A HARVARD BUSINESS SCHOOL CASE STUDY ON DIRECT-TO-CONSUMER MARKETING ANALYTICS

Evaluating Customer Acquisition, Retention, and Media Strategies Using Marketing Analytics Insights

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Research Question 1:

Evaluate Hubble's current business model. Would you invest in their current Fundraising round? Why or why not?

Business Model Overview
Hubble operates a direct-to-consumer(DTC)subscription model, offering daily disposable contact lenses at **$30/month plus $3 shipping**. Customers get a convenient, affordable alternative to premium lenses. Hubble simplifies operations, reduces inventory complexity, and streamlines fulfilment by focusing only on **spherical lenses(–0.50 to –12.0)**.
The model appeals to social-media first, budget-conscious millennials: **90% of traffic comes from smartphones**, and **52%** discover Hubble via Facebook or Instagram. Customer response has been strong, with an **NPS of 60**% and **77%** intent to repurchase. Notably, **90% of the reorders are after the free trial**, and the average subscriber stays for **8 months/year**.

Investing Strategy
We would invest in Hubble's current round. The founding team combines analytical skills and a data-driven mindset. The company shows traction in **customer growth**, **monthly revenue and annual revenue[Figure1.1]**. We are particularly impressed by Hubble's brand positioning. It cracked the price-sensitive digital segment with affordable pricing, a bold visual identity, and a seamless mobile experience. Product quality resonates. Customers report consistent satisfaction with ease of use, comfort, and design. The U.S. contact lens market is **$4B in US**. Hubble has already reached **14%** of the market online. With strong brand awareness, we see expansion potential into **traditional retail**, which still serves **86%** of consumers. Media results support this: **prospecting CPA is $38**, **retargeting CPA is $3**, with **63% conversion**.

Conditions upon our investment
Despite its momentum, there are risks we must weigh carefully. The average customer lifetime value is $264(for 8 months) of subscription. A gross margin of 40% results in about $105 in gross -profit per customer, leaving limited room for error when acquisition costs rise.

We are also cautious about Hubble's heavy dependence on Facebook for customer acquisition. The attribution model is opaque, performance is difficult to trace precisely, and rising CPMs could erode efficiency. While Hubble currently targets 59% of the daily market, its limited product portfolio (excluding Toric, multifocal lenses) restricts its ability to tap into the remaining market segments. This product constraint could hinder growth unless the SKU range is expanded. Additionally, the company is **not yet cash-flow positive**, so careful capital deployment is critical.

Research Question 2:

How efficiently does Hubble acquire and retain customers? What do they do well, and what needs improvement?

Hubble's customer acquisition has been highly effective. Within 18 months, it reached $20 million in annual revenue, customer growth, and monthly revenue**[Figure 1.1]**. The company leverages a low-friction, risk-free trial model, leading to 90% of users placing a first order post-trial. Early engagement is strong with an average retention of 8-months and a churn rate of just 4%. Its data-driven marketing, primarily through Facebook and Instagram (61% of media spend),reflects disciplined execution. Prospecting CPA stands at $77.81, and retargeting CPA at $38.06. Hubble has begun diversifying across Google Ads, podcasts, TV, and direct mail to scale. Notably, an A/B TV campaign yielded a 12.5% lift in acquisition, showcasing maturity in cross-channel experimentation.

Area of Improvement
Despite this, overreliance on Facebook poses a growing challenge. Despite creative niche targeting, rising CPMs and audience fatigue have led to higher acquisition costs and reduced efficiency. This platform dependency raises sustainability risks.
Moreover, while initial retention is strong, retargeting campaign is not effective(high CAC). The business remains acquisition-heavy with limited post-purchase engagement. Regulatory concerns and critiques around lens quality(Dk/t = 18 vs. >24 preferred)may further affect retention. To sustain growth, Hubble must reduce platform dependency, enhance retention via segmentation and personalization, and expand SKUs to meet evolving customer needs.

Research Question 3:

Assess how Hubble has used owned, earned, and paid media. What needs to change as the company scales?

Hubble used three media types: owned (like websites), earned (like reviews), and paid (like ads). Hubble relies heavily on paid media, with some use of owned and earned media to support growth.

Owned Media has helped Hubble to drive acquisition and retention. Its mobile-first website where **90% of visits and 70% of sales occur, sits** and **70% of sales** occur—delivers a streamlined, mobile-optimized experience tailored to millennials. The site features clear calls to action and a simple subscription model, making it a high-conversion storefront. Hubble's distinctive packaging reinforces its lifestyle appeal and encourages social sharing. CRM tools support personalized communication, including subscription confirmations, shipping updates, and re-engagement prompts. To further reduce churn, Hubble could expand its owned assets with an educational blog, SMS reminders, or a mobile app to strengthen brand engagement between purchases.

Earned Media Hubble's earned media presence has been modest. While it received coverage in outlets like *The New York Times Magazine*, *Vogue*, and *Forbes*, consumer-driven brand awareness remains limited. However, with a NPS(**Net Promoter Score) of 60** and **77% repurchase intent**, Hubble enjoys intense customer satisfaction an ideal foundation for expanding **referral programs**, **user-generated content(UGC)**, and **social proof** initiatives. Its core audience-socially active, urban millennial women is well suited to drive organic visibility through testimonials, reviews, and sharing. Hubble can further activate this segment through **micro-influencer partnerships** and **community-driven campaigns**.

Paid Media has been the engine of Hubble's growth. Initially, over 95% of customers came through Facebook, with a prospecting CPA of $77.81 and retargeting CPA of $38.06. The team ran disciplined A/B tests, audience segmentation, and retargeting campaigns. Hubble expanded into Instagram, Google Ads, Snapchat, Pinterest, podcasts, radio, TV, and direct mail as it scaled. TV A/B test led to a 12.5% lift in acquisition in treated markets, reflecting maturity in integrating offline media. Still, Facebook dependency introduces risk rising CPMs, attribution ambiguity, and audience fatigue are driving inefficiency, even with niche targeting.

Recommendations and Strategic Outlook
Reducing reliance on Facebook is critical to manage rising costs and regain control over acquisition efficiency. Increased investment in owned media through lifecycle email flows, loyalty programs, and digital tools through lifecycle email flows, loyalty programs, and digital tool-scan deepen engagement and reduce churn. Similarly, expanding earned media via referral incentives, UGC-campaigns, and influencer collaborations will build authentic advocacy at a lower cost. Lastly, adopting advanced attribution models, such as multi-touch attribution and media mix modelling, will clarify channel performance and inform more intelligent budget allocation.

Research Question 3:

What is the role of offline and online advertising in acquiring Hubble customers?

Hubble’s customer acquisition initially relied heavily on online advertising, particularly performance-driven campaigns on Facebook and Instagram, which comprised **61% of media spend** as of April 2018**[Figure 1.3].** These channels enabled rapid scaling, supported by a **$3 trial offer** and mobile-optimized landing pages. Retargeting was especially effective, with a **CPA of $38** and **a 0.63% conversion rate**, compared to **$78 and 0.02%** for prospecting. Hubble spent **$1.5M/month** on digital media, with an estimated **CAC of $100**, acquiring tens of thousands of customers and reaching **$20M in first-year revenue**.

As online efficiency declined due to rising CPMs and audience fatigue, Hubble tested offline advertising, including a **$1M TV-campaign**. Results were promising: **12.5% lift in acquisition** in treated markets and a **25% increase in Facebook conversions** during a World Series ad, showing a halo effect. Diversifying into TV and podcasts helped build top-of-funnel awareness, which online channels alone could not sustain.

These channels formed a multi-step funnel: offline ads-built awareness, online prospecting introduced the offer, and retargeting closed the sale. However, heavy Facebook reliance creates volatility. To scale, Hubble must adopt a blended strategy—balancing offline reach, online efficiency, and retention

References

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Appendix

Exhibit 1 Hubble's Key Performance Indicators, March 2018

Metrics	**Year-over-Year Growth**
Cumulative Number of Customers	14x
Number of Orders	7x
Monthly Revenue	10x
Revenue Run-Rate	10x
Gross Margin	+2 percentage points

Source: Casewriters, adapted from company documents.

Figure 1.1 Hubble's Key Performance Indicator

	Sales in the Period before Advertising (Acquisitions per 1,000 Customers)	Sales in the Period after Advertising (Acquisitions per 1,000 Customers)
Treated Markets	0.036	0.054
Control Markets	0.032	0.044
Difference (Treatment minus Control)	0.004	0.010

Source: Casewriters, with disguised figures based on company documents.

Note: The interpretation is that the ads added 0.006 more acquisition per 1,000 customers in the treated market than what we would expect without ads. This means we would have expected to see 0.044 + 0.004 = 0.048 sales, but we see 0.054. Comparing these figures, the lift in sales in the treated market due to advertising is 12.5%.

Figure 1.2 Comparison between TV Advertising Media and Control Market

Media	Allocation
Facebook / Instagram	61%
TV	12%
Google/ Bing Search	10%
Podcasts	6%
Pinterest	5%
Radio	2%
Mailers	2%
Snapchat	1%
Google Display	1%

Figure 1.3 Media Budget Allocation across channel

	Prospecting Campaign	Retargeting Campaign
Spend	$100,000	$100,000
Impressions	6,425,703	417,084
Clicks	98,313	21,986
Customers Who Initiate Checkout	5,141	3,153
Customers Who Complete Purchase	1,285	2,628
CPM—Cost per Thousand	$15.56	$239.76
CPC—Cost per Click	$1.02	$4.55
CPA—Cost per Completed Purchase	$77.81	$38.06
CTR—Click Through Rate	1.53%	5.27%
Conversion to Purchase Rate	0.02%	0.63%

Source: Casewriters.

Note: The figures in this Exhibit were disguised by the casewriters to protect the confidentiality of the company. Assume that the campaigns lasted one full month, April 1–April 30, 2018. The prospecting campaign targeted new users; the retargeting campaign targeted those who had seen Hubble's ad impressions before, some of whom engaged with the ads previously but did not complete a purchase.

Figure 1.4 Result from Facebook Campaigns