult	Fully exploited	Temporary
Ecosystem Lock-in at a lower price point	High (services revenue)	High	Difficult	Fully exploited	Sustained
Brand Reputation & Marketing Execution	High	High	Difficult	Fully Exploited	Sustained
Improved Repairability	Medium	Medium	Moderate	Partially Exploited	Competitive Parity

Table 3 demonstrates how the MacBook Neo was able to build upon Apple's existing strengths to become even more successful. It is worth noting that while several resources are classified as sources of sustained advantage, this classification assumes Apple's silicon supply and brand execution remain uncontested; competitors closing the chip-performance gap or successfully repositioning against Apple's pricing could erode some of these advantages over time. Vertical integration through Apple's custom silicon strategy and ecosystem lock-in at a lower price point provided potential sources of sustained competitive advantage, consistent with the VRIO framework (Barney, 1991; 1995). Specifically, affordability and advanced sustainability features now served as valuable and rare capabilities that Apple has managed to fully exploit through their organization. This analysis reflects the paper's central argument that while ecosystem lock-in continued to remain as the foundation, affordability and sustainability were used as extensions of Apple's existing strategy to expand their market reach without having to leave Apple's existing brand image.

This move to release the Macbook Neo is reflective of Apple's original 2006 Macbook release strategy. The first consumer Macbook, made out of polycarbonate plastic, was launched as an accessible, education and lifestyle-focused device to expand the Apple product lineup to a greater demographic (Apple, 2006). Similar to Neo, it utilized cost-effective design choices while maintaining Apple's build quality, becoming an important contributor to Apple's expansion in the personal computer market (Apple, 2006). Both of these cases represent operational strategies of vertical integration and lineup expansion to drive sales volumes while preserving ecosystem lock-in.

Apple's decision to release the MacBook Neo appears predominantly reactive, based on the available evidence. Leveraging their strong position within the premium segment of the industry, in addition to its vertical integration, Apple was able to repurpose the binned A18 Pro chips. This enabled Apple to achieve prices that competitors have struggled to match amid rising component costs. The Macbook Neo also marked a major advancement in sustainability. With 60% recycled content overall within the laptop itself, the Macbook Neo proved to be one of Apple's most sustainability-focused products with the lowest carbon footprint (Apple, 2026b). The body is composed of 90%+ recycled aluminum, with a new forming process using 50% less aluminum than traditional methods to produce the body (Apple, 2026b). Within its batteries, the Macbook Neo contains 100% recycled cobalt, and also 100% recycled rare earth elements within the magnets. 45% of manufacturing electricity originated from renewable energy (Apple, 2026b). These sustainability gains span across the various levels of the supply chain, resulting in the lowest carbon footprint of any Macbook ever produced.

This aligns with research on ethical consumerism, which suggests that sustainability communication can influence consumer perception and brand value among environmentally conscious consumers (Du et al., 2010; Kotler & Lee, 2005). In such markets, Apple's increase in sustainability allows them to act as one of the leaders in leading the global trend. With the new demographic now targeting students, and people of the younger generations, who are also much more conscious about the environment, the Macbook Neo proves to be the product that could allow Apple to expand into this new market.

This shift in strategy, to the release of the Macbook Neo was motivated by multiple factors, both inside and outside of Apple. Some external factors that could have influenced the release of the Macbook Neo included the lack of market expansion for Apple, and the slowing growth in the premium markets, especially due to rising component costs. With their current markets already being heavily saturated, with Apple operating in a red-ocean market, it was time for Apple to implement a blue-ocean strategy of releasing the Neo and entering the education and the budget buyers industry. Some internal factors also motivated the release of the Macbook Neo. By releasing the Macbook Neo, Apple could utilize existing Apple silicon capabilities, including the A18 Pro chip architecture, to achieve competitive pricing while maintaining performance advantages (Apple, 2026b). This was an opportunistic internal factor that not only reduced damage for the company, but also brought in much more profit. Through vertical integration, Apple was able to achieve lower costs that allowed it to target the lower-cost market. Sustainability and ESG goals also played a role in pushing the release of the Macbook Neo. With Apple's 2030 carbon-neutrality goal, there was increasing pressure to innovate in materials and manufacturing. Thus, by releasing the Macbook Neo, Apple could also display their progress towards their goal, allowing them to continue to maintain their premium brand image. To better understand the motivations behind the MacBook Neo, a STEEPLE analysis was conducted focusing on the period from 2026 onward.

Table 4: STEEPLE Analysis of the MacBook Neo (2026 onward)

Factor	Key Points
Social	Rising demand from Gen Z and students for affordable tech; continued hybrid learning trends
Technological	Advances in recycled materials and efficient chip designs; AI feature expectations
Economic	Slowing premium segment growth; high component costs; opportunity in budget laptop market
Environmental	Heightened regulatory pressure on electronics carbon footprint and materials sourcing
Political	Government initiatives for digital inclusion in education; ongoing trade tensions
Legal	Strengthening right-to-repair and sustainability regulations
Ethical	Increased consumer awareness and demand for ethical and sustainable products

Note. Information adapted from PCMag (2026), Forbes (2026), Counterpoint Research (2026), International Data Corporation (2026), Apple (2026a), Reuters (2026), Repair.eu (2026), and Du et al. (2010).

Table 4 shows the STEEPLE analysis of the MacBook Neo, and is reflective of the shift in the external environment that encouraged the Neo's release. Increased demand from Gen Z and students, in conjunction with heightened ESG expectations and increased regulatory pressure on sustainability led to optimal conditions for the release of an affordable and sustainable product. Additionally, heavy economic saturation within the premium segment further supported market expansion. These external factors help to explain the circumstances in which Apple was operating in, and provides a reason for why Apple may have chosen to layer affordability with sustainability onto its existing ecosystem lock-in strategy to respond to changing consumer and regulatory demands.

While these external conditions supported the Neo's launch, Apple also faced numerous problems due to the release of the Macbook Neo. Apple also faced potential supply chain challenges, particularly due to broader semiconductor constraints and increasing component costs affecting technology manufacturers (Reuters, 2026). Apple could plausibly face challenges maintaining supply if demand exceeds available component capacity. This led to Apple having to find new supply lines from TSMC at higher costs, leading to supply shortages, sell-outs, and also longer delivery times for the Macbook Neo. Furthermore, other components of the Macbook, such as the storage or RAM continued to increase in price, leading to potential problems for Apple to maintain the current price that is set for the Macbook Neo. Brand perception also played a problem for Apple, which required careful deliberation and execution by the marketing department. By releasing a USD $599 Macbook, Apple risked diluting their premium brand image, meaning that they risked falling to be on par with companies that are producing cheaper, budget-friendly products.

Overall, consumer receptions towards the Macbook Neo were quite positive. Technology reviewers such as PCMag, Forbes, and TechCrunch described the MacBook Neo as one of the strongest budget laptop options of 2026 (PCMag, 2026; Forbes,

2026; TechCrunch, 2026), which encouraged numerous people to purchase the Macbook Neos as their first Apple devices. With enough capabilities to perform everyday tasks flawlessly, the Macbook Neo proved to be the device that was suitable for many individuals. Yet, some limitations and risks remain due to the release of the Macbook Neo. The greatest risk for Apple, with the release of the Macbook Neo, is the potential for Apple's brand image to change to become known as a company just like any other, offering both premium-high end products to cheaper, budget-friendly products. With a $400 difference between the two devices, Apple's success in maintaining its brand image also relied on the marketing aspect within Apple. Apple was able to market the Macbook Neo in the same way they would market the Macbook Air or the Pro, while emphasizing on the price. Many customers of Apple did not see a huge difference within the marketing systems, which was most likely intended to ensure that Apple could maintain the premium brand image that they are known for.

5. Comparison

The independent case studies illustrate Apple's strategic evolution from a pure premium lock-in model to a more inclusive, layered ecosystem. In this new approach, ecosystem lock-in remains the foundational mechanism for long-term value capture, while affordability and sustainability serve as strategic extensions that broaden customer acquisition without compromising the core architecture of Apple.

Pricing, Market Access and Sustainability Integration

Traditional MacBooks targeted premium consumers and professionals, with entry-level models historically positioned around the $999 price range (Apple, 2020–2025). The MacBook Neo's USD $599 price point represents a calculated market expansion into education and entry-level segments, effectively creating a three-tier product ladder that minimizes internal cannibalization while broadening the overall customer base (Apple, 2026b).

Sustainability in traditional MacBooks served primarily as brand promotion. The Neo transformed it into a competitive differentiator, achieving 60% recycled content and the lowest carbon footprint of any MacBook (Apple, 2026a). This move reflects Apple's response to external ESG pressures and also positions Apple as a sustainability leader even in the budget segment — a way for Apple to maintain their innovative brand image.

Ecosystem Role, Competitive Positioning, and Risks and Trade-offs

Both generations rely on ecosystem lock-in, but the Neo extends Apple's lock-in strategy to a significantly wider audience. By lowering the entry cost, Apple was able to increase the probability of future cross-selling (e.g., iPhone "e" integration and services), potentially converting one-time budget buyers into high-lifetime-value ecosystem users (Gawer & Cusumano, 2014; Jacobides et al., 2018). Traditional MacBooks operated in a crowded red-ocean premium market. The Neo reflects the elements of blue-ocean strategy by entering the affordable, sustainable laptop category, challenging Chromebooks and Windows devices on both price and user experience (Kim & Mauborgne, 2005).

The strategy introduces risks such as potential brand dilution, supply chain vulnerabilities (A18 Pro chip shortages), and execution challenges in maintaining its premium perception. Apple's marketing success in framing the Neo as "premium experience at accessible price" will be critical to long-term success. Overall, this comparison demonstrates that Apple is

leveraging its traditional strengths in ecosystem lock-in and vertical integration while addressing the previous limitations in market reach and sustainability.

6. Summary of Findings

The analysis provides several noteworthy findings. First, traditional MacBooks demonstrated the strengths and the limitations of a pure premium lock-in model: the ability to gain exceptional loyalty and profitability within a narrow market segment, but greater vulnerability to market saturation and the exclusion of younger, price-sensitive consumers. Second, the MacBook Neo successfully makes use of Apple's core capabilities (vertical integration and ecosystem design) to address these weaknesses, achieving meaningful market expansion while maintaining strategic coherence. The integration of affordability and high sustainability standards represents an innovative approach to reflect Apple's premium brand image amid current consumer demands. Notable outcomes of the release include strong initial consumer reception in target demographics and the potential for increased services revenue from a larger installed base. However, persistent supply chain fragility and brand perception risks highlight the difficulty in maintaining such a strategy. Collectively, these findings demonstrate that Apple has moved beyond simple innovation toward a more adaptive, multi-tiered ecosystem strategy — one that balances traditional strengths with adaptability to a changing world.

7. Discussion & Recommendations

The findings of this paper align well with various theoretical perspectives that were discussed in the literature review. The importance of ecosystem lock-in as a tool for competitive advantage reflects platform ecosystem theory (Gawer & Cusumano, 2014; Jacobides et al., 2018), while the Neo's affordability and sustainability highlight the importance of blue-ocean strategy and disruptive innovation concepts (Kim & Mauborgne, 2005; Christensen et al., 2015). Furthermore, the new role of sustainability as a tool for competitive advantage reflects the rise of ethical consumerism and CSR communication theories (Du et al., 2010; Kotler & Lee, 2005), demonstrating how external pressures can drive strategic adaptation in premium brands.

From a VRIO perspective, both the traditional MacBooks and the Neo demonstrate that ecosystem lock-in and vertical integration can serve as sources of competitive advantage (Barney, 1991; 1995). However, the Neo was able to successfully also target new advantages through affordability and sustainability — many gaps that were left behind by traditional devices. The STEEPLE analyses further help to reveal the role that external factors play and how they influenced this shift. This comparison highlights Apple's success in transitioning to a layered ecosystem model, where lock-in serves as the foundation while affordability and sustainability helps to broaden customer reach.

To continue to stay successful in this new strategic shift, Apple should continue to invest in supply chain resilience. As supply chains, specifically the chip production lines drive the costs of these products, investing in them will become critical. Additionally, Apple will need to ensure that they are able to maintain clear product differentiation across the product ladder through defined marketing that highlights the premium user experience at various price points. Additionally, Apple should continue to deepen sustainability efforts to go beyond the Neo, to strengthen their brand leadership in the ESG sector. These recommendations build upon blue-ocean strategy and ecosystem theory (Kim & Mauborgne, 2005; Gawer & Cusumano, 2014).

8. Conclusion

This study has examined Apple's strategic shift through the comparative analysis of traditional MacBooks and the MacBook Neo. The findings demonstrate that the Neo reflects a significant shift that is adapted to the changing environment. Apple was able to maintain their ecosystem lock-in as its core competitive advantage while adding affordability and sustainability to expand market reach and to respond to external events. By balancing its premium brand image with the now expanded customer demographic, Apple has positioned itself to capture new customer segments without sacrificing the high-margin models that defined Apple. This layered ecosystem approach has the ability to serve as an example for other premium technology brands facing heavy red-ocean competition and changing consumer expectations. Future research in this sector could examine the long-term effect of this strategy on Apple's brand image and services revenue growth, and their competitive positioning. Overall, the MacBook Neo illustrates how leading companies can innovate using their existing strengths to remain competitive in a dynamic market.

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Ethics Statement

This research was conducted independently and without access to a formal ethics review board. Therefore, this paper's author adhered to the practical guidelines for ethical research. All data used was secondary, and was collected from publicly available sources using ethical guidelines for research.

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Mentor Contribution Statement

This research paper was written under the guidance of **[REDACTED]**. The mentor's role included providing feedback to further develop ideas that were explored in the research paper and gaining a better understanding of various business frameworks that were utilised. Additionally, the mentor's guidance on the structure of this paper, and addressing gaps were essential for the success of this paper.

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From Premium Lock-In to Inclusive Growth: Apple's Strategic Evolution with the MacBook Neo

Abstract

The global technology market has long been shaped by major disruptions, including the COVID-19 endemic, economic pressures, and rising ESG expectations from consumers. This paper examines Apple's strategic evolution from a premium ecosystem lock-in model to a more layered, inclusive ecosystem through the release of the 2026 MacBook Neo. Using frameworks such as VRIO and STEEPLE, this study conducts a comprehensive comparative case analysis of traditional Apple silicon (M-series) MacBooks and the MacBook Neo. Findings indicate that the Neo was able to successfully extend Apple's foundational ecosystem lock-in strategy by incorporating affordability and advanced sustainability as extensions of its strategy. This shift has broadened market access into education and budget segments while also maintaining long-term customer value through services. The analysis is able to highlight both opportunities for growth in addition to challenges that Apple faces, such as supply chain constraints and brand perception risks. This study is able to contribute to the literature on platform ecosystems, blue-ocean strategy, and sustainability-driven innovation by reflecting how premium brands have the ability to adapt to changing environments. Practical recommendations for Apple are also discussed.

Keywords: Strategic positioning, Apple Inc., market entry strategy, VRIO, ecosystem, lock-in effects, case study analysis, product pricing

1. Introduction

MacBooks are one of the world's most renowned pieces of technology. They are known to be reliable, lasting well over five years (Apple, 2025), and they have evolved to become widely adopted tools for professionals requiring high-performance, high-quality, reliable devices for work (Apple, 2025; Westover, 2025). Since the release of the first MacBook in 2006, Apple has

evolved in making the MacBook a tool to capture and lock many users into the Apple ecosystem (Gawer & Cusumano, 2014; Jacobides et al., 2018). This included the integration of services such as iCloud and other Apple platforms, which strengthened the attractiveness of joining and remaining within Apple's ecosystem (Gawer & Cusumano, 2014; Jacobides et al., 2018). However, MacBook sales were never too stagnant. With various global events, MacBook sales saw big changes that eventually led Apple to make a strategy change to continue to stay at the top of the industry.

During the COVID-19 pandemic, Apple's MacBook sales boosted from 25.7 billion US dollars prior to the pandemic to its peak at 40.2 billion US dollars (Business of Apps, 2026). However, Apple's MacBook sales continued to decline with the end of the pandemic, back down to 29.4 billion US dollars (Business of Apps, 2026). Yet, Apple's services revenue continued to reflect a strong growth throughout, with over 109 billion US dollars being generated from services revenue (Business of Apps, 2026; Sparks, 2026). By 2025, although Apple's MacBook revenue has recovered back to 33.7 billion US dollars (Business of Apps, 2026), the revenue remained below the pandemic-era highs, signalling saturation in the premium segment. This sales shift set the stage for Apple's strategic shift with the launch of the MacBook Neo in March 2026 — Apple's most affordable laptop ever, priced at USD $599 (Apple, 2026b). The move to release the MacBook Neo reflects a change from a high-margin, ecosystem lock-in focused strategy to a more inclusive approach emphasizing affordability and sustainability, aimed at capturing students, first-time buyers in the price-sensitive segment.

This paper critically analyzed two case studies, one examining the M-series MacBooks and the other, the newly-released MacBook Neo. The paper utilized analytical frameworks such as STEEPLE and VRIO to better understand individual circumstances for each product. Findings from the comparative case study analysis reveal the reasons for Apple's strategy shift away from focusing largely on high-margin, premium products to entering the budget industry and focusing on sustainability and affordability.

2. Literature Review

The global technology market has been influenced by various destabilizing events, including the COVID-19 pandemic, geopolitical conflicts, trade tariffs, and ongoing cost-of-living crises. These events have greatly influenced consumer preferences and buying behaviors, and have thus created both challenges and opportunities for companies operating in highly competitive industries (Kim & Mauborgne, 2005; Gawer & Cusumano, 2014).

Customer Acquisition, Price Sensitivity and Market Strategy

Market expansion theories, including blue-ocean strategy, emphasize the importance of creating new demand by targeting underdeveloped markets rather than competing directly for the red-ocean markets — which are heavily saturated (Kim & Mauborgne, 2005). Disruptive innovation theory further corroborates the argument that companies can achieve growth by introducing simpler, more affordable solutions that target overlooked customer groups before moving upward (Christensen et al., 2015). These frameworks highlight how organizations respond to global events by expanding into new demographics to sustain long-term growth.

From the consumer perspective, price sensitivity remains a critical factor influencing customer acquisition, particularly among younger demographics (Gen Z) and in emerging markets, where economic pressures and high cost-of-living crises have heightened demand for more affordable yet high-quality products (Siam University, 2019; Kotler & Armstrong, 2018).

From the company perspective, balancing premium positioning with accessible pricing options can better enhance market penetration without eroding brand equity, though it requires careful management of perceived value (Atlantis Press). Consumer value theories underscore that affordability, when combined with strong ecosystem benefits, can drive acquisition among price-sensitive segments while maintaining loyalty.

Marketing Mix (4Ps) and Strategic Positioning

The marketing mix framework (McCarthy, 1960; Kotler & Armstrong, 2018) continues to remain as a foundational tool for understanding how firms position products in competitive markets. Product decisions involve features, quality, and branding. Pricing decisions balance accessibility with the perceived value of the product. Place affects market reach, and promotion shapes brand perception and influences customer acquisition. In technology markets, premium brands often emphasize product differentiation and high pricing to maintain exclusivity, while other companies will adopt more inclusive strategies such as adapting price and promotion to attract a broader market segment. However, despite the 4Ps serving as the foundation for many marketing analysis, this paper considers the release of the MacBook Neo from an overall perspective, thus utilizing more advanced frameworks (VRIO & STEEPLE).

Ecosystem Strategies, Customer Lock-In, and Sustainability and Ethical Consumerism

Platform ecosystem theory emphasizes how companies are able to create value through interconnected products and services that increase the switching costs and also customer retention (Gawer & Cusumano, 2014; Jacobides et al., 2018). Research on brand communities and subcultures of consumption demonstrates that strong identification with a brand's lifestyle and values leads to higher loyalty and advocacy (Muñiz & O'Guinn, 2001; Schouten & McAlexander, 1995). These theoretical perspectives highlight the power of ecosystem design in creating sustained competitive advantage amid market instability.

Additionally, growing environmental awareness and ethical consumerism have increased demand for sustainable practices. Corporate social responsibility (CSR) and sustainability communication theories show that companies addressing carbon footprints, recycled materials, and ethical production can enhance brand perception and customer acquisition, particularly among younger, ESG-conscious consumers (Du et al., 2010; Kotler & Lee, 2005). Global events have amplified these expectations, pushing organizations to integrate sustainability into core strategy.

Current Gaps in Literature

Despite these strong theoretical foundations, significant gaps remain. Much of the existing research is based on pre-2026 data and does not fully account for the dynamism of the current environment — including wars, escalating tariffs, trade policies, and the cost-of-living crises before and after the pandemic. These factors have rapidly changed consumer behavior and purchasing patterns, yet theory has not fully caught up. Traditional premium brands now face pressure to rethink strategies in price-sensitive markets amid steep technological advancements (e.g., AI integration) while managing supply chain costs and global instability. Few studies apply comprehensive multi-framework analysis at the individual product level to evaluate how companies balance ecosystem lock-in with broader accessibility. This study addresses these gaps by examining Apple's MacBook Neo through theoretical lenses of ecosystem lock-in, market expansion, price sensitivity, and sustainability, assessing the effectiveness of its strategic shift into the budget segment.

3. Methodology

This study uses a comparative case study approach focusing on the two core Apple MacBook generations: the traditional M-series MacBooks (2020-2025) and the MacBook Neo (2026). Data was collected from a variety of secondary sources, including Apple's official reports, industry analyses (IDC, Counterpoint, Business of Apps), academic literature, and product reviews. Analytical tools were also applied, including VRIO (to assess competitive advantage) and STEEPLE (to examine external influences) (Barney, 1991; 1995). The comparison integrates theoretical frameworks such as platform ecosystem theory, blue-ocean strategy, and sustainability. Limitations include reliance on only publicly available data and the recency of the MacBook Neo launch, leading to lack of long-term reviews and studies.

4. Analysis & Findings

Traditional MacBooks

Apple's MacBooks, well-known for their integrated software, premium hardware, and emphasis on user experience, have consistently been positioned as premium devices within the laptop industry (Apple, 2025; Westover, 2025). Since the release of the first MacBook in 2006, Apple has evolved the MacBook into a platform that captures and retains users within the Apple ecosystem through integrated hardware, software, and services (Gawer & Cusumano, 2014; Jacobides et al., 2018). A turning point was in 2020, when Apple launched the Macbook with their very own M1 chip (Apple, 2020), instead of relying on Intel chips for their Macbooks. Since then, the price tag has continued to stay at the hefty price of $999 (Apple, 2020–2025), which made it difficult for many to approach Apple's Macbooks as their first laptop. A VRIO analysis (Barney, 1991; 1995) of traditional MacBooks (Table 1) highlights the sources of competitive advantage during this period.

Table 1. VRIO Analysis of Traditional MacBooks (2020–2025)

Resource/ Capability	Value	Rarity	Imitability	Organization	Competitive Advantage
Ecosystem Lock-In	High switching costs	High	Difficult (hardware-software integration)	Fully exploited	Temporary
Vertical Integration	High (cost control + performance)	High	Very difficult	Fully exploited	Sustained
Premium Brand & User Experience	High (loyalty & WTP)	Medium to high	Moderately difficult	Fully exploited	Sustained
Supply Chain Mastery	High (resilience)	Medium	Moderately difficult	Fully exploited	Temporary

Sustainability Practices	Medium	Low	Easy	Partially Exploited	Competitive Parity
Product Quality & Reliability	High	Medium	Difficult	Fully Exploited	Temporary

As shown by Table 1, the VRIO analysis reflects that ecosystem lock-in and vertical integration were the primary sources of sustained competitive advantage for traditional MacBooks, consistent with the VRIO framework's emphasis on valuable, rare, and difficult-to-imitate resources (Barney, 1991; 1995). These resources, by creating high switching costs and better performance compared to competitors, made Apple's strategy difficult to imitate. Premium branding and user experience continued to reinforce Apple's position within the technology industry, yet sustainability continued to remain only as competitive parity. This table supports the argument that Apple's pre-2026 strategy was heavily reliant on ecosystem lock-in as its foundational strategy, delivering strong profitability within the premium segment but lacking the ability to expand into more price-sensitive and education-focused markets.

Building on these internal strengths, Apple maintained its strategy of ecosystem lock-in, allowing it to retain existing customers through interconnected hardware, software, and services (Gawer & Cusumano, 2014; Jacobides et al., 2018). Apple's MacBooks, offering services such as iCloud, iMessage, and Apple ID, work in conjunction with other Apple devices, strengthening ecosystem integration and increasing switching costs for users (Gawer & Cusumano, 2014; Jacobides et al., 2018). As many users who used Macbooks began to become more reliant on Apple's services, it became more costly for them to switch out of the Apple ecosystem, especially if they were heavily reliant on services such as iCloud (Gawer & Cusumano, 2014; Jacobides et al., 2018). Apple, with one of their revenue streams being the subscriptions that they earn profit from through their services, utilized this as a way to ensure that Apple users would continue to use Apple's Macbooks.

Historically, sustainability played a less central role in Apple's product differentiation strategy compared with performance, design, and ecosystem integration (Apple, 2025). Progress existed at different stages, such as increasing recycled content in their Macbooks to around 55% in newer models (Apple, 2025), and aiming to achieve carbon neutral goals by 2030. Yet, the increase in sustainability was viewed as more of a brand image enhancement rather than to expand their products to a new demographic, or a new segment.

This strategy has been beneficial for Apple, resulting in brand loyalty from customers, higher margins on their revenues, and the ability for them to maintain a stronger brand image. Many users and tech critics regarded Macbooks as having excellent battery life, providing smooth multitasking, and thermal efficiency for the Pro models in tasks such as video editing, coding, and graphic design (Westover, 2025). MacBooks were also praised for their premium build quality, including aluminium chassis designs, keyboards, trackpads, and integration with Apple devices (Westover, 2025). This has contributed to Apple's adoption among both individual consumers and businesses seeking reliable computing solutions (Apple, 2025; Westover, 2025). For many businesses, reliability is key, and due to Macbook's ability to offer one of the best reliable experiences in the laptops industry, Apple excelled at both providing products for the everyday consumer and also businesses (Apple, 2025; Westover, 2025). To gain a better understanding of Apple's circumstances during the period when Apple prioritized ecosystem-lock in as a strategy, a STEEPLE analysis was conducted by looking at the time period of 2024-2025.

Table 2. STEEPLE Analysis of Traditional MacBooks (2024–2025)

Factor	Key Points
Social	Growing demand from professionals and creatives; rise of remote/hybrid work; limited appeal to younger and education segments
Technological	Advances in AI and chip performance; increasing component costs due to AI demand
Economic	Premium segment saturation; post-pandemic demand normalization; rising component costs
Environmental	Increasing regulatory pressure on e-waste and carbon emissions; rising ESG expectations
Political	Geopolitical tensions and trade tariffs; push for supply chain diversification
Legal	Stricter right-to-repair regulations in the EU and other regions
Ethical	Growing societal concern over ethical sourcing and environmental impact

Note. Information adapted from Apple (2025), American Enterprise Institute (2022), Moor Insights & Strategy (2025), and More (2025).

Table 2 highlights the external pressures that Apple faced in their traditional MacBooks between 2024 and 2025. Social demand was heavily concentrated among professionals, while economic saturation and rising component costs continued to limit growth in the premium segment (Business of Apps, 2026; Moor Insights & Strategy, 2025). Environmental and ethical concerns were increasing, but Apple's response was gradual, treating the concerns as burdens. These external conditions are consistent with Apple's strategic shift, and appear to have set the foundation for Apple to extend its ecosystem lock-in strategy with new elements within affordability and sustainability. Price-sensitive markets proved to be quite important, with the price-sensitive markets in the laptops sector to be 55%. This means that Apple was operating within just the remaining 45%, which meant that there was room for Apple to eventually expand into.

MacBook Neo

With the release of the MacBook Neo in 2026, the budget laptop industry experienced a new competitor. Priced at USD $599, the MacBook Neo reflected Apple's attempt to expand beyond its traditional premium positioning and enter more price-sensitive market segments (Apple, 2026b). Apple began emphasizing affordability, positioning the MacBook Neo as a device designed for students, families, and first-time Mac users (Apple, 2026). This reflects product-line extension strategies, where firms create differentiated offerings across price points to capture multiple consumer segments while reducing internal competition (Kotler & Armstrong, 2018). By creating separate distinctions, Apple's release of the Macbook Neo does

not harm any of the other products that are offered by Apple. Rather, these products all complement each other to become much more attractive to customers within the different demographics.

We can now take a look at a VRIO analysis on the MacBook Neo, analyzing the product in a more specific lens.

Table 3. VRIO Analysis of the MacBook Neo (2026 onwards)

Resource/ Capability	Value	Rarity	Imitability	Organization	Competitive Advantage
Repurposed A18 Pro Chip + Vertical Integration	High (enabled USD $599 pricing)	High	Difficult	Fully exploited	Sustained
Affordability + Product Ladder Strategy	High (new segment expansion)	Medium	Moderately difficult	Fully exploited	Temporary
Advanced Sustainability Features	High (ESG appeal)	Medium to high	Moderately difficult	Fully exploited	Temporary
Ecosystem Lock-in at a lower price point	High (services revenue)	High	Difficult	Fully exploited	Sustained
Brand Reputation & Marketing Execution	High	High	Difficult	Fully Exploited	Sustained
Improved Repairability	Medium	Medium	Moderate	Partially Exploited	Competitive Parity

Table 3 demonstrates how the MacBook Neo was able to build upon Apple's existing strengths to become even more successful. It is worth noting that while several resources are classified as sources of sustained advantage, this classification assumes Apple's silicon supply and brand execution remain uncontested; competitors closing the chip-performance gap or successfully repositioning against Apple's pricing could erode some of these advantages over time. Vertical integration through Apple's custom silicon strategy and ecosystem lock-in at a lower price point provided potential sources of sustained competitive advantage, consistent with the VRIO framework (Barney, 1991; 1995). Specifically, affordability and advanced sustainability features now served as valuable and rare capabilities that Apple has managed to fully exploit through their organization. This analysis reflects the paper's central argument that while ecosystem lock-in continued to remain as the foundation, affordability and sustainability were used as extensions of Apple's existing strategy to expand their market reach without having to leave Apple's existing brand image.

This move to release the Macbook Neo is reflective of Apple's original 2006 Macbook release strategy. The first consumer Macbook, made out of polycarbonate plastic, was launched as an accessible, education and lifestyle-focused device to expand the Apple product lineup to a greater demographic (Apple, 2006). Similar to Neo, it utilized cost-effective design choices while maintaining Apple's build quality, becoming an important contributor to Apple's expansion in the personal computer market (Apple, 2006). Both of these cases represent operational strategies of vertical integration and lineup expansion to drive sales volumes while preserving ecosystem lock-in.

Apple's decision to release the MacBook Neo appears predominantly reactive, based on the available evidence. Leveraging their strong position within the premium segment of the industry, in addition to its vertical integration, Apple was able to repurpose the binned A18 Pro chips. This enabled Apple to achieve prices that competitors have struggled to match amid rising component costs. The Macbook Neo also marked a major advancement in sustainability. With 60% recycled content overall within the laptop itself, the Macbook Neo proved to be one of Apple's most sustainability-focused products with the lowest carbon footprint (Apple, 2026b). The body is composed of 90%+ recycled aluminum, with a new forming process using 50% less aluminum than traditional methods to produce the body (Apple, 2026b). Within its batteries, the Macbook Neo contains 100% recycled cobalt, and also 100% recycled rare earth elements within the magnets. 45% of manufacturing electricity originated from renewable energy (Apple, 2026b). These sustainability gains span across the various levels of the supply chain, resulting in the lowest carbon footprint of any Macbook ever produced.

This aligns with research on ethical consumerism, which suggests that sustainability communication can influence consumer perception and brand value among environmentally conscious consumers (Du et al., 2010; Kotler & Lee, 2005). In such markets, Apple's increase in sustainability allows them to act as one of the leaders in leading the global trend. With the new demographic now targeting students, and people of the younger generations, who are also much more conscious about the environment, the Macbook Neo proves to be the product that could allow Apple to expand into this new market.

This shift in strategy, to the release of the Macbook Neo was motivated by multiple factors, both inside and outside of Apple. Some external factors that could have influenced the release of the Macbook Neo included the lack of market expansion for Apple, and the slowing growth in the premium markets, especially due to rising component costs. With their current markets already being heavily saturated, with Apple operating in a red-ocean market, it was time for Apple to implement a blue-ocean strategy of releasing the Neo and entering the education and the budget buyers industry. Some internal factors also motivated the release of the Macbook Neo. By releasing the Macbook Neo, Apple could utilize existing Apple silicon capabilities, including the A18 Pro chip architecture, to achieve competitive pricing while maintaining performance advantages (Apple, 2026b). This was an opportunistic internal factor that not only reduced damage for the company, but also brought in much more profit. Through vertical integration, Apple was able to achieve lower costs that allowed it to target the lower-cost market. Sustainability and ESG goals also played a role in pushing the release of the Macbook Neo. With Apple's 2030 carbon-neutrality goal, there was increasing pressure to innovate in materials and manufacturing. Thus, by releasing the Macbook Neo, Apple could also display their progress towards their goal, allowing them to continue to maintain their premium brand image. To better understand the motivations behind the MacBook Neo, a STEEPLE analysis was conducted focusing on the period from 2026 onward.

Table 4. STEEPLE Analysis of the MacBook Neo (2026 onward)

Factor	Key Points
Social	Rising demand from Gen Z and students for affordable tech; continued hybrid learning trends
Technological	Advances in recycled materials and efficient chip designs; AI feature expectations
Economic	Slowing premium segment growth; high component costs; opportunity in budget laptop market
Environmental	Heightened regulatory pressure on electronics carbon footprint and materials sourcing
Political	Government initiatives for digital inclusion in education; ongoing trade tensions
Legal	Strengthening right-to-repair and sustainability regulations
Ethical	Increased consumer awareness and demand for ethical and sustainable products

Note. Information adapted from Osborne (2026), Isaacs (2026), Counterpoint Research (2026), International Data Corporation (2026), Apple (2026a), Apple (2026c), Repair.eu (2026), and Du et al. (2010).

Table 4 shows the STEEPLE analysis of the MacBook Neo, and is reflective of the shift in the external environment that encouraged the Neo's release. Increased demand from Gen Z and students, in conjunction with heightened ESG expectations and increased regulatory pressure on sustainability led to optimal conditions for the release of an affordable and sustainable product. Additionally, heavy economic saturation within the premium segment further supported market expansion. These external factors help to explain the circumstances in which Apple was operating in, and provides a reason for why Apple may have chosen to layer affordability with sustainability onto its existing ecosystem lock-in strategy to respond to changing consumer and regulatory demands.

While these external conditions supported the Neo's launch, Apple also faced numerous problems due to the release of the Macbook Neo. Apple also plausibly faced supply chain challenges, particularly given broader semiconductor constraints and increasing component costs affecting technology manufacturers more generally. Apple could plausibly face challenges maintaining supply if demand exceeds available component capacity. This led to Apple having to find new supply lines from TSMC at higher costs, leading to supply shortages, sell-outs, and also longer delivery times for the Macbook Neo. Furthermore, other components of the Macbook, such as the storage or RAM continued to increase in price, leading to potential problems for Apple to maintain the current price that is set for the Macbook Neo. Brand perception also played a problem for Apple, which required careful deliberation and execution by the marketing department. By releasing a USD $599 Macbook, Apple risked diluting their premium brand image, meaning that they risked falling to be on par with companies that are producing cheaper, budget-friendly products.

Overall, consumer receptions towards the Macbook Neo were quite positive. Technology reviewers such as PCMag, Forbes, and TechCrunch described the MacBook Neo as one of the strongest budget laptop options of 2026 (Osborne, 2026; Isaacs,

2026; Singh, 2026), which encouraged numerous people to purchase the Macbook Neos as their first Apple devices. With enough capabilities to perform everyday tasks flawlessly, the Macbook Neo proved to be the device that was suitable for many individuals. Yet, some limitations and risks remain due to the release of the Macbook Neo. The greatest risk for Apple, with the release of the Macbook Neo, is the potential for Apple's brand image to change to become known as a company just like any other, offering both premium-high end products to cheaper, budget-friendly products. With a $400 difference between the two devices, Apple's success in maintaining its brand image also relied on the marketing aspect within Apple. Apple was able to market the Macbook Neo in the same way they would market the Macbook Air or the Pro, while emphasizing on the price. Many customers of Apple did not see a huge difference within the marketing systems, which was most likely intended to ensure that Apple could maintain the premium brand image that they are known for.

5. Comparison

The independent case studies illustrate Apple's strategic evolution from a pure premium lock-in model to a more inclusive, layered ecosystem. In this new approach, ecosystem lock-in remains the foundational mechanism for long-term value capture, while affordability and sustainability serve as strategic extensions that broaden customer acquisition without compromising the core architecture of Apple.

Pricing, Market Access and Sustainability Integration

Traditional MacBooks targeted premium consumers and professionals, with entry-level models historically positioned around the $999 price range (Apple, 2020–2025). The MacBook Neo's USD $599 price point represents a calculated market expansion into education and entry-level segments, effectively creating a three-tier product ladder that minimizes internal cannibalization while broadening the overall customer base (Apple, 2026b).

Sustainability in traditional MacBooks served primarily as brand promotion. The Neo transformed it into a competitive differentiator, achieving 60% recycled content and the lowest carbon footprint of any MacBook (Apple, 2026a). This move reflects Apple's response to external ESG pressures and also positions Apple as a sustainability leader even in the budget segment — a way for Apple to maintain their innovative brand image.

Ecosystem Role, Competitive Positioning, and Risks and Trade-offs

Both generations rely on ecosystem lock-in, but the Neo extends Apple's lock-in strategy to a significantly wider audience. By lowering the entry cost, Apple was able to increase the probability of future cross-selling (e.g., iPhone "e" integration and services), potentially converting one-time budget buyers into high-lifetime-value ecosystem users (Gawer & Cusumano, 2014; Jacobides et al., 2018). Traditional MacBooks operated in a crowded red-ocean premium market. The Neo reflects the elements of blue-ocean strategy by entering the affordable, sustainable laptop category, challenging Chromebooks and Windows devices on both price and user experience (Kim & Mauborgne, 2005).

The strategy introduces risks such as potential brand dilution, supply chain vulnerabilities (A18 Pro chip shortages), and execution challenges in maintaining its premium perception. Apple's marketing success in framing the Neo as "premium experience at accessible price" will be critical to long-term success. Overall, this comparison demonstrates that Apple is

leveraging its traditional strengths in ecosystem lock-in and vertical integration while addressing the previous limitations in market reach and sustainability.

6. Summary of Findings

The analysis provides several noteworthy findings. First, traditional MacBooks demonstrated the strengths and the limitations of a pure premium lock-in model: the ability to gain exceptional loyalty and profitability within a narrow market segment, but greater vulnerability to market saturation and the exclusion of younger, price-sensitive consumers. Second, the MacBook Neo successfully makes use of Apple's core capabilities (vertical integration and ecosystem design) to address these weaknesses, achieving meaningful market expansion while maintaining strategic coherence. The integration of affordability and high sustainability standards represents an innovative approach to reflect Apple's premium brand image amid current consumer demands. Notable outcomes of the release include strong initial consumer reception in target demographics and the potential for increased services revenue from a larger installed base. However, persistent supply chain fragility and brand perception risks highlight the difficulty in maintaining such a strategy. Collectively, these findings demonstrate that Apple has moved beyond simple innovation toward a more adaptive, multi-tiered ecosystem strategy — one that balances traditional strengths with adaptability to a changing world.

7. Discussion & Recommendations

The findings of this paper align well with various theoretical perspectives that were discussed in the literature review. The importance of ecosystem lock-in as a tool for competitive advantage reflects platform ecosystem theory (Gawer & Cusumano, 2014; Jacobides et al., 2018), while the Neo's affordability and sustainability highlight the importance of blue-ocean strategy and disruptive innovation concepts (Kim & Mauborgne, 2005; Christensen et al., 2015). Furthermore, the new role of sustainability as a tool for competitive advantage reflects the rise of ethical consumerism and CSR communication theories (Du et al., 2010; Kotler & Lee, 2005), demonstrating how external pressures can drive strategic adaptation in premium brands.

From a VRIO perspective, both the traditional MacBooks and the Neo demonstrate that ecosystem lock-in and vertical integration can serve as sources of competitive advantage (Barney, 1991; 1995). However, the Neo was able to successfully also target new advantages through affordability and sustainability — many gaps that were left behind by traditional devices. The STEEPLE analyses further help to reveal the role that external factors play and how they influenced this shift. This comparison highlights Apple's success in transitioning to a layered ecosystem model, where lock-in serves as the foundation while affordability and sustainability helps to broaden customer reach.

To continue to stay successful in this new strategic shift, Apple should continue to invest in supply chain resilience. As supply chains, specifically the chip production lines drive the costs of these products, investing in them will become critical. Additionally, Apple will need to ensure that they are able to maintain clear product differentiation across the product ladder through defined marketing that highlights the premium user experience at various price points. Additionally, Apple should continue to deepen sustainability efforts to go beyond the Neo, to strengthen their brand leadership in the ESG sector. These recommendations build upon blue-ocean strategy and ecosystem theory (Kim & Mauborgne, 2005; Gawer & Cusumano, 2014).

8. Conclusion

This study has examined Apple's strategic shift through the comparative analysis of traditional MacBooks and the MacBook Neo. The findings demonstrate that the Neo reflects a significant shift that is adapted to the changing environment. Apple was able to maintain their ecosystem lock-in as its core competitive advantage while adding affordability and sustainability to expand market reach and to respond to external events. By balancing its premium brand image with the now expanded customer demographic, Apple has positioned itself to capture new customer segments without sacrificing the high-margin models that defined Apple. This layered ecosystem approach has the ability to serve as an example for other premium technology brands facing heavy red-ocean competition and changing consumer expectations. Future research in this sector could examine the long-term effect of this strategy on Apple's brand image and services revenue growth, and their competitive positioning. Overall, the MacBook Neo illustrates how leading companies can innovate using their existing strengths to remain competitive in a dynamic market.

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Ethics Statement

This research was conducted independently and without access to a formal ethics review board. Therefore, this paper's author adhered to the practical guidelines for ethical research. All data used was secondary, and was collected from publicly available sources using ethical guidelines for research.

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I would like to deeply express my gratitude to **[REDACTED]** for her assistance and advice that has guided my process in the writing of this paper.

Author Biography

[REDACTED] is a 17-year-old rising senior at **[REDACTED]** with a research focus on the intersection of sustainability and

competitive business strategy. He is the founder of a community-driven sustainability platform in Hong Kong and has explored global supply chains through an internship at a maritime logistics company. Outside the classroom, **[REDACTED]** is an avid rock climber and outdoor enthusiast, interests that first drew his attention to the environmental costs of unchecked industrial growth and continue to inform his research. He plans to pursue undergraduate study in business and economics, with a long-term interest in sustainable supply chain strategy.

Mentor Contribution Statement

This research paper was written under the guidance of **[REDACTED]**. The mentor's role included providing feedback to further develop ideas that were explored in the research paper and gaining a better understanding of various business frameworks that were utilised. Additionally, the mentor's guidance on the structure of this paper, and addressing gaps were essential for the success of this paper.

Decision: **Desk revise and resubmit**, with likely favorable external peer review if the concerns below are addressed.

Review: This paper examines Apple's strategic positioning following the introduction of the MacBook Neo and argues that Apple has expanded its traditional premium ecosystem strategy by incorporating affordability and sustainability as additional mechanisms for reaching new consumer segments. The paper employs a comparative approach across case studies, using varied analyses alongside literature on platform ecosystems, blue ocean strategy, disruptive innovation, consumer behavior, and sustainability. The central argument is clear and seems impactful, and the manuscript demonstrates a good degree of engagement with both scholarly literature and contemporary industry sources.

The manuscript appears broadly suitable for consideration through peer review. However, before forwarding it, several focused revisions would help ensure that the paper's factual claims, methodological framing, and conclusions are sufficiently precise for reviewers to evaluate the substantive argument rather than becoming distracted by avoidable evidentiary concerns. These revisions do not require the author to redesign the study from the ground up, but they should be addressed prior to external review.

Do note that the concerns below are not comprehensive, but are, in my view, borderline necessary to ensure that peer reviews have a decent chance of being favorable.

1. **Please recheck several important quantitative claims and statements about market dynamics.** In particular, the introduction currently reports that MacBook sales rose from approximately $25.7 billion before the pandemic to approximately $40.2 billion and later declined before recovering. This seems rather small and more closely matches their sales in number of units; the author should ensure that revenue figures have not been inadvertently conflated with these. Also, please distinguish between Apple's overall Mac revenue and revenue attributable specifically to MacBooks whenever the underlying source reports the broader Mac product category.
2. Do you have a reliable source to support the following? "Price-sensitive markets proved to be quite important, with the price-sensitive markets in the laptops sector to be [sic] 55%. This means that Apple was operating within just the remaining 45%, which meant that there was room for Apple to eventually expand into." **This needs to be sourced**, and if a reliable source does not directly support this interpretation, the statistic and the resulting inference should either be removed or substantially softened to match what you can source.
3. One of the manuscript's strengths is that it identifies and integrates Apple's strategy well throughout the narrative, but **at times, the interpretations of Apple's strategy are presented with greater certainty and with an almost journalistic vagueness than the available secondary evidence appears to permit**. For instance, the paper argues that Neo minimized "internal cannibalization," generated substantially better profit, reflected "Apple's premium brand image," achieved meaningful market expansion, etc. You should present such claims with much greater precision in a way that directly

reflects the evidence provided in secondary sources, Apple or industry source claims, interpretations through VRIO/STEEPLE analysis, etc.

4. **As your manuscript has a significant review component and an analytical component that bolsters it, the methodological clarity/motivation for your literature review should also be significantly strengthened.** You should explain how secondary sources were selected, the time period covered by your source review, why VRIO and STEEPLE were chosen (sorry if you mentioned this somewhere and I did not catch it), and how conflicting or uncertain evidence was treated and properly responded to.

Response to Editorial Review Manuscript: From Premium Lock-In to Inclusive Growth: Apple's Strategic Evolution with the MacBook Neo

Dear Dr. Katona,

Thank you so much for the careful and constructive evaluation of my manuscript. I appreciate the opportunity to revise the manuscript prior to the peer review. I have addressed each of the four concerns raised in the editorial review and have made revisions throughout the manuscript.

Comment 1: Please recheck several important quantitative claims and statements about market dynamics. In particular, the introduction currently reports that MacBook sales rose from approximately $25.7 billion before the pandemic to approximately $40.2 billion and later declined before recovering. This seems rather small and more closely matches their sales in number of units; the author should ensure that revenue figures have not been inadvertently conflated with these. Also, please distinguish between Apple's overall Mac revenue and revenue attributable specifically to MacBooks whenever the underlying source reports the broader Mac product category.

Response: I have rechecked the quantitative claims concerning Apple's Mac revenue against the source. The figures that have been reported in the manuscript are Mac revenue figures rather than unit sales. I have also revised the wording throughout the manuscript to consistently refer to Apple's Mac revenue, rather than the MacBook-specific revenue, which the source highlights. The change is visible in **Introduction, section 1, paragraph 2.**

Comment 2: Do you have a reliable source to support the following? "Price-sensitive markets proved to be quite important, with the price-sensitive markets in the laptops sector to be [sic] 55%. This means that Apple was operating within just the remaining 45%, which meant that there was room for Apple to eventually expand into." This needs to be sourced, and if a reliable source does not directly support this interpretation, the statistic and the resulting inference should either be removed or substantially softened to match what you can source.

Response: For this comment, I have removed the 55%/45% statistic and the relevant explanation from the revised manuscript due to the lack of available source material that directly corroborated the claim. The discussion of Apple's expansion into the price-sensitive and the education industry is now grounded in Apple's documented positioning of the MacBook Neo and the comparative analysis. This change is visible in **the revised Introduction/Literature Review and Analysis sections**.

Comment 3: One of the manuscript's strengths is that it identifies and integrates Apple's strategy well throughout the narrative, but at times, the interpretations of Apple's strategy are presented with greater certainty and with an almost journalistic vagueness than the available secondary evidence appears to permit. For instance, the paper argues that Neo minimized "internal cannibalization," generated substantially better profit, reflected "Apple's premium brand image," achieved meaningful market expansion, etc. You should present such claims with much greater precision in a way that directly reflects the evidence provided in secondary sources, Apple or industry source claims, interpretations through VRIO/STEEPLE analysis, etc.

Response: For this comment, I have examined the manuscript to identify claims that concerned Apple's strategic motivations, profitability, market expansion, internal cannibalization, consumer response, and competitive outcomes. In cases where claims were not directly supported by sources, I have revised the language to ensure that the meaning conveyed was strictly interpretational, not as a fact. For example, I have added words such as "may," "suggests," "potentially," and "appears," in places where it was appropriate. Additionally, I have also added a section in the methodology that the paper distinguishes between what is observed and what is projected due to the MacBook Neo's recent release. This change can be found in **Methodology, sections 3-8, including Tables 1-4 and their accompanying analyses.**

Comment 4: As your manuscript has a significant review component and an analytical component that bolsters it, the methodological clarity/motivation for your literature review should also be significantly strengthened. You should explain how secondary sources were selected, the time period covered by your source review, why VRIO and STEEPLE were chosen (sorry if you mentioned this somewhere and I did not catch it), and how conflicting or uncertain evidence was treated and properly responded to.

Response: I have substantially expanded the methodology section to clarify the research design, secondary-source selection process, time period covered by the literature review, the reason for choosing VRIO and STEEPLE, and how uncertain evidence was treated. The revised methodology section distinguishes between official Apple sources, industry and market research, academic literature, and technology reporting. I have also ensured that VRIO is clarified that it is used as a tool to assess Apple's internal resources and capabilities, while STEEPLE examines the external environment that surrounds the company's strategic decisions. Finally, I have also explained how claims that were related to internal motivations and long-term outcome projections were clarified as projections and not fact-based claims. This change can be found in **methodology, section 3.**

Again, I am very grateful for the opportunity to revise my manuscript and have the chance to improve my manuscript further. I believe that this implemented version has improved the paper's clarity, how evidence was used, and its analytical rigor. I hope that the revised manuscript is now appropriate for peer review.

Sincerely,
[redacted]

Convergence
A Journal for Young Researchers

Received: [for official use only] ; Accepted: [for official use only];
Managing Editor: [for official use only];
Action Editor: [for official use only]

From Premium Lock-In to Inclusive Growth: Apple's Strategic Evolution with the MacBook Neo

Abstract

The global technology market has long been shaped by major disruptions, including the COVID-19 endemic, economic pressures, and rising ESG expectations from consumers. This paper examines Apple's strategic evolution from a premium ecosystem lock-in model to a more layered, inclusive ecosystem through the release of the 2026 MacBook Neo. Using frameworks such as VRIO and STEEPLE, this study conducts a comprehensive comparative case analysis of traditional Apple silicon (M-series) MacBooks and the MacBook Neo. Findings indicate that the Neo was able to successfully extend Apple's foundational ecosystem lock-in strategy by incorporating affordability and advanced sustainability as extensions of its strategy. This shift has broadened market access into education and budget segments while also maintaining long-term customer value through services. The analysis is able to highlight both opportunities for growth in addition to challenges that Apple faces, such as supply chain constraints and brand perception risks. This study is able to contribute to the literature on platform ecosystems, blue-ocean strategy, and sustainability-driven innovation by reflecting how premium brands have the ability to adapt to changing environments. Practical recommendations for Apple are also discussed.

Keywords: Strategic positioning, Apple Inc., market entry strategy, VRIO, ecosystem, lock-in effects, case study analysis, product pricing

1. Introduction

MacBooks are one of the world's most renowned pieces of technology. They are known to be reliable, lasting well over five years (Apple, 2025), and they have evolved to become widely adopted tools for professionals requiring high-performance, high-quality, reliable devices for work (Apple, 2025; Westover, 2025). Since the release of the first MacBook in 2006, Apple has

evolved in making the MacBook a tool to capture and lock many users into the Apple ecosystem (Gawer & Cusumano, 2014; Jacobides et al., 2018). This included the integration of services such as iCloud and other Apple platforms, which strengthened the attractiveness of joining and remaining within Apple's ecosystem (Gawer & Cusumano, 2014; Jacobides et al., 2018). However, MacBook sales were never too stagnant. With various global events, MacBook sales saw big changes that eventually led Apple to make a strategy change to continue to stay at the top of the industry.

During the COVID-19 pandemic, Apple's Mac revenue boosted from 24.7 billion US dollars prior to the pandemic to its peak at 40 billion US dollars (Business of Apps, 2026). However, Apple's Mac revenue continued to decline with the end of the pandemic, all the way down to 29.2 billion US dollars (Business of Apps, 2026). Yet, Apple's services revenue continued to reflect a strong growth throughout, with over 109 billion US dollars being generated from services revenue (Business of Apps, 2026; Sparks, 2026). By 2025, although Apple's Mac revenue has recovered back to 33.7 billion US dollars (Business of Apps, 2026), the revenue remained below the pandemic-era highs, signalling saturation in the premium segment. This sales shift set the stage for Apple's strategic shift with the launch of the MacBook Neo in March 2026 — Apple's most affordable laptop ever, priced at USD $599 (Apple, 2026b). The move to release the MacBook Neo reflects a change from a high-margin, ecosystem lock-in focused strategy to a more inclusive approach emphasizing affordability and sustainability, aimed at capturing students, first-time buyers in the price-sensitive segment.

This paper critically analyzed two case studies, one examining the M-series MacBooks and the other, the newly-released MacBook Neo. The paper utilized analytical frameworks such as STEEPLE and VRIO to better understand individual circumstances for each product. Findings from the comparative case study analysis reveal the reasons for Apple's strategy shift away from focusing largely on high-margin, premium products to entering the budget industry and focusing on sustainability and affordability.

2. Literature Review

The global technology market has been influenced by various destabilizing events, including the COVID-19 pandemic, geopolitical conflicts, trade tariffs, and ongoing cost-of-living crises. These events have greatly influenced consumer preferences and buying behaviors, and have thus created both challenges and opportunities for companies operating in highly competitive industries (Kim & Mauborgne, 2005; Gawer & Cusumano, 2014).

Customer Acquisition, Price Sensitivity and Market Strategy

Market expansion theories, including blue-ocean strategy, emphasize the importance of creating new demand by targeting underdeveloped markets rather than competing directly for the red-ocean markets — which are heavily saturated (Kim & Mauborgne, 2005). Disruptive innovation theory further corroborates the argument that companies can achieve growth by introducing simpler, more affordable solutions that target overlooked customer groups before moving upward (Christensen et al., 2015). These frameworks highlight how organizations respond to global events by expanding into new demographics to sustain long-term growth.

From the consumer perspective, price sensitivity remains a critical factor influencing customer acquisition, particularly among younger demographics (Gen Z) and in emerging markets, where economic pressures and high cost-of-living crises have heightened demand for more affordable yet high-quality products (Siam University, 2019; Kotler & Armstrong, 2018).

From the company perspective, balancing premium positioning with accessible pricing options can better enhance market penetration without eroding brand equity, though it requires careful management of perceived value (Atlantis Press). Consumer value theories underscore that affordability, when combined with strong ecosystem benefits, can drive acquisition among price-sensitive segments while maintaining loyalty.

Marketing Mix (4Ps) and Strategic Positioning

The marketing mix framework (McCarthy, 1960; Kotler & Armstrong, 2018) continues to remain as a foundational tool for understanding how firms position products in competitive markets. Product decisions involve features, quality, and branding. Pricing decisions balance accessibility with the perceived value of the product. Place affects market reach, and promotion shapes brand perception and influences customer acquisition. In technology markets, premium brands often emphasize product differentiation and high pricing to maintain exclusivity, while other companies will adopt more inclusive strategies such as adapting price and promotion to attract a broader market segment. However, despite the 4Ps serving as the foundation for many marketing analysis, this paper considers the release of the MacBook Neo from an overall perspective, thus utilizing more advanced frameworks (VRIO & STEEPLE).

Ecosystem Strategies, Customer Lock-In, and Sustainability and Ethical Consumerism

Platform ecosystem theory emphasizes how companies are able to create value through interconnected products and services that increase the switching costs and also customer retention (Gawer & Cusumano, 2014; Jacobides et al., 2018). Research on brand communities and subcultures of consumption demonstrates that strong identification with a brand's lifestyle and values leads to higher loyalty and advocacy (Muñiz & O'Guinn, 2001; Schouten & McAlexander, 1995). These theoretical perspectives highlight the power of ecosystem design in creating sustained competitive advantage amid market instability.

Additionally, growing environmental awareness and ethical consumerism have increased demand for sustainable practices. Corporate social responsibility (CSR) and sustainability communication theories show that companies addressing carbon footprints, recycled materials, and ethical production can enhance brand perception and customer acquisition, particularly among younger, ESG-conscious consumers (Du et al., 2010; Kotler & Lee, 2005). Global events have amplified these expectations, pushing organizations to integrate sustainability into core strategy.

Current Gaps in Literature

Despite these strong theoretical foundations, significant gaps remain. Much of the existing research is based on pre-2026 data and does not fully account for the dynamism of the current environment — including wars, escalating tariffs, trade policies, and the cost-of-living crises before and after the pandemic. These factors have rapidly changed consumer behavior and purchasing patterns, yet theory has not fully caught up. Traditional premium brands now face pressure to rethink strategies in price-sensitive markets amid steep technological advancements (e.g., AI integration) while managing supply chain costs and global instability. Few studies apply comprehensive multi-framework analysis at the individual product level to evaluate how companies balance ecosystem lock-in with broader accessibility. This study addresses these gaps by examining Apple's MacBook Neo through theoretical lenses of ecosystem lock-in, market expansion, price sensitivity, and sustainability, assessing the effectiveness of its strategic shift into the budget segment.

3. Methodology

This study uses a comparative case study approach focusing on two periods of Apple's MacBook strategy: the traditional M-series MacBooks from 2020 to 2025, and the MacBook Neo following its release in 2026. The comparative design was chosen to examine how Apple's existing ecosystem strategy has extended through changes in pricing, sustainability, and target market positioning. The analysis combines secondary-source review with strategic framework analysis to evaluate both the internal capabilities within Apple and its external conditions.

Secondary sources were chosen based on their relevance to Apple's product strategy, ecosystem positioning, market conditions, sustainability practices, and consumer behavior. Many of these sources were drawn from four primary categories: Apple's official corporate and product communications pages; industry and market research from organizations such as IDC and Counterpoint Research; peer-reviewed academic literature and established theoretical works; and contemporary technology-industry reporting and product reviews. Apple's official sources were mainly used for product specifications, pricing, and environmental claims, and also stated their corporate objectives. Independent industry and academic sources were used to provide external context and reduce the pure reliance on company-reported information. Contemporary empirical and industry sources primarily cover the 2020–2026 period, while older academic works were used where necessary to establish the theoretical frameworks applied in the analysis.

Two analytical frameworks were chosen for their complementary effects to each other. VRIO was used to assess Apple's internal resources and capabilities and their potential contribution to its competitive advantage, particularly ecosystem integration, vertical integration, brand reputation, and Apple's custom silicon chip strategy (Barney, 1991; 1995). The STEEPLE analysis was used to analyze the external social, technological, economic, environmental, political, legal and ethical conditions relevant to Apple's MacBook strategy. These two frameworks, when combined, allows the paper to examine both Apple's internal strategic capabilities in addition to the external conditions that could have influenced its strategic change.

The analysis also incorporates various theoretical perspectives on platform ecosystems, blue-ocean strategy, disruptive innovation, consumer behavior, and sustainability. These theories were used to interpret the strategic significance of the differences that were identified between the two cases rather than being used as a tool to measure the MacBook Neo's performance in the market.

Due to the MacBook Neo's recent release, the study distinguishes the observed outcomes that have been reported and analytical projections. In cases where direct evidence regarding Apple's motivations, market expansion, profitability, or long-term consumer behavior was unavailable, the conclusions drawn were treated as interpretations rather than factual claims. Language that was used such as "suggests," "may," "potentially," and "appears" is thus used where it is appropriate. Any conflicting evidence was considered alongside other sources, while official Apple sources acted as verifiers of claims that concerned the product directly.

This study however contains several limitations that must be noted. The study relies exclusively on publicly available secondary data, meaning that any confidential information that concerns Apple's internal decision making, product-level profitability, customer acquisition, and supply-chain situations cannot directly be analyzed. Additionally, the recency of the MacBook Neo limits the availability of long-term data on sales, consumer, and other market data. Therefore, the findings

should instead be understood as an analysis of Apple's strategic positioning and the potential implications of the MacBook Neo rather than as a definitive assessment of its long-term success in Apple's business model.

4. Analysis & Findings

Traditional MacBooks

Apple's MacBooks, well-known for their integrated software, premium hardware, and emphasis on user experience, have consistently been positioned as premium devices within the laptop industry (Apple, 2025; Westover, 2025). Since the release of the first MacBook in 2006, Apple has evolved the MacBook into a platform that captures and retains users within the Apple ecosystem through integrated hardware, software, and services (Gawer & Cusumano, 2014; Jacobides et al., 2018). A turning point was in 2020, when Apple launched the Macbook with their very own M1 chip (Apple, 2020), instead of relying on Intel chips for their Macbooks. Since then, the price tag has continued to stay at the hefty price of $999 (Apple, 2020–2025), which made it difficult for many to approach Apple's Macbooks as their first laptop. A VRIO analysis (Barney, 1991; 1995) of traditional MacBooks (Table 1) highlights the sources of competitive advantage during this period.

Table 1. VRIO Analysis of Traditional MacBooks (2020–2025)

Resource/ Capability	Value	Rarity	Imitability	Organization	Competitive Advantage
Ecosystem Lock-In	High switching costs	High	Difficult (hardware-software integration)	Fully exploited	Temporary
Vertical Integration	High (cost control + performance)	High	Very difficult	Fully exploited	Sustained
Premium Brand & User Experience	High (loyalty & WTP)	Medium to high	Moderately difficult	Fully exploited	Sustained
Supply Chain Mastery	High (resilience)	Medium	Moderately difficult	Fully exploited	Temporary
Sustainability Practices	Medium	Low	Easy	Partially Exploited	Competitive Parity
Product Quality & Reliability	High	Medium	Difficult	Fully Exploited	Temporary

Note. VRIO classifications represent the author's analytical assessment based on the publicly available evidence reviewed in this study. Classifications of rarity, imitability, organizational exploitation, and competitive advantage should therefore be interpreted as analytical judgments rather than direct claims made by Apple.

As shown by Table 1, the VRIO analysis reflects that ecosystem lock-in and vertical integration were the primary sources of sustained competitive advantage for traditional MacBooks, consistent with the VRIO framework's emphasis on valuable, rare, and difficult-to-imitate resources (Barney, 1991; 1995). These resources, by creating high switching costs and better performance compared to competitors, made Apple's strategy difficult to imitate. Premium branding and user experience continued to reinforce Apple's position within the technology industry, yet sustainability continued to remain only as competitive parity. This table supports the argument that Apple's pre-2026 strategy was heavily reliant on ecosystem lock-in as its foundational strategy, supporting Apple's established position within the premium segment while offering comparatively limited access to more price-sensitive and education-focused markets.

Building on these internal strengths, Apple maintained its strategy of ecosystem lock-in, allowing it to retain existing customers through interconnected hardware, software, and services (Gawer & Cusumano, 2014; Jacobides et al., 2018). Apple's MacBooks, offering services such as iCloud, iMessage, and Apple ID, work in conjunction with other Apple devices, strengthening ecosystem integration and increasing switching costs for users (Gawer & Cusumano, 2014; Jacobides et al., 2018). As many users who used Macbooks began to become more reliant on Apple's services, it became more costly for them to switch out of the Apple ecosystem, especially if they were heavily reliant on services such as iCloud (Gawer & Cusumano, 2014; Jacobides et al., 2018). Apple's services ecosystem may therefore reinforce continued use of Apple hardware by increasing the switching costs associated with leaving the ecosystem.

Historically, sustainability played a less central role in Apple's product differentiation strategy compared with performance, design, and ecosystem integration (Apple, 2025). Progress existed at different stages, such as increasing recycled content in their Macbooks to around 55% in newer models (Apple, 2025), and aiming to achieve carbon neutral goals by 2030. Yet, the increase in sustainability was viewed as more of a brand image enhancement rather than to expand their products to a new demographic, or a new segment.

This strategy has been linked to strong customer loyalty, premium pricing, and a strong brand position. Many users and tech critics regarded Macbooks as having excellent battery life, providing smooth multitasking, and thermal efficiency for the Pro models in tasks such as video editing, coding, and graphic design (Westover, 2025). MacBooks were also praised for their premium build quality, including aluminium chassis designs, keyboards, trackpads, and integration with Apple devices (Westover, 2025). This has contributed to Apple's adoption among both individual consumers and businesses seeking reliable computing solutions (Apple, 2025; Westover, 2025). For many businesses, reliability is key, and due to Macbook's ability to offer one of the best reliable experiences in the laptops industry, Apple excelled at both providing products for the everyday consumer and also businesses (Apple, 2025; Westover, 2025). To gain a better understanding of Apple's circumstances during the period when Apple prioritized ecosystem-lock in as a strategy, a STEEPLE analysis was conducted by looking at the time period of 2024-2025.

Table 2. STEEPLE Analysis of Traditional MacBooks (2024–2025)

Factor	Key Points
Social	Growing demand from professionals and creatives; rise of remote/hybrid work; limited appeal to younger and education segments
Technological	Advances in AI and chip performance; increasing component costs due to AI demand
Economic	Premium segment saturation; post-pandemic demand normalization; rising component costs
Environmental	Increasing regulatory pressure on e-waste and carbon emissions; rising ESG expectations
Political	Geopolitical tensions and trade tariffs; push for supply chain diversification
Legal	Stricter right-to-repair regulations in the EU and other regions
Ethical	Growing societal concern over ethical sourcing and environmental impact

Note. STEEPLE factors represent external conditions identified from the sources reviewed and their relevance to Apple's strategic environment. Their inclusion does not establish that any individual factor directly caused Apple's decision to launch the MacBook Neo. Information adapted from Apple (2025), American Enterprise Institute (2022), Moor Insights & Strategy (2025), and More (2025).

Table 2 highlights the external pressures that Apple faced in their traditional MacBooks between 2024 and 2025. Social demand was heavily concentrated among professionals, while economic saturation and rising component costs continued to limit growth in the premium segment (Business of Apps, 2026; Moor Insights & Strategy, 2025). Environmental and ethical concerns were increasing, but Apple's response was gradual, treating the concerns as burdens. These external conditions are consistent with Apple's strategic shift, and appear to have set the foundation for Apple to extend its ecosystem lock-in strategy with new elements within affordability and sustainability.

MacBook Neo

With the release of the MacBook Neo in 2026, the budget laptop industry experienced a new competitor. Priced at USD $599, the MacBook Neo reflected Apple's attempt to expand beyond its traditional premium positioning and enter more price-sensitive market segments (Apple, 2026b). Apple began emphasizing affordability, positioning the MacBook Neo as a device designed for students, families, and first-time Mac users (Apple, 2026). This reflects product-line extension strategies, where firms create differentiated offerings across price points to capture multiple consumer segments while reducing internal competition (Kotler & Armstrong, 2018). By differentiating the Neo through price and positioning, Apple may reduce direct overlap with its higher-priced MacBook models and limit potential internal cannibalization.

We can now take a look at a VRIO analysis on the MacBook Neo, analyzing the product in a more specific lens.

Table 3. VRIO Analysis of the MacBook Neo (2026 onwards)

Resource/ Capability	Value	Rarity	Imitability	Organization	Competitive Advantage
Repurposed A18 Pro Chip + Vertical Integration	High (enabled USD $599 pricing)	High	Difficult	Fully exploited	Sustained
Affordability + Product Ladder Strategy	High (new segment expansion)	Medium	Moderately difficult	Fully exploited	Temporary
Advanced Sustainability Features	High (ESG appeal)	Medium to high	Moderately difficult	Fully exploited	Temporary
Ecosystem Lock-in at a lower price point	High (services revenue)	High	Difficult	Fully exploited	Sustained
Brand Reputation & Marketing Execution	High	High	Difficult	Fully Exploited	Sustained
Improved Repairability	Medium	Medium	Moderate	Partially Exploited	Competitive Parity

Note. VRIO classifications represent the author's analytical assessment based on the publicly available evidence reviewed in this study. Classifications of rarity, imitability, organizational exploitation, and competitive advantage should therefore be interpreted as analytical judgments rather than direct claims made by Apple.

Table 3 demonstrates how the MacBook Neo was able to build upon Apple's existing strengths to become even more successful. It is worth noting that while several resources are classified as sources of sustained advantage, this classification assumes Apple's silicon supply and brand execution remain uncontested; competitors closing the chip-performance gap or repositioning against Apple's pricing could erode some of these advantages over time. Vertical integration through Apple's custom silicon strategy and ecosystem lock-in at a lower price point provided potential sources of sustained competitive advantage, consistent with the VRIO framework (Barney, 1991; 1995). Specifically, affordability and advanced sustainability features now served as valuable and rare capabilities that Apple has managed to fully exploit through their organization. This analysis reflects the paper's central argument that while ecosystem lock-in continued to remain as the foundation, affordability and sustainability were used as extensions of Apple's existing strategy to expand their market reach without having to leave Apple's existing brand image.

This move to release the Macbook Neo is reflective of Apple's original 2006 Macbook release strategy. The first consumer Macbook, made out of polycarbonate plastic, was launched as an accessible, education and lifestyle-focused device to expand the Apple product lineup to a greater demographic (Apple, 2006). Similar to Neo, it utilized cost-effective design choices while maintaining Apple's build quality, becoming an important contributor to Apple's expansion in the personal computer market (Apple, 2006). Both of these cases represent operational strategies of vertical integration and lineup expansion to drive sales volumes while preserving ecosystem lock-in.

Apple's decision to release the MacBook Neo appears predominantly reactive, based on the available evidence. Leveraging their strong position within the premium segment of the industry, in addition to its vertical integration, Apple was able to repurpose the binned A18 Pro chips. This may have contributed to Apple's ability to offer the Neo at a comparatively low price point despite broader increases in component costs. The Macbook Neo also marked a major advancement in sustainability. With 60% recycled content overall within the laptop itself, the Macbook Neo could prove to be one of Apple's most sustainability-focused products with the lowest carbon footprint (Apple, 2026b). The body is composed of 90%+ recycled aluminum, with a new forming process using 50% less aluminum than traditional methods to produce the body (Apple, 2026b). Within its batteries, the Macbook Neo contains 100% recycled cobalt, and also 100% recycled rare earth elements within the magnets. 45% of manufacturing electricity originated from renewable energy (Apple, 2026b). These sustainability gains span across the various levels of the supply chain, resulting in the lowest carbon footprint of any Macbook ever produced.

This aligns with research on ethical consumerism, which suggests that sustainability communication can influence consumer perception and brand value among environmentally conscious consumers (Du et al., 2010; Kotler & Lee, 2005). In such markets, Apple's increase in sustainability allows them to act as one of the leaders in leading the global trend. With the new demographic now targeting students, and people of the younger generations, who are also much more conscious about the environment, the MacBook Neo therefore represents a potential mechanism through which Apple could expand into these customer segments.

This shift in strategy, to the release of the Macbook Neo was motivated by multiple factors, both inside and outside of Apple. Some external factors that could have influenced the release of the Macbook Neo included the lack of market expansion for Apple, and the slowing growth in the premium markets, especially due to rising component costs. With their current markets already being heavily saturated, with Apple operating in a red-ocean market, these conditions may have created an opportunity for Apple to pursue elements of a blue-ocean strategy by entering the education and budget-oriented laptop segments. Some internal factors also motivated the release of the Macbook Neo. By releasing the Macbook Neo, Apple could utilize existing Apple silicon capabilities, including the A18 Pro chip architecture, to achieve competitive pricing while maintaining performance advantages (Apple, 2026b). This was an opportunistic internal factor that not only reduced damage for the company, but also could potentially improve the economics of serving a lower-price segment, although product-level profitability cannot be established from publicly available data. Through vertical integration, Apple was able to achieve lower costs that allowed it to target the lower-cost market. Sustainability and ESG goals also played a role in pushing the release of the Macbook Neo. With Apple's 2030 carbon-neutrality goal, there was increasing pressure to innovate in materials and manufacturing. Thus, by releasing the Macbook Neo, Apple could also display their progress towards their goal, allowing them to continue to maintain their premium brand image. To better understand the motivations behind the MacBook Neo, a STEEPLE analysis was conducted focusing on the period from 2026 onward.

Table 4. STEEPLE Analysis of the MacBook Neo (2026 onward)

Factor	Key Points
Social	Rising demand from Gen Z and students for affordable tech; continued hybrid learning trends
Technological	Advances in recycled materials and efficient chip designs; AI feature expectations
Economic	Slowing premium segment growth; high component costs; opportunity in budget laptop market
Environmental	Heightened regulatory pressure on electronics carbon footprint and materials sourcing
Political	Government initiatives for digital inclusion in education; ongoing trade tensions
Legal	Strengthening right-to-repair and sustainability regulations
Ethical	Increased consumer awareness and demand for ethical and sustainable products

Note. STEEPLE factors represent external conditions identified from the sources reviewed and their relevance to Apple's strategic environment. Their inclusion does not establish that any individual factor directly caused Apple's decision to launch the MacBook Neo. Information adapted from Osborne (2026), Isaacs (2026), Counterpoint Research (2026), International Data Corporation (2026), Apple (2026a), Apple (2026c), Repair.eu (2026), and Du et al. (2010).

Table 4 shows the STEEPLE analysis of the MacBook Neo, and is reflective of the shift in the external environment that encouraged the Neo's release. Increased demand from Gen Z and students, in conjunction with heightened ESG expectations and increased regulatory pressure on sustainability could have created optimal conditions for the release of an affordable and sustainable product. Additionally, heavy economic saturation within the premium segment further supported market expansion. These external factors help to explain the circumstances in which Apple was operating in, and provides a reason for why Apple may have chosen to layer affordability with sustainability onto its existing ecosystem lock-in strategy to respond to changing consumer and regulatory demands.

While these external conditions supported the Neo's launch, Apple also faced numerous problems due to the release of the Macbook Neo. Apple also plausibly faced supply chain challenges, particularly given broader semiconductor constraints and increasing component costs affecting technology manufacturers more generally. Apple could plausibly face challenges maintaining supply if demand exceeds available component capacity. This could lead to situations of Apple having to find new supply lines from TSMC at higher costs, leading to supply shortages, sell-outs, and also longer delivery times for the Macbook Neo. Furthermore, other components of the Macbook, such as the storage or RAM continued to increase in price, leading to potential problems for Apple to maintain the current price that is set for the Macbook Neo. Brand perception also played a problem for Apple, which required careful deliberation and execution by the marketing department. By releasing a USD $599

Macbook, Apple risked diluting their premium brand image, meaning that they risked falling to be on par with companies that are producing cheaper, budget-friendly products.

Overall, consumer receptions towards the Macbook Neo were quite positive. Technology reviewers such as PCMag, Forbes, and TechCrunch described the MacBook Neo as one of the strongest budget laptop options of 2026 (Osborne, 2026; Isaacs, 2026; Singh, 2026), which encouraged numerous people to purchase the Macbook Neos as their first Apple devices. With enough capabilities to perform everyday tasks flawlessly, the Macbook Neo proved to be the device that was suitable for many individuals. Yet, some limitations and risks remain due to the release of the Macbook Neo. The greatest risk for Apple, with the release of the Macbook Neo, is the potential for Apple's brand image to change to become known as a company just like any other, offering both premium-high end products to cheaper, budget-friendly products. With a $400 difference between the two devices, Apple's success in maintaining its brand image also relied on the marketing aspect within Apple. Apple was able to market the Macbook Neo in the same way they would market the Macbook Air or the Pro, while emphasizing on the price. Many customers of Apple did not see a huge difference within the marketing systems, which was most likely intended to ensure that Apple could maintain the premium brand image that they are known for.

5. Comparison

The independent case studies illustrate Apple's strategic evolution from a pure premium lock-in model to a more inclusive, layered ecosystem. In this new approach, ecosystem lock-in remains the foundational mechanism for long-term value capture, while affordability and sustainability serve as strategic extensions that broaden customer acquisition without compromising the core architecture of Apple.

Pricing, Market Access and Sustainability Integration

Traditional MacBooks targeted premium consumers and professionals, with entry-level models historically positioned around the $999 price range (Apple, 2020–2025). The MacBook Neo's USD $599 price point represents a calculated market expansion into education and entry-level segments, effectively creating a differentiated product ladder that may reduce internal cannibalization while providing Apple with an opportunity to reach additional customer segments (Apple, 2026b).

Sustainability in traditional MacBooks served primarily as brand promotion. The Neo places greater emphasis on sustainability as a potential competitive differentiator, achieving 60% recycled content and the lowest carbon footprint of any MacBook (Apple, 2026a). This move reflects Apple's response to external ESG pressures and also positions Apple as a sustainability leader even in the budget segment — a way for Apple to maintain their innovative brand image.

Ecosystem Role, Competitive Positioning, and Risks and Trade-offs

Both generations rely on ecosystem lock-in, but the Neo extends Apple's lock-in strategy to a wider audience. By lowering the entry cost, Apple was able to increase the probability of future cross-selling (e.g., iPhone "e" integration and services), potentially converting one-time budget buyers into high-lifetime-value ecosystem users (Gawer & Cusumano, 2014; Jacobides et al., 2018). Traditional MacBooks operated in a crowded red-ocean premium market. The Neo exhibits several elements

consistent with blue-ocean strategy by entering the affordable, sustainable laptop category, challenging Chromebooks and Windows devices on both price and user experience (Kim & Mauborgne, 2005).

The strategy introduces risks such as potential brand dilution, supply chain vulnerabilities (A18 Pro chip shortages), and execution challenges in maintaining its premium perception. Apple's marketing success in framing the Neo as "premium experience at accessible price" will be critical to long-term success. Overall, this comparison suggests that Apple is leveraging its traditional strengths in ecosystem lock-in and vertical integration while addressing the previous limitations in market reach and sustainability.

6. Summary of Findings

The analysis provides several noteworthy findings. First, traditional MacBooks demonstrated the strengths and the limitations of a pure premium lock-in model: the ability to gain exceptional loyalty and profitability within a narrow market segment, but greater vulnerability to market saturation and the exclusion of younger, price-sensitive consumers. Second, the MacBook Neo effectively makes use of Apple's core capabilities (vertical integration and ecosystem design) to address these weaknesses, creating the potential for meaningful market expansion while maintaining strategic coherence. The integration of affordability and high sustainability standards represents an innovative approach to reflect Apple's premium brand image amid current consumer demands. Notable outcomes of the release include positive initial reception among several technology reviewers and reported interest among new buyers and the potential for increased services revenue from a larger installed base. However, persistent supply chain fragility and brand perception risks highlight the difficulty in maintaining such a strategy. Collectively, these findings demonstrate that Apple has moved beyond simple innovation toward a more adaptive, multi-tiered ecosystem strategy — one that balances traditional strengths with adaptability to a changing world.

7. Discussion & Recommendations

The findings of this paper align well with various theoretical perspectives that were discussed in the literature review. The importance of ecosystem lock-in as a tool for competitive advantage reflects platform ecosystem theory (Gawer & Cusumano, 2014; Jacobides et al., 2018), while the Neo's affordability and sustainability highlight the importance of blue-ocean strategy and disruptive innovation concepts (Kim & Mauborgne, 2005; Christensen et al., 2015). Furthermore, the new role of sustainability as a tool for competitive advantage reflects the rise of ethical consumerism and CSR communication theories (Du et al., 2010; Kotler & Lee, 2005), demonstrating how external pressures can drive strategic adaptation in premium brands.

From a VRIO perspective, both the traditional MacBooks and the Neo demonstrate that ecosystem lock-in and vertical integration can serve as sources of competitive advantage (Barney, 1991; 1995). However, the Neo was able to also target new advantages through affordability and sustainability — many gaps that were left behind by traditional devices. The STEEPLE analyses further help to reveal the role that external factors play and how they influenced this shift. This comparison highlights Apple's movement toward a layered ecosystem model, where lock-in serves as the foundation while affordability and sustainability helps to broaden customer reach.

To continue to stay successful in this new strategic shift, Apple should continue to invest in supply chain resilience. As supply chains, specifically the chip production lines drive the costs of these products, investing in them will become critical. Additionally, Apple will need to ensure that they are able to maintain clear product differentiation across the product ladder through defined marketing that highlights the premium user experience at various price points. Additionally, Apple should continue to deepen sustainability efforts to go beyond the Neo, to strengthen their brand leadership in the ESG sector. These recommendations build upon blue-ocean strategy and ecosystem theory (Kim & Mauborgne, 2005; Gawer & Cusumano, 2014).

8. Conclusion

This study has examined Apple's strategic shift through the comparative analysis of traditional MacBooks and the MacBook Neo. The findings suggest that the MacBook Neo reflects a significant adaptation to the changing competitive environment. Apple has retained ecosystem lock-in as its core competitive advantage while adding affordability and sustainability, potentially allowing them to expand market reach and to respond to external events. By balancing its premium brand image with the now expanded customer demographic, Apple has positioned itself to potentially capture new customer segments without sacrificing the high-margin models that defined Apple. The findings further suggest that this approach provides opportunities for market expansion while introducing risks related to supply-chain resilience, brand perception, and long-term product differentiation.

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Ethics Statement

This research was conducted independently and without access to a formal ethics review board. Therefore, this paper's author adhered to the practical guidelines for ethical research. All data used was secondary, and was collected from publicly available sources using ethical guidelines for research.

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Author Biography

[REDACTED] is a 17-year-old rising senior at **[REDACTED]** with a research focus on the intersection of sustainability and competitive business strategy. He is the founder of a community-driven sustainability platform in Hong Kong and has explored global supply chains through an internship at a maritime logistics company. Outside the classroom, **[REDACTED]** is an avid rock climber and outdoor enthusiast, interests that first drew his attention to the environmental costs of unchecked industrial growth and continue to inform his research. He plans to pursue undergraduate study in business and economics, with a long-term interest in sustainable supply chain strategy.

Mentor Contribution Statement

This research paper was written under the guidance of **[REDACTED]**. The mentor's role included providing feedback to further develop ideas that were explored in the research paper and gaining a better understanding of various business frameworks that were utilised. Additionally, the mentor's guidance on the structure of this paper, and addressing gaps were essential for the success of this paper.

Reviewers Report – Convergence Journal

Paper: From Premium Lock-In to Inclusive Growth: Apple's Strategic Evolution with the MacBook Neo
Recommendation: Accept with minor revisions

Comments Overall

This is a thoughtful and ambitious paper addressing a topical: how Apple may be adapting its established premium ecosystem strategy through the introduction of the lower-priced MacBook Neo. I am conscious of the authors limitation that this is the "Analysis of Apple's strategic positioning and potential impact on the MacBook Neo rather than a definitive assessment of its long-term success in Apple's Business model" and have taken this into consideration in my recommendation. The paper has several strengths. The subject is timely, the manuscript is well presented, and the author successfully moves beyond product description by applying established strategic frameworks such as: VRIO, STEEPLE, ecosystem theory, blue-ocean strategy, disruptive innovation and sustainability theory. I particularly liked the main premise that affordability and sustainability may not represent an abandonment of Apple's ecosystem strategy, but rather new layers built upon it.

The author's recognizes the further limitations created by studying such a recently introduced product. The study methodology identifies that confidential information about Apple's internal decision-making, profitability and customer acquisition is unavailable, and that Neo's relatively recent release limits long-term market evidence. Thus, as the author has identified, the findings should be interpreted principally as an assessment of strategic positioning rather than a definitive evaluation of long-term commercial success.

While some claims go beyond what the available evidence can establish, and the theoretical frameworks are sometimes applied descriptively rather than critically, given the limitations the author worked in, I recommend that the paper be accepted with minor revision.

Specific Comments:

I make the following comments to assist the author in strengthening the paper:

- **Originality and central contribution:** The paper contains an interesting and potentially original argument, which could be sharpened. The most compelling insight may not be that Apple has moved "from premium lock-in to inclusive growth," but that it has retained ecosystem lock-in while lowering the point of entry into that ecosystem. The paper argues that ecosystem lock-in remains foundational while affordability and sustainability are strategic extensions. The paper could have a stronger intellectual focus if in the introduction the question: Does the MacBook Neo represent a genuine change in Apple's strategy, or an extension of the existing strategy into a broader customer base?' was posed. This is a suggestion not a requirement.
- **Make the research question more explicit:** The subject of analysis and the explanation that the paper seeks to explain Apple's strategic shift is given but I can't find a precise research question. For example - How does the introduction of the MacBook Neo represent an extension of Apple's existing ecosystem-based competitive strategy through affordability and sustainability, and how might this reposition Apple within more price-sensitive market segments?
- **Inconsistency in Table 1:** Table 1 classifies ecosystem lock-in as a temporary competitive advantage, while the text immediately afterwards describes ecosystem lock-in and vertical integration as the primary sources of sustained competitive advantage. This difference needs reconciling.
- **Disruptive innovation theory:** A lower-priced product is not necessarily disruptive innovation in the Christensen sense. Does the Neo meet the conditions of low-end or new-market disruption. If that evidence is not available, disruptive innovation could be presented as a comparative theoretical lens rather than a conclusion.
- **Define 'inclusive growth':** As this concept appears in the title, a clear definition would be beneficial. Lower pricing broadens accessibility, but "inclusive growth" can imply much wider social and

economic outcomes. The author might either define the term narrowly or consider whether language such as “broader market access” or “accessible ecosystem growth” better captures the argument.

- **Claims about consumer reception and causation:** The manuscript states that favorable reviews encouraged numerous people to purchase Neo devices as their first Apple products denoting acceptance but do not demonstrate purchasing causation. Unless reliable consumer or market data are available, I suggest revising this to something such as: “Early reviews were positive and suggest that the device may have appeal among first-time Mac buyers.”
- **Make the recommendations more specific:** Recommendations concerning supply-chain resilience, product differentiation and further sustainability investment are sensible, but relatively broad. More case-specific recommendations would help e.g. maintaining sufficient differentiation between Neo and MacBook Air, measure are Neo buyers genuinely incremental customers rather than customers trading down and tracking if new Neo users subsequently generate ecosystem-services revenue. These would strengthen the paper.
- **Presentation:** There are some inconsistencies in capitalization of MacBook and grammar errors detracting from the professionalism of the paper.

Final recommendation: Accept with minor revisions

This manuscript has a sound and interesting underlying premise, and I would encourage the author to consider the comments above. The paper is timely, the strategic question is relevant, and the paper establishes the base for further work. The revisions suggested are readily easily achievable and would materially improve the paper.

Convergence Journal Manuscript Review

Paper Title: From Premium Lock-In to Inclusive Growth: Apple's Strategic Evolution with the MacBook Neo

SUMMARY

This paper compares Apple's laptop strategy across two periods. The first covers the M-series MacBooks sold between 2020 and 2025, and the second covers the MacBook Neo, which launched in March 2026 at USD $599. The author runs a VRIO analysis on each generation's internal capabilities and a STEEPLE analysis on the external conditions surrounding it. The argument that emerges is that Apple never let go of ecosystem lock-in. While this stays the foundation, the company built affordability and sustainability on top of it to reach the education market and price-sensitive buyers while its premium line carried on. The paper ends with the risks it sees (supply chain, brand perception, execution) and a set of recommendations for Apple.

STRENGTHS

The design of the study is its greatest strength. Combining an internal framework (VRIO) with an external one (STEEPLE), and applying both to the traditional MacBook period and the Neo period, gives the comparison a clear analytical structure. The methodology section is also unusually careful for a student case study. It identifies the main source categories, explains how official and independent sources are used differently, distinguishes observed outcomes from analytical projections, and explicitly adopts hedged language when public data cannot establish a claim.

The revision also shows good epistemic care. The notes beneath the VRIO tables clarify that the classifications are the author's analytical judgments rather than Apple's claims, and the STEEPLE notes correctly state that the listed factors do not establish causation. The limitations paragraph appropriately acknowledges that the study relies on public secondary data and that the Neo is too recent for confident long-term conclusions.

The historical comparison with the 2006 consumer MacBook is also potentially useful because it frames the Neo as an extension of a longer product-line strategy rather than as a complete break from Apple's past. However, the specific characterization of the 2006 MacBook as education-focused needs either a direct

source or softer wording, because the cited Apple announcement supports a consumer/digital-lifestyle positioning more clearly than an education-specific one.

ORIGINALITY AND SIGNIFICANCE

A multi-framework comparison focused on an individual, very recent strategic move is a sensible contribution for a student journal. The frameworks themselves are established tools, so the originality lies in their combined application to a current product-level case rather than in methodological novelty. The paper generally recognizes this appropriately.

The significance could be sharpened by stating more directly what the case implies for other premium technology brands. The abstract promises insight into how premium brands can adapt to changing markets, but the discussion remains mostly Apple-specific. One or two sentences explaining what is transferable beyond Apple would make the contribution more explicit.

CLARITY AND STRUCTURE

Literature review, methodology, the traditional MacBook case, the Neo case, and then the comparison, findings, discussion, and conclusion each land where a reader expects them. The tables do real work too, since they support the argument instead of restating the prose.

Table 1 holds the most important internal inconsistency. Ecosystem Lock-In is rated Valuable, Highly Rare, Difficult to Imitate, and Fully Exploited in that table, and the standard VRIO reading of such a row is a sustained competitive advantage. The table nevertheless labels it Temporary, while the paragraph right below calls ecosystem lock-in a source of sustained competitive advantage. Something has to give. Explain the rule that turns the four V/R/I/O ratings into the final category, then bring either the classification or the ratings in line with it.

The reception section has a second clarity problem. What the cited TechCrunch piece shows is strong early demand and first-time Mac buyers, which is enough for a discussion of early adoption. The sentence as written goes further and implies that positive technology reviews caused people to buy the Neo, and the evidence does not carry that. The claim that many customers saw little difference in Apple's marketing looks unsupported as well. Either give it a source or soften it, and if neither works, cut it.

USE OF EVIDENCE AND RESEARCH METHODS

For a secondary-source case study, the evidence base is broadly appropriate. Apple's official materials are properly used for product specifications, pricing, and company-reported sustainability data, while independent sources are used for market context and reception. Here are some issues that need to be addressed:

First, the statement that Apple repurposed "binned" A18 Pro chips is not supported by a citation in the manuscript. The claim may be correct, but "binning" is a specific manufacturing characterization and should either be cited directly or rephrased more cautiously.

Second, the paper uses Mac revenue to support statements about MacBook sales and premium-segment saturation. This inference is too strong as written. Aggregate Mac revenue is not the same as MacBook unit sales, and revenue falling below an unusual pandemic-era peak does not by itself demonstrate that the premium segment is saturated. The manuscript should distinguish Mac revenue from MacBook sales and provide independent evidence if it wants to argue that premium-segment saturation caused or strongly motivated Apple's strategy shift.

Third, the reception paragraph should be rewritten to match the cited evidence precisely. Singh (2026) supports strong early market demand, launch-quarter shipments, and the presence of first-time Mac buyers. That is useful evidence and should be stated directly. What is not supported is the causal claim that positive reviews encouraged those purchases or the claim that many customers perceived Apple's Neo marketing as essentially the same as MacBook Air/Pro marketing.

Fourth, the sustainability discussion relies heavily on Apple-reported environmental claims. Bringing the More (2025) Reuters report about the German court ruling on Apple's Apple Watch carbon-neutral marketing into the body would provide useful critical context about reliance on company sustainability claims. That ruling should not be presented as evidence that the Neo's specific recycled-material figures are false. It is relevant instead as a reminder that corporate environmental claims should be treated with independent scrutiny where possible.

ENGAGEMENT WITH LITERATURE

The theoretical grounding is strong for this level. Blue-ocean strategy, disruptive innovation, platform ecosystems, brand community, CSR communication, and the marketing mix are all relevant and used analytically rather than simply listed.

One theoretical issue deserves more precise treatment. The paper currently uses disruptive innovation theory as support for the Neo's lower-price market move. Low price and entry into a lower-end segment alone do not establish disruption under

Christensen's framework. Disruption is a process that begins in a low-end or new-market foothold and develops over time. Given how recent the Neo is, the manuscript should say that the move has characteristics consistent with a low-end or new-market strategy rather than presenting disruption as already demonstrated.

The literature-review gap statement could also be more cautious. The claim that "few studies" apply comprehensive multi-framework analysis at the individual product level is plausible, but the paper does not present a systematic literature search. It would therefore be better framed as an observed gap in the reviewed literature rather than a comprehensive field-wide claim.

GRAMMAR AND LANGUAGE

The writing is generally understandable, and the ideas are communicated clearly. A careful proofreading pass is still needed.

"MacBook" and "Macbook" alternate throughout and should be standardized. The abstract uses "COVID-19 endemic" where "pandemic" is intended and repeats "is able to" several times in a short span. Tense shifts between past and present when describing the paper's own analysis. Phrases such as "MacBook sales were never too stagnant," "Brand perception also played a problem," and "reduced damage for the company" should be rewritten.

The paper also mixes American and British spelling conventions, for example "analyzed" with "signalling" and "utilised." One convention should be selected and used consistently.

RECOMMENDATION

My recommendation is **Accept with minor revisions**.

The research premise is sound, the comparative design is appropriate, and the methodology is well developed for a secondary-source student case study. The second resubmission already shows substantial improvement in cautious wording, methodological transparency, and table notes. The remaining problems are important but localized.

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From Premium Lock-In to Inclusive Growth: Apple's Strategic Evolution with the MacBook Neo

Abstract

The global technology market has long been shaped by major disruptions, including the COVID-19 endemic, economic pressures, and rising ESG expectations from consumers. This paper examines Apple's strategic evolution from a premium ecosystem lock-in model to a more layered, inclusive ecosystem through the release of the 2026 MacBook Neo. Using frameworks such as VRIO and STEEPLE, this study conducts a comprehensive comparative case analysis of traditional Apple silicon (M-series) MacBooks and the MacBook Neo. Findings indicate that the Neo was able to successfully extend Apple's foundational ecosystem lock-in strategy by incorporating affordability and advanced sustainability as extensions of its strategy. This shift has broadened market access into education and budget segments while also maintaining long-term customer value through services. The analysis is able to highlight both opportunities for growth in addition to challenges that Apple faces, such as supply chain constraints and brand perception risks. This study is able to contribute to the literature on platform ecosystems, blue-ocean strategy, and sustainability-driven innovation by reflecting how premium brands have the ability to adapt to changing environments. Practical recommendations for Apple are also discussed.

Keywords: Strategic positioning, Apple Inc., market entry strategy, VRIO, ecosystem, lock-in effects, case study analysis, product pricing

1. Introduction

MacBooks are one of the world's most renowned pieces of technology. They are known to be reliable, lasting well over five years (Apple, 2025), and they have evolved to become widely adopted tools for professionals requiring high-performance, high-quality, reliable devices for work (Apple, 2025; Westover, 2025). Since the release of the first MacBook in 2006, Apple has

evolved the MacBook into a tool to capture and retain users within the Apple ecosystem (Gawer & Cusumano, 2014; Jacobides et al., 2018). This included the integration of services such as iCloud and other Apple platforms, which strengthened the attractiveness of joining and remaining within Apple's ecosystem (Gawer & Cusumano, 2014; Jacobides et al., 2018). However, Mac revenue has experienced significant changes due to various global events, creating both challenges and opportunities for Apple as it seeks to maintain its position within the industry.

During the COVID-19 pandemic, Apple's Mac revenue increased from 24.7 billion US dollars prior to the pandemic to a peak of approximately 40 billion US dollars (Business of Apps, 2026). However, Apple's Mac revenue declined following the end of the pandemic, reaching approximately 29.2 billion US dollars (Business of Apps, 2026). Yet, Apple's services revenue continued to reflect strong growth throughout, with over 109 billion US dollars being generated from services revenue (Business of Apps, 2026; Sparks, 2026). By 2025, Apple's Mac revenue had recovered to 33.7 billion US dollars (Business of Apps, 2026). These figures represent Apple's overall Mac revenue rather than MacBook unit sales specifically and therefore cannot, on their own, establish saturation in the premium segment. However, the normalization of Mac revenue following the pandemic-era peak provides context for examining Apple's opportunities for further market expansion. This set the stage for Apple's launch of the MacBook Neo in March 2026 — Apple's most affordable laptop ever, priced at USD $599 (Apple, 2026b). The move to release the MacBook Neo reflects a potential shift toward a more accessible approach emphasizing affordability and sustainability, aimed at capturing students, first-time buyers, and consumers in more price-sensitive segments.

This paper critically analyzes two case studies, one examining the M-series MacBooks and the other, the newly released MacBook Neo. The paper utilizes analytical frameworks such as STEEPLE and VRIO to better understand the circumstances surrounding each product. This study asks: How does the introduction of the MacBook Neo represent an extension of Apple's existing ecosystem-based competitive strategy through affordability and sustainability, and how might this reposition Apple within more price-sensitive market segments? The comparative case study therefore examines whether the MacBook Neo represents a genuine change in Apple's strategy or an extension of its existing ecosystem-based approach to a broader customer base. Findings from the comparative case study analysis are used to examine how Apple may be extending its ecosystem strategy through affordability and sustainability rather than completely abandoning its premium positioning.

In this study, "inclusive growth" refers specifically to the potential expansion of access to Apple's ecosystem through a lower-priced entry point, rather than the broader social and economic meaning that the term can imply. The paper therefore focuses on whether Apple can broaden access to its ecosystem while maintaining the ecosystem-based competitive advantages that supported its traditional MacBook strategy.

2. Literature Review

The global technology market has been influenced by various destabilizing events, including the COVID-19 pandemic, geopolitical conflicts, trade tariffs, and ongoing cost-of-living crises. These events have greatly influenced consumer preferences and buying behaviors, and have thus created both challenges and opportunities for companies operating in highly competitive industries (Kim & Mauborgne, 2005; Gawer & Cusumano, 2014).

Customer Acquisition, Price Sensitivity and Market Strategy

Market expansion theories, including blue-ocean strategy, emphasize the importance of creating new demand by targeting

underdeveloped markets rather than competing directly in heavily saturated markets (Kim & Mauborgne, 2005). Disruptive innovation theory further provides a useful lens for examining how companies can introduce simpler or more affordable solutions that target overlooked customer groups before potentially moving upward in the market (Christensen et al., 2015). However, lower pricing or entry into a new customer segment alone does not establish disruption under Christensen's framework, as disruption is a process that develops over time. These frameworks therefore provide useful perspectives for examining Apple's potential market expansion through the MacBook Neo.

From the consumer perspective, price sensitivity remains a critical factor influencing customer acquisition, particularly among younger demographics (Gen Z) and in emerging markets, where economic pressures and high cost-of-living crises have heightened demand for more affordable yet high-quality products (Siam University, 2019; Kotler & Armstrong, 2018). From the company perspective, balancing premium positioning with accessible pricing options can better enhance market penetration without eroding brand equity, though it requires careful management of perceived value (Chen et al., 2021). Consumer value theories underscore that affordability, when combined with strong ecosystem benefits, can support acquisition among price-sensitive segments while maintaining loyalty.

Marketing Mix (4Ps) and Strategic Positioning

The marketing mix framework (McCarthy, 1960; Kotler & Armstrong, 2018) continues to remain a foundational tool for understanding how firms position products in competitive markets. Product decisions involve features, quality, and branding. Pricing decisions balance accessibility with the perceived value of the product. Place affects market reach, and promotion shapes brand perception and influences customer acquisition. In technology markets, premium brands often emphasize product differentiation and high pricing to maintain exclusivity, while other companies may adopt more accessible strategies such as adapting price and promotion to attract a broader market segment. However, despite the 4Ps serving as the foundation for many marketing analyses, this paper considers the release of the MacBook Neo from an overall strategic perspective, thus utilizing more advanced frameworks such as VRIO and STEEPLE.

Ecosystem Strategies, Customer Lock-In, and Sustainability and Ethical Consumerism

Platform ecosystem theory emphasizes how companies are able to create value through interconnected products and services that increase switching costs and customer retention (Gawer & Cusumano, 2014; Jacobides et al., 2018). Research on brand communities and subcultures of consumption demonstrates that strong identification with a brand's lifestyle and values can lead to higher loyalty and advocacy (Muñiz & O'Guinn, 2001; Schouten & McAlexander, 1995). These theoretical perspectives highlight the power of ecosystem design in creating sustained competitive advantage amid market instability.

Additionally, growing environmental awareness and ethical consumerism have increased demand for sustainable practices. Corporate social responsibility (CSR) and sustainability communication theories show that companies addressing carbon footprints, recycled materials, and ethical production can enhance brand perception and customer acquisition, particularly among younger, ESG-conscious consumers (Du et al., 2010; Kotler & Lee, 2005). Global events have amplified these expectations, pushing organizations to integrate sustainability into core strategy.

Current Gaps in Literature

Despite these strong theoretical foundations, gaps remain within the literature reviewed for this study. Much of the

existing research is based on pre-2026 data and does not fully account for the current environment, including geopolitical conflicts, escalating tariffs, changing trade policies, and cost-of-living pressures. These factors have rapidly changed consumer behavior and purchasing patterns, while traditional premium brands now face pressure to rethink strategies in price-sensitive markets amid technological advancements such as AI integration and increasing supply-chain costs. Within the literature reviewed for this study, relatively few studies apply multiple strategic frameworks at the individual product level to evaluate how companies balance ecosystem lock-in with broader accessibility. This study addresses this observed gap by examining Apple's MacBook Neo through theoretical lenses of ecosystem lock-in, market expansion, price sensitivity, and sustainability.

3. Methodology

This study uses a comparative case study approach focusing on two periods of Apple's MacBook strategy: the traditional M-series MacBooks from 2020 to 2025, and the MacBook Neo following its release in 2026. The comparative design was chosen to examine how Apple's existing ecosystem strategy has extended through changes in pricing, sustainability, and target market positioning. The analysis combines secondary-source review with strategic framework analysis to evaluate both Apple's internal capabilities and its external conditions.

Secondary sources were chosen based on their relevance to Apple's product strategy, ecosystem positioning, market conditions, sustainability practices, and consumer behavior. Many of these sources were drawn from four primary categories: Apple's official corporate and product communications pages; industry and market research from organizations such as IDC and Counterpoint Research; peer-reviewed academic literature and established theoretical works; and contemporary technology-industry reporting and product reviews. Apple's official sources were mainly used for product specifications, pricing, and environmental claims, as well as statements concerning its corporate objectives. Independent industry and academic sources were used to provide external context and reduce reliance on company-reported information. Contemporary empirical and industry sources primarily cover the 2020–2026 period, while older academic works were used where necessary to establish the theoretical frameworks applied in the analysis.

Two analytical frameworks were chosen for their complementary effects. VRIO was used to assess Apple's internal resources and capabilities and their potential contribution to its competitive advantage, particularly ecosystem integration, vertical integration, brand reputation, and Apple's custom silicon chip strategy (Barney, 1991; 1995). STEEPLE was used to analyze the external social, technological, economic, environmental, political, legal, and ethical conditions relevant to Apple's MacBook strategy. These two frameworks, when combined, allow the paper to examine both Apple's internal strategic capabilities and the external conditions that could have influenced its strategic change.

The analysis also incorporates various theoretical perspectives on platform ecosystems, blue-ocean strategy, disruptive innovation, consumer behavior, and sustainability. These theories are used to interpret the strategic significance of the differences identified between the two cases rather than being used as tools to measure the MacBook Neo's performance in the market. In particular, disruptive innovation is treated as a comparative theoretical lens because the Neo's recent release does not provide sufficient evidence to establish a completed disruption process.

Due to the MacBook Neo's recent release, the study distinguishes between observed outcomes that have been reported and analytical projections. In cases where direct evidence regarding Apple's motivations, market expansion, profitability, or

long-term consumer behavior was unavailable, the conclusions drawn were treated as interpretations rather than factual claims. Language such as "suggests," "may," "potentially," and "appears" is therefore used where appropriate. Any conflicting evidence was considered alongside other sources, while official Apple sources acted as verifiers of claims concerning the product directly.

This study, however, contains several limitations that must be noted. The study relies exclusively on publicly available secondary data, meaning that confidential information concerning Apple's internal decision-making, product-level profitability, customer acquisition, and supply-chain situations cannot directly be analyzed. Additionally, the recency of the MacBook Neo limits the availability of long-term sales, consumer, and other market data. Therefore, the findings should instead be understood as an analysis of Apple's strategic positioning and the potential implications of the MacBook Neo rather than as a definitive assessment of its long-term success in Apple's business model.

4. Analysis & Findings

Traditional MacBooks

Apple's MacBooks, well-known for their integrated software, premium hardware, and emphasis on user experience, have consistently been positioned as premium devices within the laptop industry (Apple, 2025; Westover, 2025). Since the release of the first MacBook in 2006, Apple has evolved the MacBook into a platform that captures and retains users within the Apple ecosystem through integrated hardware, software, and services (Gawer & Cusumano, 2014; Jacobides et al., 2018). A turning point was in 2020, when Apple launched the MacBook with its own M1 chip (Apple, 2020), instead of relying on Intel chips for its MacBooks. Since then, the price of entry-level models has continued to remain around $999 (Apple, 2020–2025), which made it difficult for many consumers to approach Apple's MacBooks as their first laptop. A VRIO analysis (Barney, 1991; 1995) of traditional MacBooks (Table 1) highlights the sources of competitive advantage during this period.

***Table 1. VRIO Analysis of Traditional MacBooks* (2020–2025)**

Resource/ Capability	Value	Rarity	Imitability	Organization	Competitive Advantage
Ecosystem Lock-In	High switching costs	High	Difficult (hardware-software integration)	Fully exploited	Sustained
Vertical Integration	High (cost control + performance)	High	Very difficult	Fully exploited	Sustained
Premium Brand & User Experience	High (loyalty & WTP)	Medium to high	Moderately difficult	Fully exploited	Sustained

Supply Chain Mastery	High (resilience)	Medium	Moderately difficult	Fully exploited	Temporary
Sustainability Practices	Medium	Low	Easy	Partially Exploited	Competitive Parity
Product Quality & Reliability	High	Medium	Difficult	Fully Exploited	Temporary

Note. VRIO classifications represent the author's analytical assessment based on the publicly available evidence reviewed in this study. Classifications of rarity, imitability, organizational exploitation, and competitive advantage should therefore be interpreted as analytical judgments rather than direct claims made by Apple.

As shown by Table 1, the VRIO analysis reflects that ecosystem lock-in and vertical integration were the primary sources of sustained competitive advantage for traditional MacBooks, consistent with the VRIO framework's emphasis on valuable, rare, and difficult-to-imitate resources (Barney, 1991; 1995). These resources, by creating high switching costs and better performance compared to competitors, made Apple's strategy difficult to imitate. Premium branding and user experience continued to reinforce Apple's position within the technology industry, yet sustainability continued to remain only as competitive parity. This table supports the argument that Apple's pre-2026 strategy was heavily reliant on ecosystem lock-in as its foundational strategy, supporting Apple's established position within the premium segment while offering comparatively limited access to more price-sensitive consumers.

Building on these internal strengths, Apple maintained its strategy of ecosystem lock-in, allowing it to retain existing customers through interconnected hardware, software, and services (Gawer & Cusumano, 2014; Jacobides et al., 2018). Apple's MacBooks, offering services such as iCloud, iMessage, and Apple ID, work in conjunction with other Apple devices, strengthening ecosystem integration and increasing switching costs for users (Gawer & Cusumano, 2014; Jacobides et al., 2018). As many users who used MacBooks began to become more reliant on Apple's services, it became more costly for them to switch out of the Apple ecosystem, especially if they were heavily reliant on services such as iCloud (Gawer & Cusumano, 2014; Jacobides et al., 2018). Apple's services ecosystem may therefore reinforce continued use of Apple hardware by increasing the switching costs associated with leaving the ecosystem.

Historically, sustainability played a less central role in Apple's product differentiation strategy compared with performance, design, and ecosystem integration (Apple, 2025). Progress existed at different stages, such as increasing recycled content in newer MacBook models to around 55% (Apple, 2025), and aiming to achieve carbon-neutrality goals by 2030. Yet, the increase in sustainability was viewed as more of a brand image enhancement rather than a primary strategy to expand its products to a new demographic or segment.

This strategy has been linked to strong customer loyalty, premium pricing, and a strong brand position. Many users and tech critics regarded MacBooks as having excellent battery life, providing smooth multitasking, and thermal efficiency for the Pro models in tasks such as video editing, coding, and graphic design (Westover, 2025). MacBooks were also praised for their premium build quality, including aluminum chassis designs, keyboards, trackpads, and integration with Apple devices (Westover, 2025). This has contributed to Apple's adoption among both individual consumers and businesses seeking reliable

computing solutions (Apple, 2025; Westover, 2025). For many businesses, reliability is key, and MacBooks' ability to offer a reliable experience in the laptop industry has supported Apple's position among both everyday consumers and businesses. To gain a better understanding of Apple's circumstances during the period when Apple prioritized ecosystem lock-in as a strategy, a STEEPLE analysis was conducted by looking at the time period of 2024–2025.

Table 2. STEEPLE Analysis of Traditional MacBooks (2024–2025)

Factor	**Key Points**
Social	Growing demand from professionals and creatives; rise of remote/hybrid work; limited appeal to younger and education segments
Technological	Advances in AI and chip performance; increasing component costs due to AI demand
Economic	Premium segment saturation; post-pandemic demand normalization; rising component costs
Environmental	Increasing regulatory pressure on e-waste and carbon emissions; rising ESG expectations
Political	Geopolitical tensions and trade tariffs; push for supply chain diversification
Legal	Stricter right-to-repair regulations in the EU and other regions
Ethical	Growing societal concern over ethical sourcing and environmental impact

Note. STEEPLE factors represent external conditions identified from the sources reviewed and their relevance to Apple's strategic environment. Their inclusion does not establish that any individual factor directly caused Apple's decision to launch the MacBook Neo. Information adapted from Apple (2025), American Enterprise Institute (2022), Moor Insights & Strategy (2025), and More (2025).

Table 2 highlights the external pressures that Apple faced surrounding its traditional MacBooks between 2024 and 2025. Social demand was heavily concentrated among professionals, while post-pandemic demand normalization and rising component costs created additional economic pressures for technology manufacturers (Business of Apps, 2026; Moor Insights & Strategy, 2025). Environmental and ethical concerns were also increasing, alongside greater attention to sustainability. These external conditions do not establish that any individual factor directly caused Apple's strategic shift, but they provide context for Apple's decision to potentially extend its ecosystem lock-in strategy through affordability and sustainability.

MacBook Neo

With the release of the MacBook Neo in 2026, the budget laptop industry gained a new competitor. Priced at USD $599, the MacBook Neo reflected Apple's attempt to expand beyond its traditional premium positioning and enter more price-sensitive

market segments (Apple, 2026b). Apple began emphasizing affordability, positioning the MacBook Neo as a device designed for students, families, and first-time Mac users (Apple, 2026). This reflects product-line extension strategies, where firms create differentiated offerings across price points to capture multiple consumer segments while reducing internal competition (Kotler & Armstrong, 2018). By differentiating the Neo through price and positioning, Apple may reduce direct overlap with its higher-priced MacBook models and limit potential internal cannibalization.

We can now take a look at a VRIO analysis on the MacBook Neo, analyzing the product in a more specific lens.

Table 3. VRIO Analysis of the MacBook Neo (2026 onwards)

Resource/ Capability	Value	Rarity	Imitability	Organization	Competitive Advantage
A18 Pro Chip + Vertical Integration	High (enabled USD $599 pricing)	High	Difficult	Fully exploited	Sustained
Affordability + Product Ladder Strategy	High (new segment expansion)	Medium	Moderately difficult	Fully exploited	Temporary
Advanced Sustainability Features	High (ESG appeal)	Medium to high	Moderately difficult	Fully exploited	Temporary
Ecosystem Lock-in at a lower price point	High (services revenue)	High	Difficult	Fully exploited	Sustained
Brand Reputation & Marketing Execution	High	High	Difficult	Fully Exploited	Sustained
Improved Repairability	Medium	Medium	Moderate	Partially Exploited	Competitive Parity

Note. VRIO classifications represent the author's analytical assessment based on the publicly available evidence reviewed in this study. Classifications of rarity, imitability, organizational exploitation, and competitive advantage should therefore be interpreted as analytical judgments rather than direct claims made by Apple.

Table 3 demonstrates how the MacBook Neo builds upon Apple's existing strengths while introducing additional strategic characteristics. It is worth noting that while several resources are classified as sources of sustained advantage, this classification assumes Apple's silicon supply and brand execution remain strong; competitors closing the chip-performance gap or repositioning against Apple's pricing could erode some of these advantages over time. Vertical integration through Apple's custom silicon strategy and ecosystem lock-in at a lower price point provide potential sources of sustained

competitive advantage, consistent with the VRIO framework (Barney, 1991; 1995). Specifically, affordability and advanced sustainability features now serve as additional strategic capabilities that Apple has organized around its existing ecosystem. This analysis reflects the paper's central argument that while ecosystem lock-in remains the foundation, affordability and sustainability can serve as extensions of Apple's existing strategy to expand its market reach without abandoning its established brand.

This move to release the MacBook Neo has similarities to Apple's original 2006 MacBook release strategy. The first consumer MacBook, made out of polycarbonate plastic, was launched as an accessible consumer and lifestyle-focused device that expanded the Apple product lineup to a greater demographic (Apple, 2006). Similar to the Neo, it utilized cost-effective design choices while maintaining Apple's build quality, becoming an important contributor to Apple's expansion in the personal computer market (Apple, 2006). Both cases represent product-line expansion strategies that allowed Apple to reach additional consumers while maintaining ecosystem integration.

Apple's decision to release the MacBook Neo appears to reflect multiple factors, both inside and outside of Apple, based on the available evidence. Some external factors that could have influenced the release of the MacBook Neo included limited opportunities for market expansion and changing conditions within the premium market, especially due to rising component costs. With Apple operating in a highly competitive market, these conditions may have created an opportunity for Apple to pursue elements of a blue-ocean strategy by entering more affordable laptop segments. Some internal factors may also have supported the release of the MacBook Neo. By releasing the MacBook Neo, Apple could utilize existing Apple silicon capabilities, including the A18 Pro chip architecture, to achieve competitive pricing while maintaining performance advantages (Apple, 2026b). Through vertical integration, Apple may have been better positioned to manage costs while targeting a lower-cost market. Sustainability and ESG goals may also have been relevant to the release of the MacBook Neo. With Apple's 2030 carbon-neutrality goal, there was increasing pressure to innovate in materials and manufacturing. Thus, the MacBook Neo also provides Apple with an opportunity to demonstrate progress toward its sustainability goals while maintaining its broader brand image. To better understand the circumstances surrounding the MacBook Neo, a STEEPLE analysis was conducted focusing on the period from 2026 onward.

The MacBook Neo also marked a major advancement in sustainability. With 60% recycled content overall within the laptop itself, the MacBook Neo could become one of Apple's most sustainability-focused products, with a low reported carbon footprint (Apple, 2026b). The body is composed of more than 90% recycled aluminum, with a new forming process using 50% less aluminum than traditional methods to produce the body (Apple, 2026b). Within its batteries, the MacBook Neo contains 100% recycled cobalt, as well as 100% recycled rare earth elements within the magnets. Forty-five percent of manufacturing electricity originated from renewable energy (Apple, 2026b). These sustainability gains span across various levels of the supply chain, resulting in a lower reported carbon footprint than previous MacBook models.

This aligns with research on ethical consumerism, which suggests that sustainability communication can influence consumer perception and brand value among environmentally conscious consumers (Du et al., 2010; Kotler & Lee, 2005). In such markets, Apple's increase in sustainability allows it to participate in the broader trend toward environmentally conscious technology. With the new demographic now targeting students and people from younger generations, who may also be more conscious about the environment, the MacBook Neo therefore represents a potential mechanism through which Apple could expand into these customer segments.

Table 4. STEEPLE Analysis of the MacBook Neo (2026 onward)

Factor	Key Points
Social	Rising demand from Gen Z and students for affordable tech; continued hybrid learning trends
Technological	Advances in recycled materials and efficient chip designs; AI feature expectations
Economic	Slowing premium segment growth; high component costs; opportunity in budget laptop market
Environmental	Heightened regulatory pressure on electronics carbon footprint and materials sourcing
Political	Government initiatives for digital inclusion in education; ongoing trade tensions
Legal	Strengthening right-to-repair and sustainability regulations
Ethical	Increased consumer awareness and demand for ethical and sustainable products

Note. STEEPLE factors represent external conditions identified from the sources reviewed and their relevance to Apple's strategic environment. Their inclusion does not establish that any individual factor directly caused Apple's decision to launch the MacBook Neo. Information adapted from Osborne (2026), Isaacs (2026), Counterpoint Research (2026), International Data Corporation (2026), Apple (2026a), Apple (2026c), Repair.eu (2026), and Du et al. (2010).

Table 4 shows the STEEPLE analysis of the MacBook Neo and reflects changes in the external environment surrounding Apple. Increased demand from Gen Z and students, in conjunction with heightened ESG expectations and increased regulatory pressure on sustainability, could have created conditions favorable to the release of an affordable and sustainable product. Additionally, changing conditions within the premium segment may have supported market expansion. These external factors help explain the circumstances in which Apple was operating and provide context for why Apple may have chosen to layer affordability and sustainability onto its existing ecosystem lock-in strategy in response to changing consumer and regulatory demands.

While these external conditions supported the Neo's launch, Apple also faced potential challenges due to the release of the MacBook Neo. Apple could plausibly face supply-chain challenges, particularly given broader semiconductor constraints and increasing component costs affecting technology manufacturers more generally. Apple could face challenges maintaining supply if demand exceeds available component capacity. This could lead to situations where Apple has to find new supply lines at higher costs, potentially leading to supply shortages, sell-outs, and longer delivery times for the MacBook Neo. Furthermore, other components of the MacBook, such as storage or RAM, could increase in price, creating potential problems for Apple in maintaining the current price of the MacBook Neo. Brand perception also presents a problem for Apple, requiring careful deliberation and execution by the marketing department. By releasing a USD $599 MacBook, Apple risks diluting its premium brand image if consumers begin to associate the company more strongly with budget-friendly products.

Overall, consumer reception towards the MacBook Neo was broadly positive. Technology reviewers such as PCMag, Forbes, and TechCrunch described the MacBook Neo favorably within the lower-priced laptop market (Osborne, 2026; Isaacs, 2026; Singh, 2026). Singh (2026) also reported strong early demand and the presence of first-time Mac buyers among Neo customers. These observations suggest that the device may have appeal among consumers who had not previously purchased a Mac, although the available evidence does not establish that positive reviews caused these purchases. The available evidence also does not establish how many Neo buyers were genuinely new Apple customers rather than existing Apple users purchasing an additional or lower-priced Mac.

Yet, some limitations and risks remain due to the release of the MacBook Neo. The greatest risk for Apple is the potential for its brand image to change if consumers begin to view the company as similar to other manufacturers offering both premium and budget-friendly products. With a $400 difference between the Neo and the MacBook Air, Apple's success in maintaining its brand image may depend on its ability to clearly differentiate the products. Apple's marketing strategy may therefore need to emphasize the Neo's value while maintaining clear differences between the Neo, MacBook Air, and MacBook Pro.

5. Comparison

The independent case studies illustrate Apple's strategic evolution from a pure premium lock-in model to a more inclusive, layered ecosystem. In this new approach, ecosystem lock-in remains the foundational mechanism for long-term value capture, while affordability and sustainability serve as strategic extensions that may broaden customer acquisition without changing the core architecture of Apple's ecosystem.

Pricing, Market Access and Sustainability Integration

Traditional MacBooks targeted premium consumers and professionals, with entry-level models historically positioned around the $999 price range (Apple, 2020–2025). The MacBook Neo's USD $599 price point represents a potential market expansion into more affordable and entry-level segments, effectively creating a differentiated product ladder that may reduce internal cannibalization while providing Apple with an opportunity to reach additional customer segments (Apple, 2026b).

Sustainability in traditional MacBooks served primarily as an additional element of Apple's broader environmental strategy. The Neo places greater emphasis on sustainability as a potential competitive differentiator, achieving 60% recycled content and a lower reported carbon footprint (Apple, 2026a; 2026b). This move reflects Apple's response to external ESG pressures and positions sustainability as a more visible part of Apple's lower-priced product strategy. However, because many of these environmental figures are reported by Apple, they should be interpreted with appropriate caution. More (2025) reported that a German court ruled that an Apple Watch could not be marketed as "CO2-neutral" under the conditions examined by the court. This does not demonstrate that the Neo's specific environmental figures are inaccurate, but it highlights the importance of independent scrutiny when evaluating corporate sustainability claims.

Ecosystem Role, Competitive Positioning, and Risks and Trade-offs

Both generations rely on ecosystem lock-in, but the Neo extends Apple's lock-in strategy to a wider potential audience. By lowering the entry cost, Apple may increase the probability of future cross-selling through other Apple devices and services,

potentially converting one-time budget buyers into longer-term ecosystem users (Gawer & Cusumano, 2014; Jacobides et al., 2018). However, whether Neo buyers actually generate additional ecosystem revenue remains uncertain and requires further market data. Traditional MacBooks operated in a crowded premium market. The Neo exhibits several elements consistent with blue-ocean strategy by entering a more affordable laptop category and potentially competing with Chromebooks and Windows devices on both price and user experience (Kim & Mauborgne, 2005).

The strategy introduces risks such as potential brand dilution, supply-chain vulnerabilities, and execution challenges in maintaining its premium perception. Apple's marketing success in presenting the Neo as an accessible Apple experience while maintaining clear differentiation from higher-priced models will be important to its long-term success. Overall, this comparison suggests that Apple is leveraging its traditional strengths in ecosystem lock-in and vertical integration while addressing previous limitations in market reach and sustainability.

6. Summary of Findings

The analysis provides several noteworthy findings. First, traditional MacBooks demonstrated the strengths and limitations of a pure premium lock-in model: the ability to gain strong loyalty and profitability within a narrow market segment, but greater vulnerability to market saturation and limited accessibility for younger and price-sensitive consumers. Second, the MacBook Neo makes use of Apple's core capabilities, including vertical integration and ecosystem design, to address some of these limitations, creating the potential for meaningful market expansion while maintaining strategic coherence. The integration of affordability and sustainability represents an additional approach that reflects changing consumer demands while maintaining Apple's broader brand positioning.

Notable early outcomes of the release include positive initial reception among several technology reviewers and reported interest among first-time Mac buyers (Osborne, 2026; Isaacs, 2026; Singh, 2026). However, the available evidence does not yet establish whether these buyers represent genuinely new Apple customers, whether they will generate additional ecosystem revenue, or whether some are existing Apple customers purchasing a lower-priced Mac. Persistent supply-chain and brand-perception risks also highlight the difficulty of maintaining such a strategy. Collectively, these findings suggest that Apple may be developing a more adaptive, multi-tiered ecosystem strategy, one that balances traditional strengths with broader accessibility and sustainability.

7. Discussion & Recommendations

The findings of this paper align well with various theoretical perspectives that were discussed in the literature review. The importance of ecosystem lock-in as a tool for competitive advantage reflects platform ecosystem theory (Gawer & Cusumano, 2014; Jacobides et al., 2018), while the Neo's affordability and sustainability highlight elements of blue-ocean strategy and provide a potential case for examining disruptive innovation concepts (Kim & Mauborgne, 2005; Christensen et al., 2015). Furthermore, the role of sustainability as a potential competitive advantage reflects the rise of ethical consumerism and CSR communication theories (Du et al., 2010; Kotler & Lee, 2005), demonstrating how external pressures can contribute to strategic adaptation in premium brands.

From a VRIO perspective, both traditional MacBooks and the Neo demonstrate that ecosystem lock-in and vertical integration can serve as sources of competitive advantage (Barney, 1991; 1995). However, the Neo also introduces affordability

and sustainability as additional strategic dimensions that were less emphasized in traditional MacBooks. The STEEPLE analyses further help reveal the role that external factors play in shaping the environment surrounding this shift. This comparison highlights Apple's movement toward a layered ecosystem model, where lock-in serves as the foundation while affordability and sustainability help broaden potential customer reach.

The MacBook Neo also has multiple characteristics that can be examined through disruptive innovation theory. Its lower price and potential appeal to consumers who may not have previously purchased a Mac are consistent with elements of a low-end or new-market strategy (Christensen et al., 2015). However, the Neo's recent release means that there is currently not enough evidence to determine whether it will follow a disruptive trajectory. Therefore, disruptive innovation is better treated as a theoretical lens for interpreting the Neo's market positioning rather than as a confirmed outcome.

The Neo's sustainability features also could represent an important extension of Apple's existing strategy. Its use of recycled materials and reduced aluminum consumption may appeal to environmentally conscious consumers while differentiating the Neo within the lower-priced laptop market. However, because many of these environmental figures are reported by Apple itself, they should be interpreted with appropriate caution. Independent scrutiny of corporate sustainability claims remains important, particularly as environmental marketing becomes a more significant part of technology companies' product positioning.

To continue to stay successful with this strategy, Apple should continue to invest in supply-chain resilience. As supply chains, specifically chip production, can drive the costs of these products, maintaining reliable component supply will become critical. Additionally, Apple should ensure clear product differentiation across the product ladder through defined marketing that highlights the different user experiences and use cases at various price points.

Apple should also measure whether Neo buyers are genuinely new Mac customers or existing customers purchasing a lower-priced Mac. This would help determine whether the Neo is expanding Apple's customer base or primarily shifting demand within its existing product line. Apple could also track whether first-time Neo buyers later adopt other Apple devices or services, which would provide a clearer indication of whether the Neo creates additional ecosystem value beyond the initial hardware purchase. Finally, Apple should continue to deepen sustainability efforts while providing transparent information about its environmental claims. Monitoring component costs, supplier conditions, recycled-material use, and the effectiveness of sustainability communication would help Apple maintain the Neo's affordability without weakening its broader brand positioning.

Although this study focuses on Apple, the case may also have implications for other premium technology brands. The MacBook Neo suggests that premium firms do not necessarily need to abandon ecosystem-based differentiation when entering more price-sensitive markets. Instead, they may be able to introduce lower-priced entry products that broaden access while maintaining the ecosystem, brand, and service relationships that support customer retention. Whether this approach succeeds, however, may depend on maintaining sufficient differentiation between entry-level and premium products.

8. Conclusion

This study has examined Apple's strategic shift through the comparative analysis of traditional MacBooks and the MacBook Neo. The findings suggest that the MacBook Neo reflects a significant adaptation to the changing competitive environment. Apple has retained ecosystem lock-in as a core competitive advantage while adding affordability and sustainability, potentially allowing it to expand market reach and respond to changing external conditions. By balancing its premium brand image with a broader potential customer base, Apple has positioned the Neo to potentially capture new customer segments without completely changing the foundations of its existing business model. The findings further suggest that this approach provides opportunities for market expansion while introducing risks related to supply-chain resilience, brand perception, and long-term product differentiation.

However, the Neo's recent release means that its long-term commercial success cannot yet be established. In particular, future research should examine whether Neo buyers are genuinely new Apple customers, whether they subsequently adopt other Apple products and services, and whether the Neo creates additional demand or primarily shifts existing customers toward a lower-priced product. As more evidence becomes available, these measures will help determine whether the Neo represents a successful extension of Apple's ecosystem strategy or primarily a redistribution of demand within Apple's existing customer base.

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Ethics Statement

This research was conducted independently and without access to a formal ethics review board. Therefore, this paper's author adhered to the practical guidelines for ethical research. All data used was secondary, and was collected from publicly available sources using ethical guidelines for research.

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Mentor Contribution Statement

This research paper was written under the guidance of **[REDACTED]**. The mentor's role included providing feedback to further develop ideas that were explored in the research paper and gaining a better understanding of various business frameworks that were utilised. Additionally, the mentor's guidance on the structure of this paper, and addressing gaps were essential for the success of this paper.

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From Premium Lock-In to Inclusive Growth: Apple's Strategic Evolution with the MacBook Neo

Abstract

The global technology market has long been shaped by major disruptions, including the COVID-19 endemic, economic pressures, and rising ESG expectations from consumers. This paper examines Apple's strategic evolution from a premium ecosystem lock-in model to a more layered, inclusive ecosystem through the release of the 2026 MacBook Neo. Using frameworks such as VRIO and STEEPLE, this study conducts a comprehensive comparative case analysis of traditional Apple silicon (M-series) MacBooks and the MacBook Neo. Findings indicate that the Neo was able to successfully extend Apple's foundational ecosystem lock-in strategy by incorporating affordability and advanced sustainability as extensions of its strategy. This shift has broadened market access into education and budget segments while also maintaining long-term customer value through services. The analysis is able to highlight both opportunities for growth in addition to challenges that Apple faces, such as supply chain constraints and brand perception risks. This study is able to contribute to the literature on platform ecosystems, blue-ocean strategy, and sustainability-driven innovation by reflecting how premium brands have the ability to adapt to changing environments. Practical recommendations for Apple are also discussed.

Keywords: Strategic positioning, Apple Inc., market entry strategy, VRIO, ecosystem, lock-in effects, case study analysis, product pricing

1. Introduction

MacBooks are one of the world's most renowned pieces of technology. They are known to be reliable, lasting well over five years (Apple, 2025), and they have evolved to become widely adopted tools for professionals requiring high-performance, high-quality, reliable devices for work (Apple, 2025; Westover, 2025). Since the release of the first MacBook in 2006, Apple has

evolved ~~in making~~ the MacBook into a tool to capture and ~~lock many~~retain users ~~into~~within the Apple ecosystem (Gawer & Cusumano, 2014; Jacobides et al., 2018). This included the integration of services such as iCloud and other Apple platforms, which strengthened the attractiveness of joining and remaining within Apple's ecosystem (Gawer & Cusumano, 2014; Jacobides et al., 2018). However, ~~MacBook~~Mac ~~sales~~revenue ~~were~~has ~~never~~experienced ~~too~~significant ~~stagnant.~~changes ~~With~~due to various global events, ~~MacBook~~creating ~~sales~~both ~~saw~~challenges ~~big~~and ~~changes~~opportunities ~~that eventually led~~for Apple ~~to~~as ~~make~~it ~~a strategy change~~seeks to ~~continue~~maintain ~~to~~its ~~stay~~position ~~at the top of~~within the industry.

During the COVID-19 pandemic, Apple's Mac revenue ~~boosted~~increased from 24.7 billion US dollars prior to the pandemic to ~~its~~a peak ~~at~~of approximately 40 billion US dollars (Business of Apps, 2026). However, Apple's Mac revenue ~~continued~~declined ~~to decline with~~following the end of the pandemic, ~~all~~reaching ~~the way down to~~approximately 29.2 billion US dollars (Business of Apps, 2026). Yet, Apple's services revenue continued to reflect ~~a~~ strong growth throughout, with over 109 billion US dollars being generated from services revenue (Business of Apps, 2026; Sparks, 2026). By 2025, ~~although~~ Apple's Mac revenue ~~has~~had recovered ~~back~~ to 33.7 billion US dollars (Business of Apps, ~~2026),~~2026). ~~the~~These figures represent Apple's overall Mac revenue ~~remained~~rather ~~below~~than ~~the~~MacBook ~~pandemic-era~~unit ~~highs,~~sales ~~signalling~~specifically and therefore cannot, on their own, establish saturation in the premium segment. However, the normalization of Mac revenue following the pandemic-era peak provides context for examining Apple's opportunities for further market expansion. This ~~sales shift~~ set the stage for Apple's ~~strategic shift with the~~ launch of the MacBook Neo in March 2026 — Apple's most affordable laptop ever, priced at USD $599 (Apple, 2026b). The move to release the MacBook Neo reflects a ~~change~~potential ~~from~~shift ~~a high-margin, ecosystem-lock-in-focused strategy to~~toward a more ~~inclusive~~accessible approach emphasizing affordability and sustainability, aimed at capturing students, first-time ~~buyers~~buyers, and consumers in ~~the~~more price-sensitive ~~segment.~~segments.

This paper critically ~~analyzed~~analyzes two case studies, one examining the M-series MacBooks and the other, the ~~newly-released~~newly released MacBook Neo. The paper ~~utilized~~utilizes analytical frameworks such as STEEPLE and VRIO to better understand ~~individual~~the circumstances ~~for~~surrounding each product. This study asks: How does the introduction of the MacBook Neo represent an extension of Apple's existing ecosystem-based competitive strategy through affordability and sustainability, and how might this reposition Apple within more price-sensitive market segments? The comparative case study therefore examines whether the MacBook Neo represents a genuine change in Apple's strategy or an extension of its existing ecosystem-based approach to a broader customer base. Findings from the comparative case study analysis ~~reveal~~are ~~the~~used ~~reasons~~to ~~for~~examine ~~Apple's~~how Apple may be extending its ecosystem strategy ~~shift~~through ~~away~~affordability ~~from~~and ~~focusing~~sustainability ~~largely~~rather ~~on~~than ~~high-margin,~~completely abandoning its premium ~~products to entering the budget industry and focusing on sustainability and affordability.~~ positioning.

In this study, "inclusive growth" refers specifically to the potential expansion of access to Apple's ecosystem through a lower-priced entry point, rather than the broader social and economic meaning that the term can imply. The paper therefore focuses on whether Apple can broaden access to its ecosystem while maintaining the ecosystem-based competitive advantages that supported its traditional MacBook strategy.

2. Literature Review

The global technology market has been influenced by various destabilizing events, including the COVID-19 pandemic,

geopolitical conflicts, trade tariffs, and ongoing cost-of-living crises. These events have greatly influenced consumer preferences and buying behaviors, and have thus created both challenges and opportunities for companies operating in highly competitive industries (Kim & Mauborgne, 2005; Gawer & Cusumano, 2014).

Customer Acquisition, Price Sensitivity and Market Strategy

Market expansion theories, including blue-ocean strategy, emphasize the importance of creating new demand by targeting underdeveloped markets rather than competing directly ~~for the red ocean markets — which are~~in heavily saturated markets (Kim & Mauborgne, 2005). Disruptive innovation theory further ~~corroborates~~provides ~~the~~a ~~argument~~useful ~~that~~lens for examining how companies can ~~achieve~~introduce ~~growth~~simpler ~~by introducing simpler,~~or more affordable solutions that target overlooked customer groups before potentially moving upward in the market (Christensen et al., 2015). However, lower pricing or entry into a new customer segment alone does not establish disruption under Christensen's framework, as disruption is a process that develops over time. These frameworks ~~highlight~~therefore ~~how~~provide ~~organizations~~useful ~~respond~~perspectives ~~to~~for ~~global~~examining ~~events~~Apple's ~~by~~potential ~~expanding~~market ~~into~~expansion ~~new~~through ~~demographics~~the ~~to~~MacBook ~~sustain long-term growth.~~Neo.

From the consumer perspective, price sensitivity remains a critical factor influencing customer acquisition, particularly among younger demographics (Gen Z) and in emerging markets, where economic pressures and high cost-of-living crises have heightened demand for more affordable yet high-quality products (Siam University, 2019; Kotler & Armstrong, 2018). From the company perspective, balancing premium positioning with accessible pricing options can better enhance market penetration without eroding brand equity, though it requires careful management of perceived value ~~(Atlantis~~(Chen ~~Press).~~et al., 2021). Consumer value theories underscore that affordability, when combined with strong ecosystem benefits, can ~~drive~~support acquisition among price-sensitive segments while maintaining loyalty.

Marketing Mix (4Ps) and Strategic Positioning

The marketing mix framework (McCarthy, 1960; Kotler & Armstrong, 2018) continues to remain ~~as~~ a foundational tool for understanding how firms position products in competitive markets. Product decisions involve features, quality, and branding. Pricing decisions balance accessibility with the perceived value of the product. Place affects market reach, and promotion shapes brand perception and influences customer acquisition. In technology markets, premium brands often emphasize product differentiation and high pricing to maintain exclusivity, while other companies ~~will~~may adopt more ~~inclusive~~accessible strategies such as adapting price and promotion to attract a broader market segment. However, despite the 4Ps serving as the foundation for many marketing ~~analysis,~~analyses, this paper considers the release of the MacBook Neo from an overall strategic perspective, thus utilizing more advanced frameworks ~~(VRIO~~such ~~&~~as ~~STEEPLE).~~VRIO and STEEPLE.

Ecosystem Strategies, Customer Lock-In, and Sustainability and Ethical Consumerism

Platform ecosystem theory emphasizes how companies are able to create value through interconnected products and services that increase ~~the~~ switching costs and ~~also~~ customer retention (Gawer & Cusumano, 2014; Jacobides et al., 2018). Research on brand communities and subcultures of consumption demonstrates that strong identification with a brand's lifestyle and values ~~leads~~can lead to higher loyalty and advocacy (Muñiz & O'Guinn, 2001; Schouten & McAlexander, 1995).

These theoretical perspectives highlight the power of ecosystem design in creating sustained competitive advantage amid market instability.

Additionally, growing environmental awareness and ethical consumerism have increased demand for sustainable practices. Corporate social responsibility (CSR) and sustainability communication theories show that companies addressing carbon footprints, recycled materials, and ethical production can enhance brand perception and customer acquisition, particularly among younger, ESG-conscious consumers (Du et al., 2010; Kotler & Lee, 2005). Global events have amplified these expectations, pushing organizations to integrate sustainability into core strategy.

Current Gaps in Literature

Despite these strong theoretical foundations, ~~significant~~ gaps ~~remain.~~remain within the literature reviewed for this study. Much of the existing research is based on pre-2026 data and does not fully account for the ~~dynamism of the~~ current ~~environment —~~environment, including ~~wars,~~geopolitical conflicts, escalating tariffs, changing trade policies, and ~~the~~ cost-of-living ~~crises before and after the pandemic.~~pressures. These factors have rapidly changed consumer behavior and purchasing patterns, ~~yet~~while ~~theory has not fully caught up. Traditional~~traditional premium brands now face pressure to rethink strategies in price-sensitive markets amid ~~steep~~ technological advancements ~~(e.g.,~~such as AI ~~integration) while managing supply chain costs~~integration and ~~global~~increasing ~~instability.~~supply-chain ~~Few~~costs. Within the literature reviewed for this study, relatively few studies apply ~~comprehensive~~multiple ~~multi-framework~~strategic ~~analysis~~frameworks at the individual product level to evaluate how companies balance ecosystem lock-in with broader accessibility. This study addresses ~~these~~this ~~gaps~~observed gap by examining Apple's MacBook Neo through theoretical lenses of ecosystem lock-in, market expansion, price sensitivity, and ~~sustainability, assessing the effectiveness of its strategic shift into the budget segment.~~sustainability.

3. Methodology

This study uses a comparative case study approach focusing on two periods of Apple's MacBook strategy: the traditional M-series MacBooks from 2020 to 2025, and the MacBook Neo following its release in 2026. The comparative design was chosen to examine how Apple's existing ecosystem strategy has extended through changes in pricing, sustainability, and target market positioning. The analysis combines secondary-source review with strategic framework analysis to evaluate both ~~the~~Apple's internal capabilities ~~within Apple~~ and its external conditions.

Secondary sources were chosen based on their relevance to Apple's product strategy, ecosystem positioning, market conditions, sustainability practices, and consumer behavior. Many of these sources were drawn from four primary categories: Apple's official corporate and product communications pages; industry and market research from organizations such as IDC and Counterpoint Research; peer-reviewed academic literature and established theoretical works; and contemporary technology-industry reporting and product reviews. Apple's official sources were mainly used for product specifications, pricing, and environmental claims, ~~and~~as ~~also~~well ~~stated~~as ~~their~~statements concerning its corporate objectives. Independent industry and academic sources were used to provide external context and reduce ~~the pure~~ reliance on company-reported information. Contemporary empirical and industry sources primarily cover the 2020–2026 period, while older academic works were used where necessary to establish the theoretical frameworks applied in the analysis.

Two analytical frameworks were chosen for their complementary ~~effects to each other.~~effects. VRIO was used to assess Apple's internal resources and capabilities and their potential contribution to its competitive advantage, particularly ecosystem integration, vertical integration, brand reputation, and Apple's custom silicon chip strategy (Barney, 1991; 1995). ~~The~~ STEEPLE ~~analysis~~ was used to analyze the external social, technological, economic, environmental, political, ~~legal~~legal, and ethical conditions relevant to Apple's MacBook strategy. These two frameworks, when combined, ~~allows~~allow the paper to examine both Apple's internal strategic capabilities ~~in addition to~~and the external conditions that could have influenced its strategic change.

The analysis also incorporates various theoretical perspectives on platform ecosystems, blue-ocean strategy, disruptive innovation, consumer behavior, and sustainability. These theories ~~were~~are used to interpret the strategic significance of the differences ~~that were~~ identified between the two cases rather than being used as ~~a tool~~tools to measure the MacBook Neo's performance in the market. In particular, disruptive innovation is treated as a comparative theoretical lens because the Neo's recent release does not provide sufficient evidence to establish a completed disruption process.

Due to the MacBook Neo's recent release, the study distinguishes ~~the~~between observed outcomes that have been reported and analytical projections. In cases where direct evidence regarding Apple's motivations, market expansion, profitability, or long-term consumer behavior was unavailable, the conclusions drawn were treated as interpretations rather than factual claims. Language ~~that was used~~ such as "suggests," "may," "potentially," and "appears" is ~~thus~~therefore used where ~~it is~~ appropriate. Any conflicting evidence was considered alongside other sources, while official Apple sources acted as verifiers of claims ~~that concerned~~concerning the product directly.

This ~~study~~study, ~~however~~however, contains several limitations that must be noted. The study relies exclusively on publicly available secondary data, meaning that ~~any~~ confidential information ~~that concerns~~concerning Apple's internal ~~decision making,~~decision-making, product-level profitability, customer acquisition, and supply-chain situations cannot directly be analyzed. Additionally, the recency of the MacBook Neo limits the availability of long-term ~~data on~~ sales, consumer, and other market data. Therefore, the findings should instead be understood as an analysis of Apple's strategic positioning and the potential implications of the MacBook Neo rather than as a definitive assessment of its long-term success in Apple's business model.

4. Analysis & Findings

Traditional MacBooks

Apple's MacBooks, well-known for their integrated software, premium hardware, and emphasis on user experience, have consistently been positioned as premium devices within the laptop industry (Apple, 2025; Westover, 2025). Since the release of the first MacBook in 2006, Apple has evolved the MacBook into a platform that captures and retains users within the Apple ecosystem through integrated hardware, software, and services (Gawer & Cusumano, 2014; Jacobides et al., 2018). A turning point was in 2020, when Apple launched the ~~Macbook~~MacBook with ~~their very~~its own M1 chip (Apple, 2020), instead of relying on Intel chips for ~~their~~its ~~Macbooks.~~MacBooks. Since then, the price ~~tag~~of entry-level models has continued to ~~stay~~remain ~~at the hefty price of~~around $999 (Apple, 2020–2025), which made it difficult for many consumers to approach Apple's ~~Macbooks~~MacBooks as their first laptop. A VRIO analysis (Barney, 1991; 1995) of traditional MacBooks (Table 1) highlights the sources of competitive advantage during this period.

Table 1. VRIO Analysis of Traditional MacBooks (2020–2025)

Resource/ Capability	Value	Rarity	Imitability	Organization	Competitive Advantage
Ecosystem Lock-In	High switching costs	High	Difficult (hardware-software integration)	Fully exploited	Sustained
Vertical Integration	High (cost control + performance)	High	Very difficult	Fully exploited	Sustained
Premium Brand & User Experience	High (loyalty & WTP)	Medium to high	Moderately difficult	Fully exploited	Sustained
Supply Chain Mastery	High (resilience)	Medium	Moderately difficult	Fully exploited	Temporary
Sustainability Practices	Medium	Low	Easy	Partially Exploited	Competitive Parity
Product Quality & Reliability	High	Medium	Difficult	Fully Exploited	Temporary

Note. VRIO classifications represent the author's analytical assessment based on the publicly available evidence reviewed in this study. Classifications of rarity, imitability, organizational exploitation, and competitive advantage should therefore be interpreted as analytical judgments rather than direct claims made by Apple.

As shown by Table 1, the VRIO analysis reflects that ecosystem lock-in and vertical integration were the primary sources of sustained competitive advantage for traditional MacBooks, consistent with the VRIO framework's emphasis on valuable, rare, and difficult-to-imitate resources (Barney, 1991; 1995). These resources, by creating high switching costs and better performance compared to competitors, made Apple's strategy difficult to imitate. Premium branding and user experience continued to reinforce Apple's position within the technology industry, yet sustainability continued to remain only as competitive parity. This table supports the argument that Apple's pre-2026 strategy was heavily reliant on ecosystem lock-in as its foundational strategy, supporting ~~Apple's~~Apple's established position within the premium segment while offering comparatively limited access to more price-sensitive ~~and education-focused markets.~~consumers.

Building on these internal strengths, Apple maintained its strategy of ecosystem lock-in, allowing it to retain existing customers through interconnected hardware, software, and services (Gawer & Cusumano, 2014; Jacobides et al., 2018). Apple's MacBooks, offering services such as iCloud, iMessage, and Apple ID, work in conjunction with other Apple devices, strengthening ecosystem integration and increasing switching costs for users (Gawer & Cusumano, 2014; Jacobides et al.,

2018). As many users who used ~~Macbooks~~MacBooks began to become more reliant on Apple's services, it became more costly for them to switch out of the Apple ecosystem, especially if they were heavily reliant on services such as iCloud (Gawer & Cusumano, 2014; Jacobides et al., 2018). Apple's services ecosystem may therefore reinforce continued use of Apple hardware by increasing the switching costs associated with leaving the ecosystem.

Historically, sustainability played a less central role in Apple's product differentiation strategy compared with performance, design, and ecosystem integration (Apple, 2025). Progress existed at different stages, such as increasing recycled content in ~~their~~newer ~~Macbooks~~MacBook models to around 55% ~~in newer models~~ (Apple, 2025), and aiming to achieve ~~carbon neutral~~carbon-neutrality goals by 2030. Yet, the increase in sustainability was viewed as more of a brand image enhancement rather than a primary strategy to expand ~~their~~its products to a new ~~demographic,~~demographic or ~~a new~~ segment.

This strategy has been linked to strong customer loyalty, premium pricing, and a strong brand position. Many users and tech critics regarded ~~Macbooks~~MacBooks as having excellent battery life, providing smooth multitasking, and thermal efficiency for the Pro models in tasks such as video editing, coding, and graphic design (Westover, 2025). MacBooks were also praised for their premium build quality, including ~~aluminium~~aluminum chassis designs, keyboards, trackpads, and integration with Apple devices (Westover, 2025). This has contributed to Apple's adoption among both individual consumers and businesses seeking reliable computing solutions (Apple, 2025; Westover, 2025). For many businesses, reliability is key, and ~~due to Macbook's~~MacBooks' ability to offer ~~one of the best~~a reliable ~~experiences~~experience in the ~~laptops~~laptop ~~industry,~~industry ~~Apple~~has ~~excelled~~supported ~~at~~Apple's position among both ~~providing products for the~~ everyday ~~consumer~~consumers and ~~also businesses (Apple, 2025; Westover, 2025).~~businesses. To gain a better understanding of Apple's circumstances during the period when Apple prioritized ~~ecosystem lock~~ecosystem ~~in~~lock-in as a strategy, a STEEPLE analysis was conducted by looking at the time period of ~~2024–2025.~~2024–2025.

Table 2. STEEPLE Analysis of Traditional MacBooks (2024–2025)

Factor	**Key Points**
Social	Growing demand from professionals and creatives; rise of remote/hybrid work; limited appeal to younger and education segments
Technological	Advances in AI and chip performance; increasing component costs due to AI demand
Economic	Premium segment saturation; post-pandemic demand normalization; rising component costs
Environmental	Increasing regulatory pressure on e-waste and carbon emissions; rising ESG expectations
Political	Geopolitical tensions and trade tariffs; push for supply chain diversification
Legal	Stricter right-to-repair regulations in the EU and other regions

Ethical	Growing societal concern over ethical sourcing and environmental impact

Note. STEEPLE factors represent external conditions identified from the sources reviewed and their relevance to Apple's strategic environment. Their inclusion does not establish that any individual factor directly caused Apple's decision to launch the MacBook Neo. Information adapted from Apple (2025), American Enterprise Institute (2022), Moor Insights & Strategy (2025), and More (2025).

Table 2 highlights the external pressures that Apple faced ~~in~~surrounding ~~their~~its traditional MacBooks between 2024 and 2025. Social demand was heavily concentrated among professionals, while ~~economic~~post-pandemic ~~saturation~~demand normalization and rising component costs ~~continued~~created ~~to~~additional ~~limit~~economic ~~growth~~pressures ~~in~~for ~~the~~technology ~~premium segment~~manufacturers (Business of Apps, 2026; Moor Insights & Strategy, 2025). Environmental and ethical concerns were also increasing, ~~but~~alongside ~~Apple's~~greater ~~response~~attention ~~was~~to ~~gradual, treating the concerns as burdens.~~sustainability. These external conditions ~~are~~do ~~consistent~~not ~~with~~establish ~~Apple's~~that any individual factor directly caused Apple's strategic shift, ~~and~~but ~~appear~~they provide context for Apple's decision to ~~have set the foundation for Apple to~~potentially extend its ecosystem lock-in strategy ~~with new elements within~~through affordability and sustainability.

MacBook Neo

With the release of the MacBook Neo in 2026, the budget laptop industry ~~experienced~~gained a new competitor. Priced at USD $599, the MacBook Neo reflected Apple's attempt to expand beyond its traditional premium positioning and enter more price-sensitive market segments (Apple, 2026b). Apple began emphasizing affordability, positioning the MacBook Neo as a device designed for students, families, and first-time Mac users (Apple, 2026). This reflects product-line extension strategies, where firms create differentiated offerings across price points to capture multiple consumer segments while reducing internal competition (Kotler & Armstrong, 2018). By differentiating the Neo through price and positioning, Apple may reduce direct overlap with its higher-priced MacBook models and limit potential internal cannibalization.

We can now take a look at a VRIO analysis on the MacBook Neo, analyzing the product in a more specific lens.

Table 3. VRIO Analysis of the MacBook Neo (2026 onwards)

Resource/ Capability	Value	Rarity	Imitability	Organization	Competitive Advantage
Repurposed A18 Pro Chip + Vertical Integration	High (enabled USD $599 pricing)	High	Difficult	Fully exploited	Sustained
Affordability + Product Ladder Strategy	High (new segment expansion)	Medium	Moderately difficult	Fully exploited	Temporary

Advanced Sustainability Features	High (ESG appeal)	Medium to high	Moderately difficult	Fully exploited	Temporary
Ecosystem Lock-in at a lower price point	High (services revenue)	High	Difficult	Fully exploited	Sustained
Brand Reputation & Marketing Execution	High	High	Difficult	Fully Exploited	Sustained
Improved Repairability	Medium	Medium	Moderate	Partially Exploited	Competitive Parity

Note. VRIO classifications represent the author's analytical assessment based on the publicly available evidence reviewed in this study. Classifications of rarity, imitability, organizational exploitation, and competitive advantage should therefore be interpreted as analytical judgments rather than direct claims made by Apple.

Table 3 demonstrates how the MacBook Neo ~~was able to build~~builds upon Apple's existing strengths ~~to~~while ~~become~~introducing ~~even~~additional ~~more~~strategic ~~successful.~~characteristics. It is worth noting that while several resources are classified as sources of sustained advantage, this classification assumes ~~Apple's~~Apple's silicon supply and brand execution remain ~~uncontested;~~strong; competitors closing the chip-performance gap or repositioning against ~~Apple's~~Apple's pricing could erode some of these advantages over time. Vertical integration through Apple's custom silicon strategy and ecosystem lock-in at a lower price point ~~provided~~provide potential sources of sustained competitive advantage, consistent with the VRIO framework (Barney, 1991; 1995). Specifically, affordability and advanced sustainability features now ~~served~~serve as ~~valuable~~additional ~~and rare~~strategic capabilities that Apple has ~~managed~~organized ~~to~~around ~~fully~~its ~~exploit~~existing ~~through their organization.~~ecosystem. This analysis reflects the paper's central argument that while ecosystem lock-in ~~continued to remain as~~remains the foundation, affordability and sustainability ~~were~~can ~~used~~serve as extensions of Apple's existing strategy to expand ~~their~~its market reach without ~~having~~abandoning ~~to~~its ~~leave~~established ~~Apple's existing brand image.~~brand.

This move to release the ~~Macbook~~MacBook Neo ~~is~~has ~~reflective~~similarities ~~of~~to Apple's original 2006 ~~Macbook~~MacBook release strategy. The first consumer ~~Macbook,~~MacBook, made out of polycarbonate plastic, was launched as an ~~accessible,~~accessible ~~education~~consumer and lifestyle-focused device ~~to~~that ~~expand~~expanded the Apple product lineup to a greater demographic (Apple, 2006). Similar to the Neo, it utilized cost-effective design choices while maintaining Apple's build quality, becoming an important contributor to Apple's expansion in the personal computer market (Apple, 2006). Both ~~of these~~ cases represent ~~operational~~product-line expansion strategies ~~of~~that ~~vertical~~allowed ~~integration and lineup expansion~~Apple to ~~drive~~reach ~~sales~~additional ~~volumes~~consumers while ~~preserving~~maintaining ecosystem ~~lock-in.~~integration.

~~Apple's~~Apple's decision to release the MacBook Neo appears ~~predominantly~~to ~~reactive,~~reflect multiple factors, both inside and outside of Apple, based on the available evidence. ~~Leveraging~~Some ~~their~~external ~~strong~~factors ~~position~~that could have influenced the release of the MacBook Neo included limited opportunities for market expansion and changing conditions within the premium ~~segment~~market, especially due to rising component costs. With Apple operating in a highly competitive

market, these conditions may have created an opportunity for Apple to pursue elements of a blue-ocean strategy by entering more affordable laptop segments. Some internal factors may also have supported the release of the industry,MacBook inNeo. additionBy releasing the MacBook Neo, Apple could utilize existing Apple silicon capabilities, including the A18 Pro chip architecture, to itsachieve competitive pricing while maintaining performance advantages (Apple, 2026b). Through vertical integration, Apple was able to repurpose the binned A18 Pro chips. This may have contributedbeen better positioned to Apple'smanage abilitycosts while targeting a lower-cost market. Sustainability and ESG goals may also have been relevant to offerthe release of the NeoMacBook atNeo. aWith comparativelyApple's low2030 pricecarbon-neutrality pointgoal, despitethere broaderwas increasesincreasing pressure to innovate in componentmaterials costs.and Themanufacturing. MacbookThus, the MacBook Neo also markedprovides Apple with an opportunity to demonstrate progress toward its sustainability goals while maintaining its broader brand image. To better understand the circumstances surrounding the MacBook Neo, a majorSTEEPLE advancementanalysis inwas sustainability.conducted Withfocusing 60% recycled content overall withinon the laptop itself, the Macbook Neo could prove to be one of Apple's most sustainability-focused products with the lowest carbon footprint (Apple, 2026b). The body is composed of 90%+ recycled aluminum, with a new forming process using 50% less aluminum than traditional methods to produce the body (Apple, 2026b). Within its batteries, the Macbook Neo contains 100% recycled cobalt, and also 100% recycled rare earth elements within the magnets. 45% of manufacturing electricity originatedperiod from renewable2026 energy (Apple, 2026b). These sustainability gains span across the various levels of the supply chain, resulting in the lowest carbon footprint of any Macbook ever produced.onward.

ThisThe alignsMacBook withNeo researchalso onmarked ethicala consumerism,major which suggests that sustainability communication can influence consumer perception and brand value among environmentally conscious consumers (Du et al., 2010; Kotler & Lee, 2005). In such markets, Apple's increaseadvancement in sustainabilitysustainability. allowsWith them60% torecycled actcontent asoverall one ofwithin the leaderslaptop in leading the global trend. With the new demographic now targeting students, and people of the younger generations, who are also much more conscious about the environment,itself, the MacBook Neo therefore could representsbecome one of Apple's most sustainability-focused products, with a potentiallow mechanismreported throughcarbon whichfootprint Apple(Apple, could2026b). expandThe intobody thesis customercomposed segments.of more than 90% recycled aluminum, with a new forming process using 50% less aluminum than traditional methods to produce the body (Apple, 2026b). Within its batteries, the MacBook Neo contains 100% recycled cobalt, as well as 100% recycled rare earth elements within the magnets. Forty-five percent of manufacturing electricity originated from renewable energy (Apple, 2026b). These sustainability gains span across various levels of the supply chain, resulting in a lower reported carbon footprint than previous MacBook models.

This shiftaligns with research on ethical consumerism, which suggests that sustainability communication can influence consumer perception and brand value among environmentally conscious consumers (Du et al., 2010; Kotler & Lee, 2005). In such markets, Apple's increase in strategy,sustainability allows it to the release of the Macbook Neo was motivated by multiple factors, both inside and outside of Apple. Some external factors that could have influenced the release of the Macbook Neo included the lack of market expansion for Apple, and the slowing growthparticipate in the premiumbroader markets,trend especiallytoward dueenvironmentally toconscious rising component costs.technology. With theirthe currentnew marketsdemographic alreadynow beingtargeting heavilystudents saturated,and withpeople Applefrom operatingyounger ingenerations, who may also be more conscious about the environment, the MacBook Neo therefore represents a red-oceanpotential market,mechanism thesethrough conditions may have created an opportunity for Apple to pursue elements of a blue-ocean strategy by entering the education and budget-oriented laptop segments. Some internal

~~factors also motivated the release of the Macbook Neo. By releasing the Macbook Neo,~~which Apple could ~~utilize~~expand ~~existing~~into ~~Apple~~these ~~silicon~~customer ~~capabilities, including the A18 Pro chip architecture, to achieve competitive pricing while maintaining performance advantages (Apple, 2026b). This was an opportunistic internal factor that not only reduced damage for the company, but also could potentially improve the economics of serving a lower-price segment, although product-level profitability cannot be established from publicly available data. Through vertical integration, Apple was able to achieve lower costs that allowed it to target the lower-cost market. Sustainability and ESG goals also played a role in pushing the release of the Macbook Neo. With Apple's 2030 carbon-neutrality goal, there was increasing pressure to innovate in materials and manufacturing. Thus, by releasing the Macbook Neo, Apple could also display their progress towards their goal, allowing them to continue to maintain their premium brand image. To better understand the motivations behind the MacBook Neo, a STEEPLE analysis was conducted focusing on the period from 2026 onward.~~segments.

Table 4. STEEPLE Analysis of the MacBook Neo (2026 onward)

Factor	**Key Points**
Social	Rising demand from Gen Z and students for affordable tech; continued hybrid learning trends
Technological	Advances in recycled materials and efficient chip designs; AI feature expectations
Economic	Slowing premium segment growth; high component costs; opportunity in budget laptop market
Environmental	Heightened regulatory pressure on electronics carbon footprint and materials sourcing
Political	Government initiatives for digital inclusion in education; ongoing trade tensions
Legal	Strengthening right-to-repair and sustainability regulations
Ethical	Increased consumer awareness and demand for ethical and sustainable products

Note. STEEPLE factors represent external conditions identified from the sources reviewed and their relevance to Apple's strategic environment. Their inclusion does not establish that any individual factor directly caused Apple's decision to launch the MacBook Neo. Information adapted from Osborne (2026), Isaacs (2026), Counterpoint Research (2026), International Data Corporation (2026), Apple (2026a), Apple (2026c), Repair.eu (2026), and Du et al. (2010).

Table 4 shows the STEEPLE analysis of the MacBook ~~Neo,~~Neo and ~~is~~reflects ~~reflective of the shift~~changes in the external environment ~~that~~surrounding ~~encouraged the Neo's release.~~Apple. Increased demand from Gen Z and students, in conjunction with heightened ESG expectations and increased regulatory pressure on ~~sustainability~~sustainability, could have created ~~optimal~~ conditions ~~for~~favorable to the release of an affordable and sustainable product. Additionally, ~~heavy~~changing ~~economic saturation~~conditions within the premium segment ~~further~~may have supported market expansion. These external factors help ~~to~~ explain the circumstances in which Apple was operating ~~in,~~ and ~~provides~~provide ~~a reason~~context for why

Apple may have chosen to layer affordability ~~with~~and sustainability onto its existing ecosystem lock-in strategy ~~to~~in ~~respond~~response to changing consumer and regulatory demands.

While these external conditions supported the Neo's launch, Apple also faced ~~numerous~~potential ~~problems~~challenges due to the release of the ~~Macbook~~MacBook Neo. Apple ~~also~~could plausibly ~~faced~~face ~~supply chain~~supply-chain challenges, particularly given broader semiconductor constraints and increasing component costs affecting technology manufacturers more generally. Apple could ~~plausibly~~ face challenges maintaining supply if demand exceeds available component capacity. This could lead to situations ~~of~~where Apple ~~having~~has to find new supply lines ~~from TSMC~~ at higher costs, potentially leading to supply shortages, sell-outs, and ~~also~~ longer delivery times for the ~~Macbook~~MacBook Neo. Furthermore, other components of the ~~Macbook,~~MacBook, such as ~~the~~ storage or ~~RAM~~RAM, ~~continued to~~could increase in price, ~~leading to~~creating potential problems for Apple ~~to~~in ~~maintain~~maintaining the current price ~~that is set for~~of the ~~Macbook~~MacBook Neo. Brand perception also ~~played~~presents a problem for Apple, ~~which required~~requiring careful deliberation and execution by the marketing department. By releasing a USD $599 ~~Macbook,~~MacBook, Apple ~~risked~~risks diluting ~~their~~its premium brand ~~image,~~image ~~meaning~~if ~~that~~consumers ~~they risked falling~~begin to ~~be~~associate ~~on~~the ~~par~~company more strongly with ~~companies that are producing cheaper,~~ budget-friendly products.

~~Overall, consumer receptions towards the Macbook Neo were quite positive. Technology reviewers such as PCMag, Forbes, and TechCrunch described the MacBook Neo as one of the strongest budget laptop options of 2026 (Osborne, 2026; Isaacs, 2026; Singh, 2026), which encouraged numerous people to purchase the Macbook Neos as their first Apple devices. With enough capabilities to perform everyday tasks flawlessly, the Macbook Neo proved to be the device that was suitable for many individuals. Yet, some limitations and risks remain due to the release of the Macbook Neo. The greatest risk for Apple, with the release of the Macbook Neo, is the potential for Apple's brand image to change to become known as a company just like any other, offering both premium high-end products to cheaper, budget-friendly products. With a $400 difference between the two devices, Apple's success in maintaining its brand image also relied on the marketing aspect within Apple. Apple was able to market the Macbook Neo in the same way they would market the Macbook Air or the Pro, while emphasizing on the price. Many customers of Apple did not see a huge difference within the marketing systems, which was most likely intended to ensure that Apple could maintain the premium brand image that they are known for.~~

Overall, consumer reception towards the MacBook Neo was broadly positive. Technology reviewers such as PCMag, Forbes, and TechCrunch described the MacBook Neo favorably within the lower-priced laptop market (Osborne, 2026; Isaacs, 2026; Singh, 2026). Singh (2026) also reported strong early demand and the presence of first-time Mac buyers among Neo customers. These observations suggest that the device may have appeal among consumers who had not previously purchased a Mac, although the available evidence does not establish that positive reviews caused these purchases. The available evidence also does not establish how many Neo buyers were genuinely new Apple customers rather than existing Apple users purchasing an additional or lower-priced Mac.

Yet, some limitations and risks remain due to the release of the MacBook Neo. The greatest risk for Apple is the potential for its brand image to change if consumers begin to view the company as similar to other manufacturers offering both premium and budget-friendly products. With a $400 difference between the Neo and the MacBook Air, Apple's success in maintaining its brand image may depend on its ability to clearly differentiate the products. Apple's marketing strategy may therefore need to emphasize the Neo's value while maintaining clear differences between the Neo, MacBook Air, and MacBook Pro.

5. Comparison

The independent case studies illustrate Apple's strategic evolution from a pure premium lock-in model to a more inclusive, layered ecosystem. In this new approach, ecosystem lock-in remains the foundational mechanism for long-term value capture, while affordability and sustainability serve as strategic extensions that may broaden customer acquisition without ~~compromising~~changing the core architecture of ~~Apple.~~Apple's ecosystem.

Pricing, Market Access and Sustainability Integration

Traditional MacBooks targeted premium consumers and professionals, with entry-level models historically positioned around the $999 price range (Apple, 2020–2025). The MacBook Neo's USD $599 price point represents a ~~calculated~~potential market expansion into ~~education~~more affordable and entry-level segments, effectively creating a differentiated product ladder that may reduce internal cannibalization while providing Apple with an opportunity to reach additional customer segments (Apple, 2026b).

Sustainability in traditional MacBooks served primarily as ~~brand~~an ~~promotion.~~additional element of Apple's broader environmental strategy. The Neo places greater emphasis on sustainability as a potential competitive differentiator, achieving 60% recycled content and ~~the~~a ~~lowest~~lower reported carbon footprint ~~of any MacBook~~ (Apple, ~~2026a).~~2026a; 2026b). This move reflects Apple's response to external ESG pressures and ~~also~~ positions ~~Apple~~sustainability as a ~~sustainability~~more ~~leader~~visible ~~even~~part ~~in~~of Apple's lower-priced product strategy. However, because many of these environmental figures are reported by Apple, they should be interpreted with appropriate caution. More (2025) reported that a German court ruled that an Apple Watch could not be marketed as "CO2-neutral" under the ~~budget~~conditions ~~segment~~examined ~~—~~by ~~a~~the ~~way~~court. ~~for~~This ~~Apple~~does ~~to~~not ~~maintain~~demonstrate ~~their~~that ~~innovative~~the ~~brand~~Neo's ~~image.~~specific environmental figures are inaccurate, but it highlights the importance of independent scrutiny when evaluating corporate sustainability claims.

Ecosystem Role, Competitive Positioning, and Risks and Trade-offs

Both generations rely on ecosystem lock-in, but the Neo extends Apple's lock-in strategy to a wider potential audience. By lowering the entry cost, Apple ~~was able to~~may increase the probability of future cross-selling ~~(e.g.,~~through ~~iPhone~~other ~~"e"~~Apple ~~integration~~devices and ~~services),~~services, potentially converting one-time budget buyers into ~~high-lifetime-value~~longer-term ecosystem users (Gawer & Cusumano, 2014; Jacobides et al., 2018). However, whether Neo buyers actually generate additional ecosystem revenue remains uncertain and requires further market data. Traditional MacBooks operated in a crowded ~~red-ocean~~ premium market. The Neo exhibits several elements consistent with blue-ocean strategy by entering ~~the~~a ~~affordable,~~more ~~sustainable~~affordable laptop ~~category,~~category ~~challenging~~and potentially competing with Chromebooks and Windows devices on both price and user experience (Kim & Mauborgne, 2005).

The strategy introduces risks such as potential brand dilution, ~~supply~~supply-chain ~~chain vulnerabilities (A18 Pro chip shortages),~~vulnerabilities, and execution challenges in maintaining its premium perception. Apple's marketing success in ~~framing~~presenting the Neo as ~~"premium~~an accessible Apple experience ~~at~~while ~~accessible~~maintaining ~~price"~~clear differentiation from higher-priced models will be ~~critical~~important to its long-term success. Overall, this comparison

suggests that Apple is leveraging its traditional strengths in ecosystem lock-in and vertical integration while addressing ~~the~~ previous limitations in market reach and sustainability.

6. Summary of Findings

The analysis provides several noteworthy findings. First, traditional MacBooks demonstrated the strengths and ~~the~~ limitations of a pure premium lock-in model: the ability to gain ~~exceptional~~strong loyalty and profitability within a narrow market segment, but greater vulnerability to market saturation and ~~the~~limited ~~exclusion~~accessibility ~~of~~for ~~younger,~~younger and price-sensitive consumers. Second, the MacBook Neo ~~effectively~~ makes use of Apple's core ~~capabilities~~capabilities, ~~(vertical~~including vertical integration and ecosystem ~~design)~~design, to address some of these ~~weaknesses,~~limitations, creating the potential for meaningful market expansion while maintaining strategic coherence. The integration of affordability and ~~high~~ sustainability ~~standards~~ represents an ~~innovative~~additional approach ~~to~~that ~~reflect~~reflects changing consumer demands while maintaining Apple's ~~premium~~broader brand ~~image amid current consumer demands. Notable outcomes of the release include positive initial reception among several technology reviewers and reported interest among new buyers and the potential for increased services revenue from a larger installed base. However, persistent supply chain fragility and brand perception risks highlight the difficulty in maintaining such a strategy. Collectively, these findings demonstrate that Apple has moved beyond simple innovation toward a more adaptive, multi-tiered ecosystem strategy — one that balances traditional strengths with adaptability to a changing world.~~positioning.

Notable early outcomes of the release include positive initial reception among several technology reviewers and reported interest among first-time Mac buyers (Osborne, 2026; Isaacs, 2026; Singh, 2026). However, the available evidence does not yet establish whether these buyers represent genuinely new Apple customers, whether they will generate additional ecosystem revenue, or whether some are existing Apple customers purchasing a lower-priced Mac. Persistent supply-chain and brand-perception risks also highlight the difficulty of maintaining such a strategy. Collectively, these findings suggest that Apple may be developing a more adaptive, multi-tiered ecosystem strategy, one that balances traditional strengths with broader accessibility and sustainability.

7. Discussion & Recommendations

The findings of this paper align well with various theoretical perspectives that were discussed in the literature review. The importance of ecosystem lock-in as a tool for competitive advantage reflects platform ecosystem theory (Gawer & Cusumano, 2014; Jacobides et al., 2018), while the Neo's affordability and sustainability highlight ~~the importance~~elements of blue-ocean strategy and provide a potential case for examining disruptive innovation concepts (Kim & Mauborgne, 2005; Christensen et al., 2015). Furthermore, the ~~new~~ role of sustainability as a ~~tool for~~potential competitive advantage reflects the rise of ethical consumerism and CSR communication theories (Du et al., 2010; Kotler & Lee, 2005), demonstrating how external pressures can ~~drive~~contribute to strategic adaptation in premium brands.

From a VRIO perspective, both ~~the~~ traditional MacBooks and the Neo demonstrate that ecosystem lock-in and vertical integration can serve as sources of competitive advantage (Barney, 1991; 1995). However, the Neo ~~was able to~~ also ~~target new advantages through~~introduces affordability and sustainability —as ~~many~~additional ~~gaps~~strategic dimensions that were ~~left~~less ~~behind~~emphasized ~~by~~in traditional ~~devices.~~MacBooks. The STEEPLE analyses further help ~~to~~ reveal the role that external factors play ~~and~~in ~~how~~shaping ~~they~~the ~~influenced~~environment surrounding this shift. This comparison highlights

Apple's movement toward a layered ecosystem model, where lock-in serves as the foundation while affordability and sustainability ~~helps to~~help broaden potential customer reach.

The MacBook Neo also has multiple characteristics that can be examined through disruptive innovation theory. Its lower price and potential appeal to consumers who may not have previously purchased a Mac are consistent with elements of a low-end or new-market strategy (Christensen et al., 2015). However, the Neo's recent release means that there is currently not enough evidence to determine whether it will follow a disruptive trajectory. Therefore, disruptive innovation is better treated as a theoretical lens for interpreting the Neo's market positioning rather than as a confirmed outcome.

The Neo's sustainability features also could represent an important extension of Apple's existing strategy. Its use of recycled materials and reduced aluminum consumption may appeal to environmentally conscious consumers while differentiating the Neo within the lower-priced laptop market. However, because many of these environmental figures are reported by Apple itself, they should be interpreted with appropriate caution. Independent scrutiny of corporate sustainability claims remains important, particularly as environmental marketing becomes a more significant part of technology companies' product positioning.

To continue to stay successful ~~in~~with this ~~new strategic shift,~~strategy, Apple should continue to invest in ~~supply chain~~supply-chain resilience. As supply chains, specifically ~~the~~ chip ~~production~~production, ~~lines~~can drive the costs of these products, ~~investing~~maintaining ~~in~~reliable ~~them~~component supply will become critical. Additionally, Apple ~~will need to~~should ensure ~~that they are able to maintain~~ clear product differentiation across the product ladder through defined marketing that highlights the ~~premium~~different user ~~experience~~experiences and use cases at various price points. ~~Additionally, Apple should continue to deepen sustainability efforts to go beyond the Neo, to strengthen their brand leadership in the ESG sector. These recommendations build upon blue-ocean strategy and ecosystem theory (Kim & Mauborgne, 2005; Gawer & Cusumano, 2014).~~

Apple should also measure whether Neo buyers are genuinely new Mac customers or existing customers purchasing a lower-priced Mac. This would help determine whether the Neo is expanding Apple's customer base or primarily shifting demand within its existing product line. Apple could also track whether first-time Neo buyers later adopt other Apple devices or services, which would provide a clearer indication of whether the Neo creates additional ecosystem value beyond the initial hardware purchase. Finally, Apple should continue to deepen sustainability efforts while providing transparent information about its environmental claims. Monitoring component costs, supplier conditions, recycled-material use, and the effectiveness of sustainability communication would help Apple maintain the Neo's affordability without weakening its broader brand positioning.

Although this study focuses on Apple, the case may also have implications for other premium technology brands. The MacBook Neo suggests that premium firms do not necessarily need to abandon ecosystem-based differentiation when entering more price-sensitive markets. Instead, they may be able to introduce lower-priced entry products that broaden access while maintaining the ecosystem, brand, and service relationships that support customer retention. Whether this approach succeeds, however, may depend on maintaining sufficient differentiation between entry-level and premium products.

8. Conclusion

This study has examined Apple's strategic shift through the comparative analysis of traditional MacBooks and the MacBook Neo. The findings suggest that the MacBook Neo reflects a significant adaptation to the changing competitive environment. Apple has retained ecosystem lock-in as ~~its~~a core competitive advantage while adding affordability and sustainability, potentially allowing ~~them~~it to expand market reach and ~~to~~ respond to changing external ~~events.~~conditions. By balancing its premium brand image with ~~the~~a ~~now~~broader ~~expanded~~potential customer ~~demographic,~~base, Apple has positioned ~~itself~~the Neo to potentially capture new customer segments without ~~sacrificing~~completely changing the ~~high-margin~~foundations ~~models~~of ~~that~~its ~~defined~~existing ~~Apple.~~business model. The findings further suggest that this approach provides opportunities for market expansion while introducing risks related to supply-chain resilience, brand perception, and long-term product differentiation.

However, the Neo's recent release means that its long-term commercial success cannot yet be established. In particular, future research should examine whether Neo buyers are genuinely new Apple customers, whether they subsequently adopt other Apple products and services, and whether the Neo creates additional demand or primarily shifts existing customers toward a lower-priced product. As more evidence becomes available, these measures will help determine whether the Neo represents a successful extension of Apple's ecosystem strategy or primarily a redistribution of demand within Apple's existing customer base.

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Ethics Statement

This research was conducted independently and without access to a formal ethics review board. Therefore, this paper's author adhered to the practical guidelines for ethical research. All data used was secondary, and was collected from publicly available sources using ethical guidelines for research.

Acknowledgements

I would like to deeply express my gratitude to **[REDACTED]** for her assistance and advice that has guided my process in the writing of this paper.

Author Biography

[REDACTED] is a 17-year-old rising senior at **[REDACTED]** with a research focus on the intersection of sustainability and competitive business strategy. He is the founder of a community-driven sustainability platform in Hong Kong and has explored global supply chains through an internship at a maritime logistics company. Outside the classroom, **[REDACTED]** is an avid rock climber and outdoor enthusiast, interests that first drew his attention to the environmental costs of unchecked industrial growth and continue to inform his research. He plans to pursue undergraduate study in business and economics, with a long-term interest in sustainable supply chain strategy.

Mentor Contribution Statement

This research paper was written under the guidance of **[REDACTED]**. The mentor's role included providing feedback to further develop ideas that were explored in the research paper and gaining a better understanding of various business frameworks that were utilised. Additionally, the mentor's guidance on the structure of this paper, and addressing gaps were essential for the success of this paper.

Response to Peer Reviewer 1: From Premium Lock-In to Inclusive Growth: Apple's Strategic Evolution with the MacBook Neo

Dear Reviewer,

Thank you so much for the thoughtful and constructive feedback on the manuscript. I greatly appreciate the comments and believe that they have helped me to clarify the paper's central argument, and strengthen the connections between the evidence and the conclusions that have been made in the paper.

Below, I respond point-by-point to each of the comments that has been raised in the review. All the changes have been incorporated into the revised manuscript, with the corresponding changes being highlighted in the track changes version.

Originality and central contribution: Reviewer comment: "The paper contains an interesting and potentially original argument, which could be sharpened. The most compelling insight may not be that Apple has moved 'from premium lock-in to inclusive growth,' but that it has retained ecosystem lock-in while lowering the point of entry into that ecosystem."

Response: I have strengthened the introduction so that it explicitly frames the study around whether the MacBook Neo represents a genuine change in Apple's strategy or an extension of its existing ecosystem-based strategy to a broader customer base. I have also clarified throughout the manuscript that ecosystem lock-in remains the foundation of Apple's strategy, while affordability and sustainability represent extensions of that strategy rather than a complete departure from Apple's premium positioning.

Research question: Reviewer comment: "I can't find a precise research question."

Response: I have added an explicit research question to the introduction: "How does the introduction of the MacBook Neo represent an extension of Apple's existing ecosystem-based competitive strategy through affordability and sustainability, and how might this reposition Apple within more price-sensitive market segments?" I also continue to use this question to clearly connect the comparative case studies, findings, and the conclusion.

Inconsistency in Table 1: Reviewer comment: “Table 1 classifies ecosystem lock-in as a temporary competitive advantage, while the text immediately afterwards describes ecosystem lock-in and vertical integration as the primary sources of sustained competitive advantage.”

Response: I have revised Table 1 so that ecosystem lock-in is now classified as a sustained competitive advantage, consistent with its VRIO ratings and with the discussion that follows the table.

Disruptive innovation theory: Reviewer comment: “A lower-priced product is not necessarily disruptive innovation in the Christensen sense.”

Response: I have revised the literature review and the discussion to clarify that the MacBook Neo’s lower price and potential appeal to the price-sensitive market are characteristics that can be viewed through disruptive innovation theory, but that the Neo’s recent release does not provide enough evidence to establish a completed disruption process. The manuscript now treats disruptive innovation as a theoretical lens rather than a firm conclusion.

Definition of “inclusive growth”: Reviewer comment: “As this concept appears in the title, a clear definition would be beneficial.”

Response: I have added a definition of “inclusive growth” to the introduction. In the paper, the term refers specifically to the potential expansion of access to Apple’s ecosystem through a lower-priced entry point, rather than the broader social and economic meaning that the term can imply. I have also clarified that the study focuses on broader ecosystem access rather than claiming wider social or economic outcomes.

Claims about consumer reception and causation: Reviewer comment: “The manuscript states that favorable reviews encouraged numerous people to purchase Neo devices as their first Apple products denoting acceptance but do not demonstrate purchasing causation.”

Response: I have revised the manuscript to distinguish between observed evidence and interpretation. The revised manuscript now states that Singh reported strong early demand and the presence of first-time Mac buyers among Neo customers, while noting that the available evidence does not establish that positive reviews caused this increase in purchases. I have also removed the unsupported claim concerning customers perceiving Apple’s Neo marketing as the same as the MacBook Air/Pro marketing.

Recommendations: Reviewer comment: “Recommendations concerning supply-chain resilience, product differentiation and further sustainability investment are sensible, but relatively broad.”

Response: I have made the recommendations section much more specific to the MacBook Neo. Specifically, I now recommend that Apple monitor whether Neo buyers are genuine new Mac customers or existing Apple customers purchasing a lower-priced Mac. I also recommended tracking whether first-time Neo buyers also adopt other Apple products or services, which could provide evidence of whether the Neo generates additional ecosystem value. Finally, I recommend maintaining clear differentiation between the Neo, MacBook Air, and MacBook Pro while monitoring component costs, supplier conditions, recycled-material use, and sustainability communication.

Presentation: Reviewer comment: “There are some inconsistencies in capitalization of MacBook and grammar errors detracting from the professionalism of the paper.”

Response: I have completed a proofreading of the paper, and the MacBook term has been standardized throughout, and the grammatical and phrasing issues have been revised.

Thank you again for the detailed and constructive feedback. I believe that these revisions have significantly improved the clarity and the analytical focus of the paper.

Sincerely,
Kibaek Lee

Response to Peer Reviewer 2: From Premium Lock-In to Inclusive Growth: Apple's Strategic Evolution with the MacBook Neo

Dear Reviewer,

Thank you so much for the thoughtful and constructive feedback on the manuscript. I greatly appreciate the comments and believe that they have helped me to clarify the paper's central argument, and strengthen the connections between the evidence and the conclusions that have been made in the paper.

Below, I respond point-by-point to each of the comments that has been raised in the review. All the changes have been incorporated into the revised manuscript, with the corresponding changes being highlighted in the track changes version.

Historical comparison with the 2006 consumer MacBook: Reviewer comment: "The historical comparison with the 2006 consumer MacBook is also potentially useful because it frames the Neo as an extension of a longer product-line strategy rather than as a complete break from Apple's past. However, the specific characterization of the 2006 MacBook as education-focused needs either a direct source or softer wording."

Response: I have revised the discussion of the 2006 MacBook to describe it as an accessible consumer and lifestyle-focused device rather than specifically describing it as education-focused. This better reflects the evidence provided by Apple's original announcement while also preserving the historical comparison between the 2006 MacBook and the MacBook Neo.

Originality and significance: Reviewer comment: "The significance could be sharpened by stating more directly what the case implies for other premium technology brands."

Response: I have added a short discussion near the end of the paper explaining the greater implications of the release of the Neo. The revised manuscript suggests that other premium technology brands may similarly be able to introduce lower-priced entry products while also being able to maintain ecosystem, brand, and service relationships that support customer retention. I also clarified that the success of such a strategy will depend heavily on maintaining sufficient differentiation between entry level and premium products.

Table 1: VRIO classification: Reviewer comment: “Table 1 holds the most important internal inconsistency. Ecosystem Lock-In is rated Valuable, Highly Rare, Difficult to Imitate, and Fully Exploited in that table, and the standard VRIO reading of such a row is a sustained competitive advantage.”

Response: I have revised the classification of ecosystem lock-in in Table 1 from temporary to sustained, bringing the final classification into alignment with its VRIO discussion and its rating.

Consumer reception and unsupported claims: Reviewer comment:
“The reception section has a second clarity problem. What the cited TechCrunch piece shows is strong early demand and first-time Mac buyers, which is enough for a discussion of early adoption. The sentence as written goes further and implies that positive technology reviews caused people to buy the Neo, and the evidence does not carry that.”

Response: I have revised the reception section to more precisely reflect the evidence provided by Singh (2026). The revised manuscript now states that Singh (2026) reported strong early demand and the presence of first-time Mac buyers among Neo customers. I then also clarify that the available evidence does not establish that positive reviews caused these purchases. This change distinguishes observed early adoption from an unsupported causal relationship.

Reviewer comment: “The claim that many customers saw little difference in Apple’s marketing looks unsupported as well. Either give it a source or soften it, and if neither works, cut it.”

Response: I have removed this unsupported claim from the manuscript rather than introducing an additional source that would not directly establish the statement.

A18 Pro “binned” chips: Reviewer comment: “The paper states that Apple repurposed ‘binned’ A18 Pro chips, but this claim is not supported by a citation.”

Response: I have removed this characterization from the manuscript. The revised discussion now instead refers more generally to Apple’s existing Apple silicon capabilities and vertical integration when discussing how Apple may have been able to achieve the Neo’s price and performance positioning.

Mac revenue and MacBook sales: Reviewer comment: “The paper uses Mac revenue to support statements about MacBook sales and premium-segment saturation. This inference is too strong as written.”

Response: I have revised the introduction to clarify that the cited revenue figures represent Apple's overall Mac revenue rather than MacBook unit sales specifically. I no longer use the revenue figures alone as evidence that the premium MacBook segment was saturated. Instead, the normalization of Mac revenue following the pandemic-era peak is presented as contextual evidence for examining Apple's opportunities for further market expansion. I have also revised the relevant discussion to use more cautious language when discussing the conditions surrounding Apple's strategic shift.

Reception evidence: Reviewer comment: "The reception paragraph should be rewritten to match the cited evidence precisely. Singh (2026) supports strong early market demand, launch-quarter shipments, and the presence of first-time Mac buyers."

Response: I have revised the reception paragraph accordingly. The revised version focuses on the evidence supported by Singh (2026), including strong early demand and first-time Mac buyers. I have removed the previous causal implication that positive reviews encouraged these purchases and have clarified that the available evidence does not yet establish whether these buyers represent genuinely new Apple customers or existing customers purchasing a lower-priced Mac.

Sustainability evidence and independent scrutiny: Reviewer comment: "The sustainability discussion relies heavily on Apple-reported environmental claims. Bringing the More (2025) Reuters report about the German court ruling on Apple's Apple Watch carbon-neutral marketing into the body would provide useful critical context."

Response: I have incorporated More (2025) into the comparison and discussion sections. The revised manuscript explains that the German court ruling does not demonstrate that the MacBook Neo's specific recycled-material or environmental figures are inaccurate. Instead, it is presented as an example of why corporate sustainability claims should be evaluated with appropriate independent scrutiny. This allows the paper to retain Apple's reported environmental data while acknowledging the limitations of relying primarily on company-reported sustainability information.

Disruptive innovation theory: Reviewer comment: "Low price and entry into a lower-end segment alone do not establish disruption under Christensen's framework."

Response: I have revised both the literature review and discussion sections. The manuscript now explains that the MacBook Neo has characteristics that can be examined through a low-end or new-market disruption lens, but that its recent release means there is not yet

sufficient evidence to establish a completed disruptive process. Disruptive innovation is therefore presented as a theoretical lens rather than a confirmed outcome.

Literature-review gap statement: Reviewer comment: “The claim that ‘few studies’ apply comprehensive multi-framework analysis at the individual product level is plausible, but the paper does not present a systematic literature search.”

Response: I have made the statement more cautious. Rather than presenting the claim as a comprehensive assessment of the entire academic field, the revised manuscript states that within the literature reviewed for this study, relatively few studies apply multiple strategic frameworks at the individual product level to examine the relationship between ecosystem lock-in, accessibility, and sustainability. This more accurately reflects the scope and methodology of the study.

Grammar and language: Reviewer comment: “A careful proofreading pass is still needed.”

Response: I have completed a full proofreading pass of the manuscript. In particular, I have standardized the capitalization of “MacBook” throughout, corrected “COVID-19 endemic” to “COVID-19 pandemic,” and revised several awkward phrases identified in the review. I also addressed unnecessary repetition of phrases such as “is able to” and improved tense consistency when describing the study’s own analysis.

I also standardized spelling conventions throughout the manuscript, using American English consistently. This includes replacing inconsistent British spellings where necessary.

Specific phrasing issues: Reviewer comment: “Phrases such as ‘MacBook sales were never too stagnant,’ ‘Brand perception also played a problem,’ and ‘reduced damage for the company’ should be rewritten.”

Response: I have revised these phrases during the proofreading process. The relevant passages now use clearer and more precise language while retaining the original meaning of the analysis.

Thank you again for the detailed and constructive feedback. I believe that these revisions have significantly improved the clarity and the analytical focus of the paper.

Sincerely,
Kibaek Lee

Decision: Accept for publication, with minor edits.

Review: This paper is substantially improved, and the author has addressed almost all of the reviewers' substantive concerns. Most importantly, the thesis shines through and makes it clear that the Neo is not Apple abandoning ecosystem lock-in, but rather lowering the entry point into the same ecosystem while layering affordability and sustainability onto the existing strategy. Reviewer 1 was especially trying to push the paper in that direction, and the author took that direction quite seriously. Relatedly, the introduction now states an explicit research direction and definition of "inclusive growth." Finally, I would say the paper does a much better job of distinguishing between evidence and interpretation, as the methodology explicitly notes that the recent release limits what can be established and marks claims on motivations, profitability, market expansion, and long-term behavior as being interpretations rather than established, quantifiable facts.

That being said, there are still some remaining minor issues that should be addressed before publication:

- I believe the author may have forgotten to revise the abstract. Please make sure that the abstract not only fully reflects the corrections claimed in the response letter, but also remains consistent with revisions made elsewhere in the paper.
    - The response states something about correcting "COVID-19 endemic" to "COVID-19 pandemic" and removed/reduced the "is/was able to" wording, but I still see it all there.
    - The abstract still says something about how the shift "has broadened market access" and has maintained "long-term customer value through services," which are still substantive overclaims. In particular, the revised body of the paper explicitly acknowledges that the evidence does **not** establish whether Neo buyers are genuinely new customers or whether they will generate additional revenue. Consider wording like, "findings **suggest** that the Neo may extend," "the strategy **may broaden access** to more price-sensitive segments," etc.
- As Reviewer 2 requested, the revised introduction now correctly says that, overall, Mac revenue cannot, by itself, establish MacBook unit sales or premium segment saturation. However, Table 2 still lists "premium segment saturation" as an economic condition, so unless another cited source independently established that proposition, that categorical wording sort of alludes to the original problem. Something like "post-pandemic demand normalization" or "possible constraints on premium segment growth" would be more consistent with the revised argument.
- Table 3 states something about how the A18 Pro chip plus vertical integration enabled USD $599 pricing, which is still a causal claim. Unless a reputable source specifically establishes this, I would change it to something like "supports lower-cost positioning" or "potentially contributes to cost-performance positioning."
- I would highly suggest another proofreading pass to revise non-academic prose like "We can now take a look at a VRIO analysis" "to continue to stay successful with this strategy," etc. and also check for British English -> American English again (e.g., "utilised" was used in the mentor statement)

- The manuscript cites “(Apple, 2026)” for the Neo’s intended audience, while the reference list contains Apple 2026a, 2026b, and 2026c, with no unlettered “Apple, 2026.” Please correct this.