A Better Backpack for Students

Marketing Simulation Report

COMR 465 | UBC Sauder School of Business

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Prepared by: Team 1

Levi Rauch - 85853463
Aahana Khanna - 81360224
Arsenii Stolbov - 49630171
Maria George - 25427576

1. Overall Outcome

Team 1 is proud to say that we performed strongly amongst our simulation cohort. In fact, we had the highest cumulative return on marketing at 115%. Furthermore, we generated the second highest net profit of $4,543.50 with a finishing bank balance of $14,543.50. This means we successfully achieved the primary objective we outlined in our strategic plan of "finishing the simulation as one of the top two teams in quarterly profit".

Throughout the simulation, we remained committed to the strategic plan we established at the start of the simulation. Our approach focused on:

1. using data-driven insights to guide marketing and product decisions,
2. maintaining profitability throughout the entire simulation,
3. developing a cost-competitive and value-differentiated product,
4. growing our market share into the low double digits by the final round, and
5. allocating our promotion budget efficiently to maximize marketing ROI.

We initially targeted school children with an entry level backpack priced well below our competitors. We initially chose not to advertise, aiming to keep early costs low while we had no revenue. This also allowed us to observe how effective advertising was for other teams before committing our own budget. We experienced high volume, good margins, and positive profit, but an anomaly was that we had the lowest market share of any team at only 7% in the first round. To capture more market share in later rounds, we analyzed our available data and identified an opportunity to add backpack features and expand our target market to include the higher-growth university segment. Since their preferences closely aligned with those of school children, we could market a single backpack effectively to both groups. In doing so, we achieved higher volume, stronger margins, and our market share improved to a peak of 16%. At the same time, calculated advertising choices delivered a strong return on marketing, indicating that our promotion spending was generally efficient rather than wasteful like some other teams.

In the end, we finished with a simulation score of 58; the second highest in our simulation and highest in both of the segments we targeted. This score is a weighted sum of net profit, market share, return on marketing, and customer satisfaction score. Please refer to section 8: References and Exhibits to see Figure 1 comparing our team's performance to other companies in the simulation, Figure 2 showing our team's financial performance during the simulation, and Figure 3 comparing our team's return on marketing. Overall, our team is very happy with our result and the marketing lessons learned along the way.

2. Target Market Choice

When looking at the simulated backpack market, our team noticed that it could be divided into five segments: urban commuters, school children, university students, luxury trend followers, and outdoor enthusiasts. The simulation provided us with market research data that indicated each segment's preferences in terms of backpack capacity, comfort, durability, waterproofing, and eco-friendliness. We were also provided data on the segment size, average purchase price, and quarterly growth rate. We saw that each segment had very different needs, so targeting a specific segment was necessary in order to be successful.

To determine the most attractive target market, we primarily looked at the revenue and growth potential. This is calculated by multiplying the number of backpacks purchased each quarter by the average purchase price. High revenues often translate to high profits, so revenue potential is a great metric to evaluate segments. However, we also considered how demanding each segment's product expectations were, since meeting the needs of segments like outdoor enthusiasts or luxury trend followers would require much higher production costs than serving a less demanding group like school children.

By analyzing the market research data in a spreadsheet, we identified school children, outdoor enthusiasts, and university students as promising segments. However, we recognized that school children and university students shared similar backpack preferences, allowing us to market a single product to both groups and capture more total revenue than targeting any one segment individually. Figure 4 in section 8, illustrates this revenue potential, growth potential, and product expectation comparison. Finally, we looked at the distribution channels available to us. Our analysis showed that retailers with student-friendly pricing, including department stores, discount retailers, and university stores, provided substantially greater reach compared to high-end fashion or outdoor stores. This trend is visually illustrated in Figure 5 in Section 8. As a result, we chose to target both school children and university students with an undifferentiated strategy, since they are the *largest* and most *reachable* segment.

Together, university students and school children total 59,000 customers with a promising total addressable market size of $1,600,000.00 and 3% growth rate at the start of Q1 2025. Our research and experience with previous simulations revealed that student backpack competitors are overpriced. We saw an opportunity to address this gap by providing a sustainable, high-capacity backpack at a price students can actually afford. As a brand new company, we decided to target the student market in two phases.

During phase one we focused on school children. As a brand new company, this group was the least risky initial target due to its low production cost and large segment size. It helped us build our brand awareness and reputation for value by driving sales volume. On the downside, it only had a 1% growth rate which is significantly lower than the other market segments. Therefore, after establishing our entry segment we moved to phase 2, where we broadened our targeting strategy to include university students. This segment is large enough and has a higher growth rate of 5%, but more importantly the higher willingness to pay improved our margins and helped us scale our business for long term growth.

To optimize our backpack for our target segment, we explored the options provided to us by our supplier. We could choose between different shapes, straps, material, color, and features. These choices affected the performance metrics of each backpack accordingly. For example, the large rectangular shaped bag has a much higher capacity than the teardrop shape, but sacrifices comfort. Since the tradeoffs and overwhelming number of combinations made it difficult for us to confidently make a decision about which backpack was best for our target segment, we decided to use our data analysis skills to automatically explore all 318 possible combinations of backpack configurations and compare their performance against student preferences and production cost. By sorting the combinations by their cost-to-benefit ratio, we could confidently launch with the perfect student backpack right away rather than experimenting on the market and confusing customers. A visualization of the backpack scores for each combination is shown in Figure 6 in section 8.

This automated backpack configurator also allowed us to quickly decide how to reposition to include university students. By accounting for the preferences of both target segments simultaneously, we learned that for our repositioning, we needed to upgrade to an eco-friendly material and add a laptop sleeve, while swapping the basic straps for thin spaghetti straps. This resulted in an increase to the cost of production and subsequently, the price; however the increased quality and repositioning attracted more customers and more profit overall. Although this repositioning worked well for us, we decided not to enter additional segments beyond schoolchildren and students, as expanding too broadly would dilute our marketing resources and weaken our positioning strategy. Instead, we prioritised deepening our presence in the student market, ensuring that our product design, pricing and advertising messages remained closely aligned with the needs and behaviour patterns of these two core segments.

Altogether, our targeting strategy evolved from a focused, low-risk entry segment to a broader but strategically aligned student market. This approach allowed us to balance production costs with revenue growth, design a product that closely matched customer needs, and leverage highly effective retail channels. By maintaining clear positioning and avoiding unnecessary expansion into less profitable segments, we were able to build a strong market presence and support the financial performance outcomes demonstrated in our results.

3. Turn Decision-Making Review

In our first turn, our strategy focused on keeping costs low, maintaining profitability, and gathering information before committing to major investments. We chose not to advertise, since early advertising offered limited reach relative to its high cost. This allowed us to conserve cash while observing how effective advertising was for other teams. Although this resulted in a low market share, it helped us maintain a positive account balance. Informed by our automated backpack configurator, we launched a simple backpack with no added features to keep production costs at a minimal $12.00. At the time, we assumed that most features would not significantly affect product performance, which allowed us to maintain profitability, but ultimately contributed to a low feature score and weaker customer satisfaction than expected. We priced the backpack at the average school-child purchase price of $24.00, positioning ourselves as "great value" being the most affordable option in the market compared to our main competitor (Troy Taylor) priced at $30.00. This helped us appeal to value-conscious consumers and secure positive profit, though margins were slim and our low price limited revenue potential. To maximize reach, we distributed through every profitable channel available: online discount retailers, department stores, and direct sales. This broad distribution secured a market share of 6%, even though discount retailers took such a large cut that we were left with no profit.

In Turn 2, our team chose not to make any new decisions because we were unsure which changes would genuinely improve our performance. Since our Turn 1 strategy produced positive profit, we hesitated to adjust features, pricing, or advertising without clearer evidence of their impact.

For turn 3, our team relied heavily on the data gathered from the previous rounds to remain consistent with our data-driven strategy. Our focus was to grow our low market share by launching our first advertising campaign. By evaluating reach and cost across all promotion channels, we calculated impressions per dollar and identified printed comic books as the most efficient option for school children, delivering nearly 14 impressions per dollar (see Figure 10). This led to an exceptional ROMI of 296%, confirming the channel's effectiveness for our primary segment. We also optimized our product by switching from wide padded to basic straps and adding a water bottle holder, boosting our feature score while keeping production costs down. To maintain our margin, we raised our price from $24.00 to $26.00 without losing our value positioning. Together, these decisions increased our profit to $1,334.30 and moved us into 2nd place overall.

In turn 4, we decided to initiate phase two of our targeting strategy to include university students. This shift was guided by the STP model, as we expanded our segmentation analysis and adopted a differentiated targeting strategy for both school children and university students. Informed by the backpack configurator and now knowing the importance of special features, We upgraded to eco-friendly material and added a laptop sleeve to better align with university student preferences while maintaining strong appeal for school children. We also reevaluated our promotion strategy and found that the gaming site channel was most efficient for both segments (see figure 11). Furthermore, because the new product features increased

our production cost, we raised our price to $30 to preserve our profit margin. Even at this higher price point, we remained competitive. Our closest competitor, Troy Taylor, was also selling at $30 but had a significantly lower characteristics score of 77 compared to our score of 91. The increased price also allowed us to sell through university stores and better reach our university student market. Unfortunately, although we had made all these decisions with the intention of targeting university students, we didn't realize that we needed to press the "target segment" button in the simulation to formally add this target segment. Nevertheless, we are prepared to make this change in the next round.

In turn five, we officially targeted university students. We further refined our backpack design based on customer feedback by adopting a more minimalistic, black style with a university logo that better aligned with the preferences of university students. These improvements increased the price all the way to $44.

In turn six, we saw that the $44.00 price was too high since sales and profits began to decline at this level, indicating higher price elasticity among university students than initially assumed. This result showed the importance of maintaining an optimal balance between premium positioning and affordability to protect consumer demand while maintaining long-term profitability.

After each turn, we evaluated the effectiveness of our strategic actions based on key performance indicators such as sales volume, profit margin, satisfaction level, and market share. For example, the shift to university students resulted in a profit margin of $9.35 and an increase in market share from 6% to 11% by the sixth turn, confirming the financial benefit of expanding this segment. The price elasticity principles were also applied to assess sensitivity to price changes. When our unit price reached $44, sales volume dropped from 562 to 333 units (see figure 7), indicating that the price had exceeded perceived value and represented our price ceiling. This insight reinforced the importance of balancing premium positioning with affordability to protect demand and ensure sustainable growth in a competitive market. In addition, we analyzed market share by segment to confirm the accuracy of our targeting decisions. An assessment of our presence in each segment based on the market size for that segment confirmed that our shift toward university students was correct and in line with the concentration of demand (see figure 9). Overall, the data analysis enabled us to make informed, data-driven decisions. These findings supported our evolution from an initial go-to-market strategy to a higher-value positioning that improved long-term profitability and competitiveness. To see a detailed breakdown of exactly what decisions were made for each turn, see exhibit 1 in section 8.

4. Competitors in the Marketplace

Competitive behavior played an important role in our decisions; particularly those related to the product, promotion, and pricing strategy. From the start, we tracked competitors' prices and product configurations to ensure that we had better value even if it meant sacrificing profit margin, since our strategy was based on low cost and high volume. This meant closely monitoring price, feature, and characteristics scores during the simulation. At the start of the simulation, we had a lower price but similar satisfaction scores. Near the end of the simulation, we had a higher price but higher satisfaction scores. Thus, although we raised our price, monitoring our competitors helped us maintain our positioning in the value conscious student market.

Advertising was another area where monitoring competitors proved valuable. As mentioned previously, we refrained from marketing in the first turn so we could observe whether other companies achieved a meaningful return on their investment. After Turn 1, we saw that several competitors overspent on promotion and drove their account balances negative (see Figure 2). This insight helped us take a more conservative and calculated approach when launching our first advertising campaign. As a result, we achieved the highest return on marketing of any company, while keeping promotion costs to only 8% of our revenue.

One major challenge we faced was presenting market share data, which was shown as a single aggregate percentage rather than broken down by segment. This limited our visibility into our specific share of the school and university markets, forcing us to infer competitors' presence in each segment by observing their marketing actions and sales performance each turn.

Additionally, when entering the university student segment, we tested price elasticity and value perception at higher prices. Competitors capitalized on this short-term research, regaining some market share. This highlighted the importance of maintaining price discipline, particularly when competitors' offerings align closely with market norms.

Another interesting observation our team noted while analyzing competitors was that one team targeted the highest price segment of outdoor enthusiasts. With little direct competition, this approach created an effective monopoly in that segment, generating high profitability and making them the top performing team. This reinforced the value of segmentation based on a thorough understanding of the overall market and identifying opportunity gaps with minimal competition.

5. Areas for Improvement/Lessons learned

We finished the simulation profitably and improved performance steadily through the middle rounds; however, several decisions created volatility and revealed opportunities to strengthen our marketing planning. Many of our strategic changes like price increases, feature adjustments, and a late segment shift were responses to competitors rather than part of a unified long-term strategy. Below is a brief reflection on how we could have improved and the key lessons learned.

Key Lessons Learned

1. Price Testing Should Be Incremental
We raised prices too aggressively in Turns 5–6, causing demand and satisfaction to drop. Smaller pricing adjustments would have allowed us to find the optimal price without harming market share.

2. Segment Changes Must Be Fully Supported
Our switch from School Children to University Students was strategically sound but poorly executed. Features and messaging did not fully match the new segment, reducing product appeal.

3. Early Marketing Investment Matters
Spending $0 on promotion in the first two turns limited awareness and forced us to play catch-up. Even minimal early media spending would have built interest sooner.

4. Product Features Should Follow Segment Needs, Not Just Cost Cutting
Some feature reductions lowered unit costs but also reduced satisfaction. Value-driven features (e.g., padded straps, relevant add-ons) would have aligned better with customer expectations.

5. Competitor Intelligence Should Drive Strategic Positioning
Teams 3, 5, and 7 revealed clear patterns in pricing and features. Earlier analysis of their strategies could have informed better differentiation and prevented direct competition.

6. Marketing Spend Must Be Monitored for Efficiency
Our ROM peaked at 243% in Turn 4 but dropped as we increased spending. Marketing budgets should scale with returns, not simply with available cash.
Overall, Team 1 improved consistently but learned that effective marketing planning requires early investment, disciplined pricing, segment alignment, and continuous competitive analysis. These lessons would help refine our approach and produce more stable performance in future rounds.

6. Recommendation

Based on our results, we recommend continuing with the student backpack concept and preparing for a broader launch, rather than starting over or scrapping the product. The simulation showed clear demand for a sustainable, functional student backpack and confirmed that our strategy can be profitable when pricing and product design are aligned with segment needs.

Before expanding, we suggest three key refinements:

1. **Calibrate pricing more carefully:** Our final price exceeded willingness to pay, so we recommend testing intermediate price points to identify the optimal balance between margin and demand.
2. **Finalize and standardize the product design:** The eco-friendly material, laptop sleeve, and improved capacity should remain core features. Any further changes should prioritize value, not cost reduction.
3. **Conduct targeted customer research:** Quick surveys or tests with actual students can validate our positioning, preferred features, and acceptable price range before full rollout.

If these refinements confirm our simulation insights, the company should move forward with a broader market introduction, supported by clear messaging around sustainability, functionality, and everyday student utility.

7. Executive Summary

This report provides a detailed overview of Team 1's performance in the marketing simulation highlighting key strategy, marketing mix decisions, competitor behavior, and future plans. Throughout the simulation we were focused on leveraging data to maximize profit and provide value to our customers.

We entered the market with a cost-competitive, volume-focused strategy targeting school children. Eventually, our targeting strategy expanded to university students to achieve higher margins and scale our business for long-term growth. As the simulation progressed our cost of production increased, thereby increasing our selling price, as we focused on meeting the expectations of our new target segment. By the end of the simulation, we were able to increase our market share to 11%, however, the late-stage price increase to $44 reduced our sales in the final quarter.

Our decision-making was data-driven shaped by consumer feedback, competitor behavior, and performance metrics. Whether it be expanding our target segment from school children to university students or eliminating distribution channels that did not generate positive returns, our decisions were based on competitive intelligence, market analysis and financial performance.

Our strategic efforts translated into constructive results as we ended the simulation with the highest cumulative return on marketing (115%) and the second-highest net profit. However, we recognize that improvement in areas, like pricing strategy and target segment alignment, can help us further strengthen our future financial performance by increasing sales and improving customer feedback.

8. References & Exhibits

Grewal, D., Levy, M., Lichti, S., Petty, R. D., & Balderston, E. (2022). Marketing (6th Canadian ed.). McGraw-Hill Education.

Figure 1: Final Simulation Score Compared to Other Teams

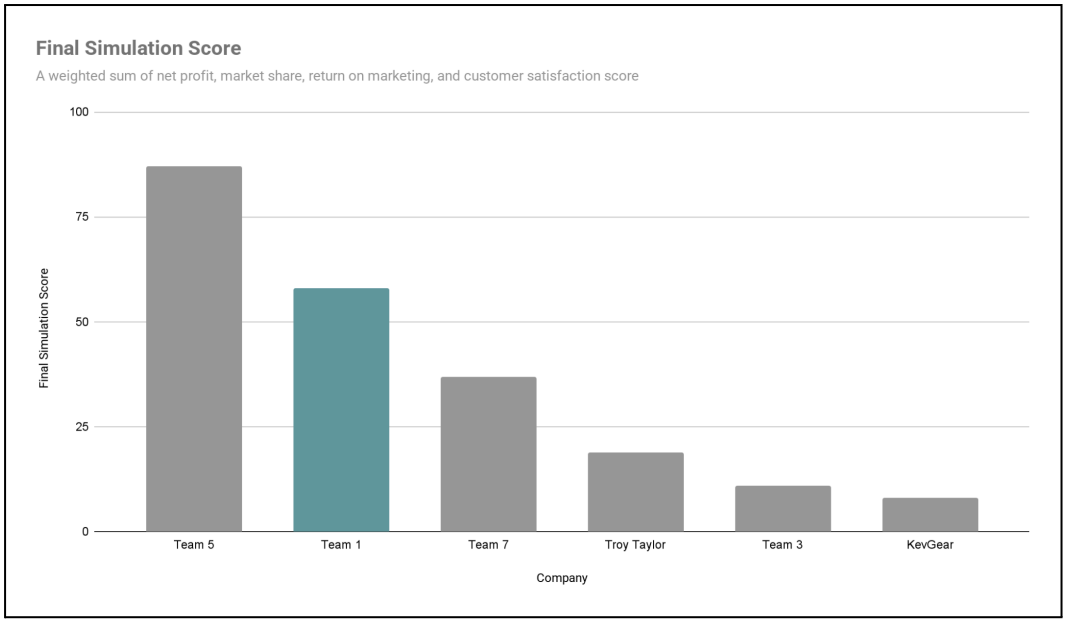

Figure 2: Team 1 Financial Performance Compared to Other Teams

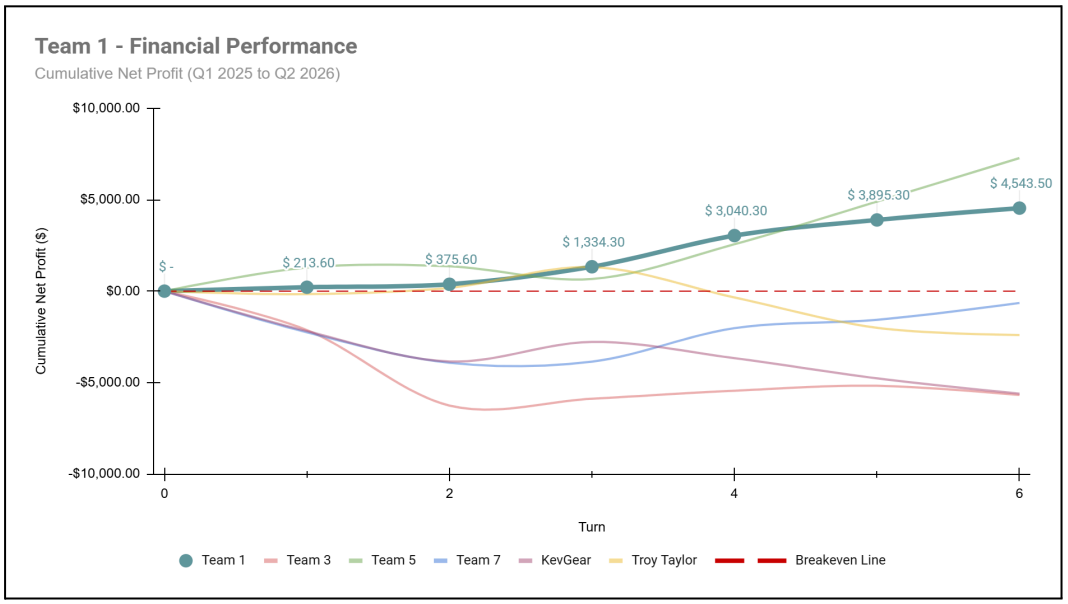

Figure 3: Team 1 Return on Marketing Compared to Other Teams

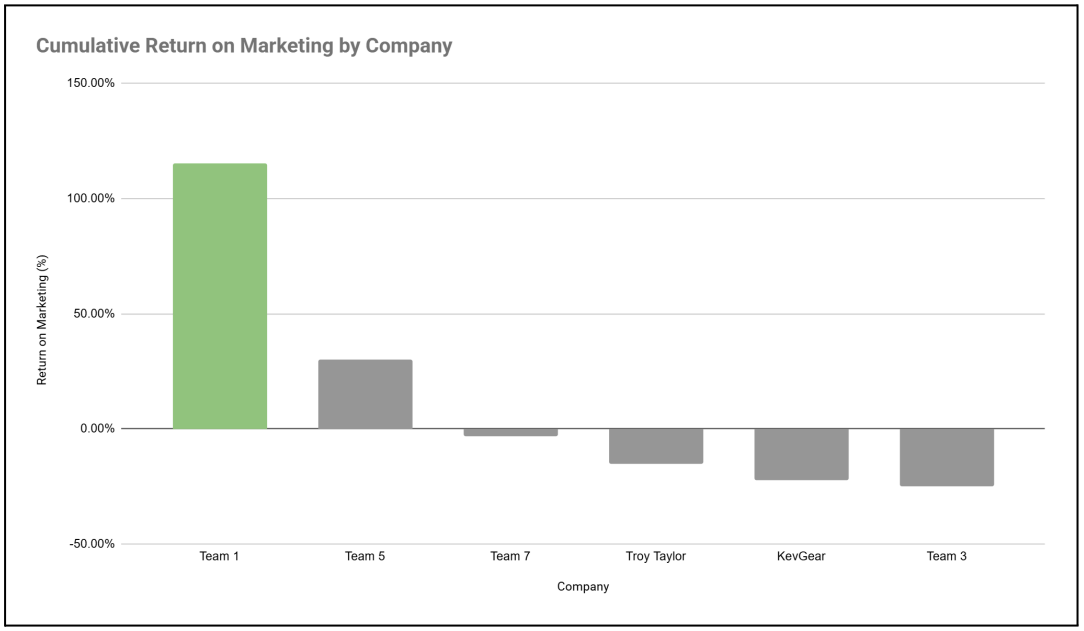

Figure 4: Backpack Market Segment Attractiveness Analytics

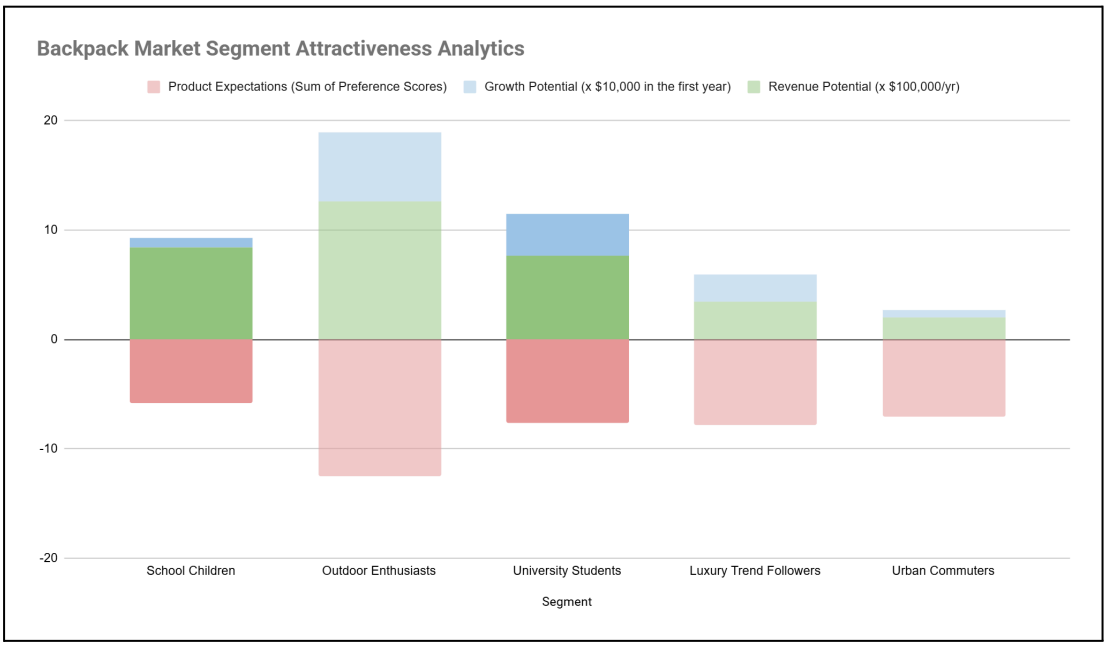

Figure 5: Total Reach by Distribution Channel

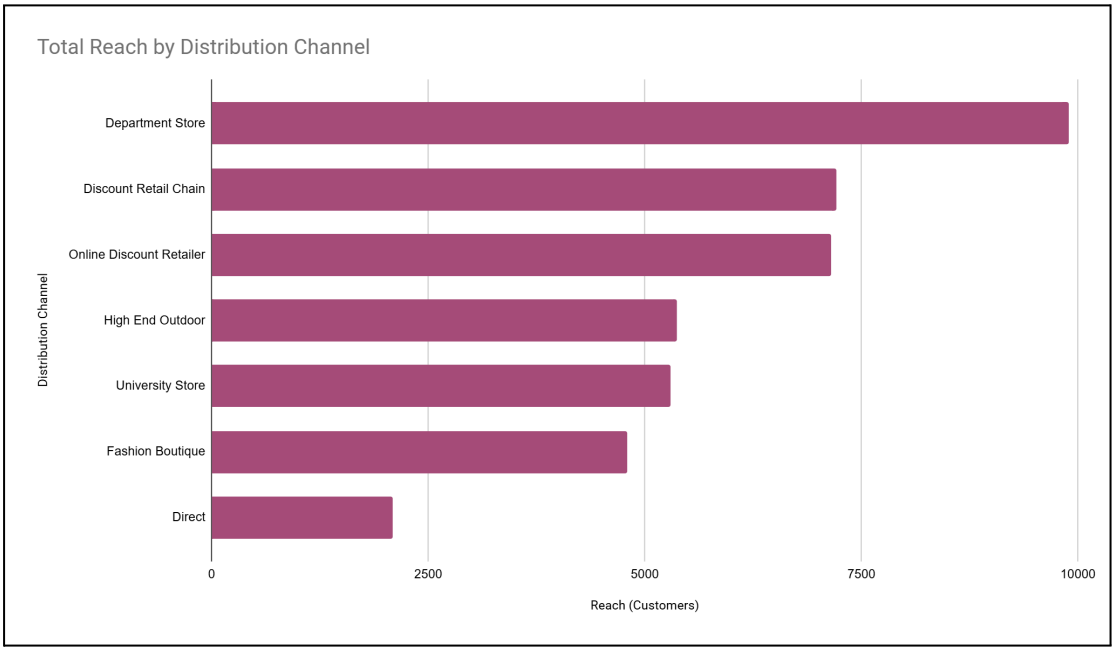

Figure 6: Backpack Configuration Value Scores

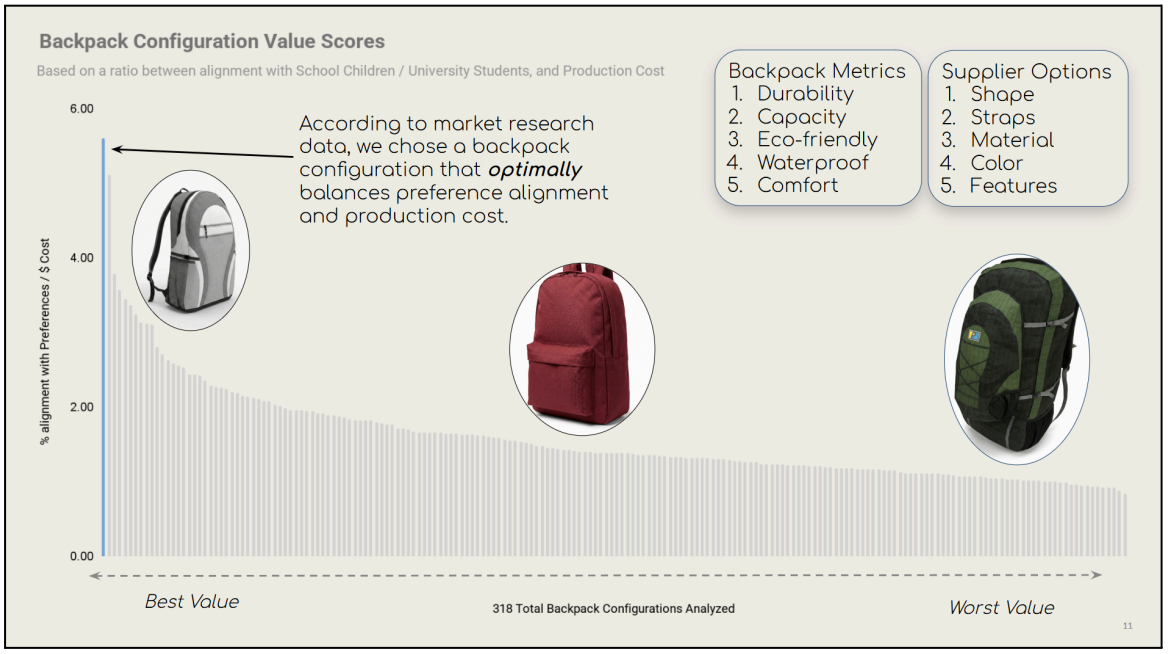

Figure 7: Units Sold Compared with Net Profit during the Simulation

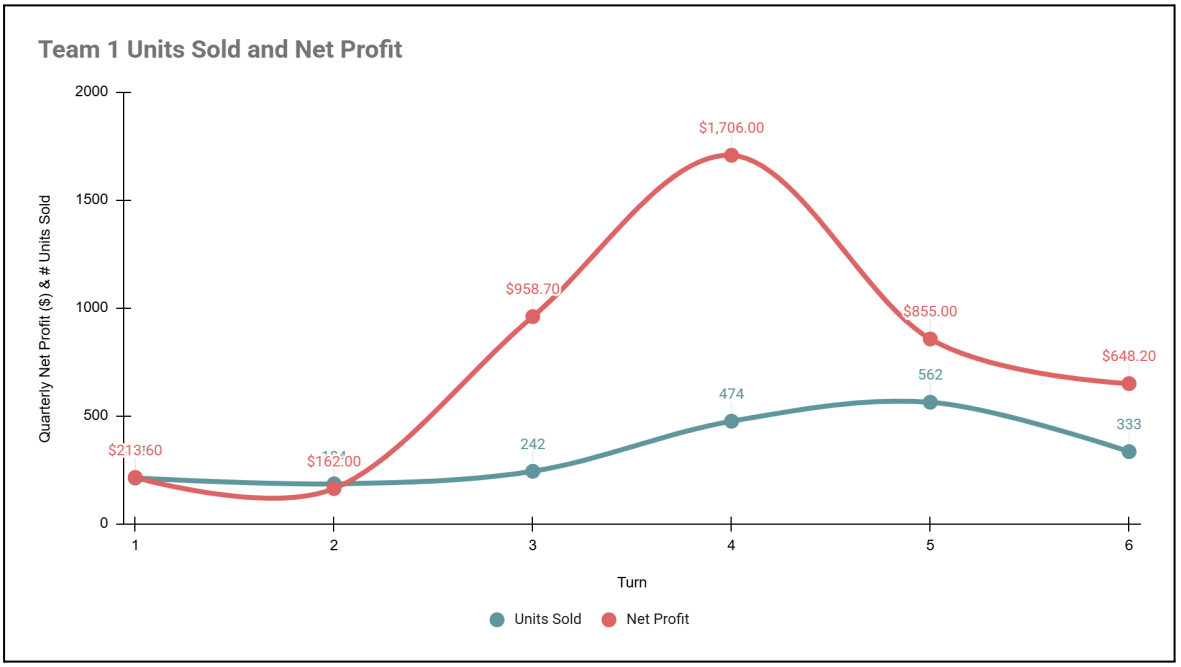

Figure 8: Product Price and Cost during the Simulation

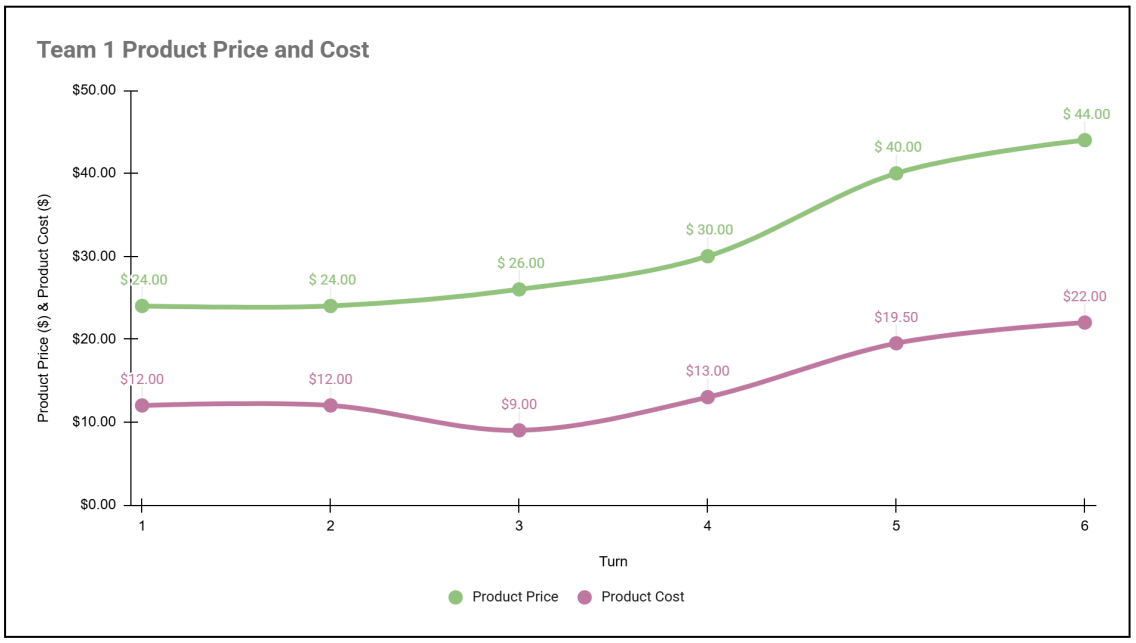

Figure 9: Cumulative Simulation Market Share by Segment

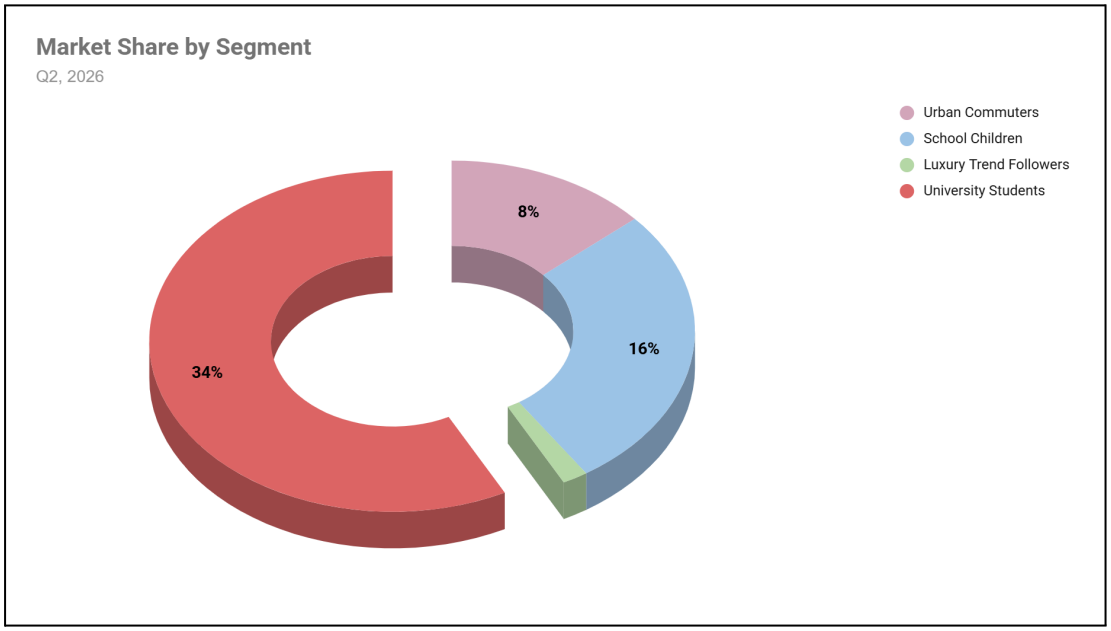

Figure 10: Promotion Channel Choice - Phase 1

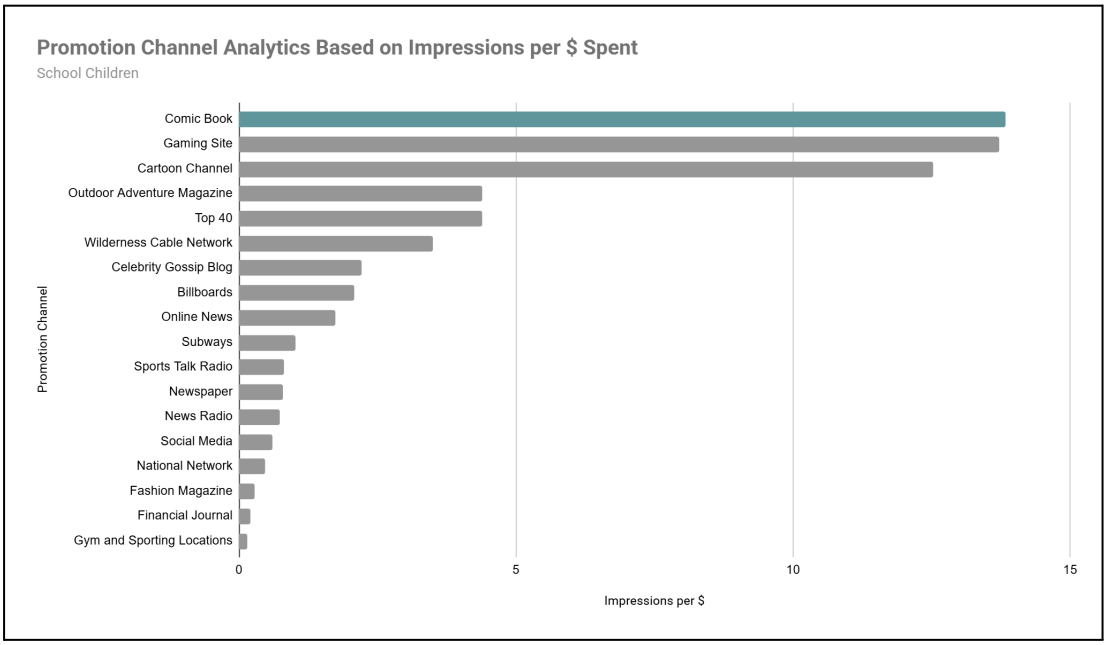

Figure 11: Promotion Channel Choice - Phase 2

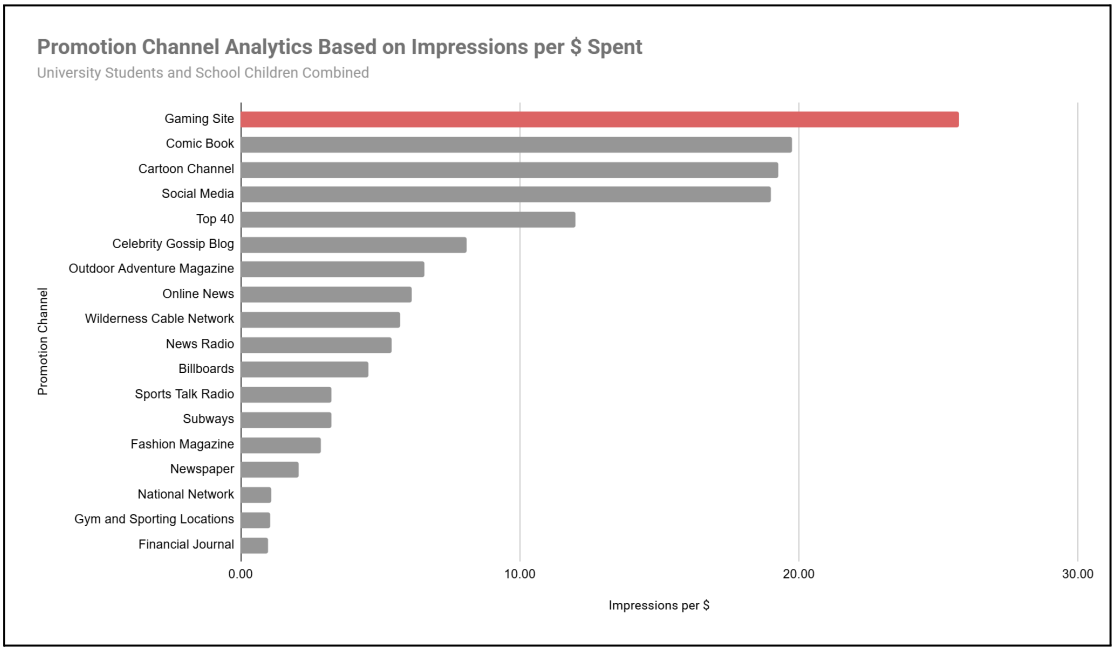

Image 1 and 2: Chosen Backpack Visualizations

*Generated by Google Gemini AI

Exhibit 1: Simulation Decisions by Turn

1	replaces Thin Spaghetti straps with Basic
1	replaces Basic straps with Wide + Chest
1	replaces Wide + Chest straps with Thin Spaghetti
1	replaces Thin Spaghetti straps with Basic
1	replaces Basic straps with Wide Padded
1	replaces Wide Padded straps with Thin Spaghetti
1	changes to Synthetic
1	adopts the Rounded Top model
1	added a distribution deal with Department Store
1	added a distribution deal with Discount Retail Chain
1	added a distribution deal with Online Discount Retailer
1	recolors their backpack Red
1	replaces Thin Spaghetti straps with Wide Padded
1	added Great Value to its messages
1	increases price from 0.00 to 24.00
1	has targeted the segment School Children
3	added Comic Book at frequency 1x to its advertising platform
3	replaces Wide Padded straps with Thin Spaghetti
3	replaces Wide Padded straps with Basic
3	replaces Wide Padded straps with Basic
3	adds a Water Bottle
3	increases price from 24.00 to 26.00
4	changes to Eco-Friendly -> cost of production increases
4	increases price from 26.00 to 30.00

4	added a distribution deal with University Store
4	added Gaming Site at frequency 1x to its advertising platform
4	removed Comic Book from its advertising platform
5	has targeted the segment University Students
5	increases price from 30.00 to 40.00
5	changed advertising frequency to 2x for Gaming Site
5	adds a University Logo
5	replaces Basic straps with Thin Spaghetti
5	recolors their backpack Black
6	removes the University Logo
6	adds a Laptop Sleeve
6	increases price from 40.00 to 44.00