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Investment Framework - Using Retention, Margin and Acquisition Cost to Optimize Investment Allocation for Subscription Businesses

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Abstract

This paper presents an Investment Framework designed to optimize paid growth initiatives in digital subscription businesses. Built on data-driven decision-making, rigorous performance analysis, and structured methodologies, the framework systematically aligns budget allocation with strategic goals. It addresses the complexities faced by global businesses, such as varying acquisition costs, retention profiles, and profit margins across products, markets, and platforms. Through a five-step process, it enables organizations to prioritize high-impact opportunities, integrate strategic flexibility, and operationalize investments effectively. The framework has demonstrated the potential to deliver measurable improvements in marketing efficiency, including significant incremental margins and ROI across key acquisition channels. Its adaptability makes it a valuable tool for businesses navigating the competitive landscape of digital ecosystems, fostering both immediate results and long-term growth. Future research areas, including machine learning integration and cross-channel attribution, are also highlighted to ensure its continued relevance in evolving markets.

Keywords: Digital Subscription, Investment Framework, Budget Optimization, Marketing ROI, Data-Driven Decision-Making, Incrementality, Paid Growth, Customer Acquisition, Strategic Overrides, Operational Efficiency

Introduction

In the highly competitive landscape of digital subscriptions, effective budget allocation for paid growth initiatives is critical to achieving sustainable growth. Businesses in this domain face the challenge of balancing growth with profitability, necessitating the development of robust frameworks for investment. Moreover, global companies often face significant complexity in decision-making due to a growing number of products, plans, SKUs, markets, and billing platforms. Each permutation has different acquisition cost, different retention profile, and different margins, making a perfect optimization near impossible without a rigorous data-driven framework. Additionally, there is often a lack of alignment across the organization on what we should be optimizing for, and how we should actually allocate the investment. This investment framework ensures that every dollar spent maximizes value, aligning investments with strategic priorities and long-term goals. It is also a mechanism that teams can use to get the company aligned behind the goals and approach for the investment. This paper delves into the components of this framework, illustrating its application through case studies and highlighting its impact on key business metrics.

Methodology

The Investment Framework follows a five-step process to systematically optimize investments. While it was developed for consumer subscription businesses, it can easily be applied for B2B SaaS companies and companies without a recurring revenue model with a few tweaks.

The five steps are:

Step 1: Align on a North Star Metric

The first step is to design a primary metric that reflects the business's overarching goals. For a business where the primary objective is to maximize margins, the north star metric for the Investment Framework can account for input metrics like incremental Paid Subscriber Acquisition Cost (pSAC) – cost to acquire an incremental paid subscriber, Paid Member Months (PMM) that captures retention, and Monthly Margin, which captures profitability. Multiplying PMM and Monthly Margin results in Lifetime Value (LTV). The composite north star metric can then be stated as LTV/pSAC, or "LoP" as a shorthand. These metrics allow for granular analysis of how efficiently users are acquired and retained, providing a foundation for evaluating marketing effectiveness. Alignment on such metrics enables cross-functional teams to maintain a unified vision. This ensures that efforts across marketing, product, and operations are cohesively directed toward the same objectives. Figure 1 illustrates visually how such a north star metric can be constructed.

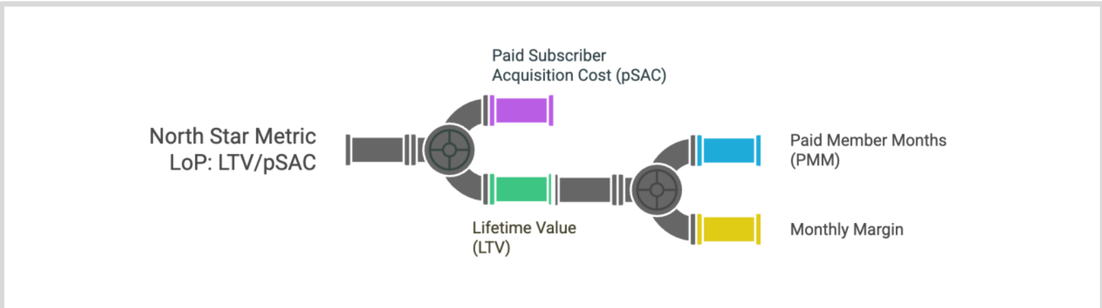

Figure 1: Designing a north star metric to optimize investments

Step 2: Allocate Budgets Using Quantitative Optimization

Next, budgets are quantitatively distributed in three steps. Step A involves estimating the maximum investment possible for each opportunity based on an ROI hurdle rate typically aligned with Finance. More mature companies might establish a higher hurdle rate while nascent companies entering their growth phase may choose to be comfortable with a breakeven or even slightly negative ROI. For example, for paid marketing (Google ads, Meta ads, etc.), one can estimate the max opportunity for a specific product-SKU-plan-market permutation by plotting the relevant spend efficiency curve with marginal ROI on the y-axis and cumulative investment on the x-axis, and cutting off spend once the curve hits the ROI hurdle rate. This step needs to be completed for all channels and all product-SKU-plan-market permutations. Figure 2 illustrates such a curve.

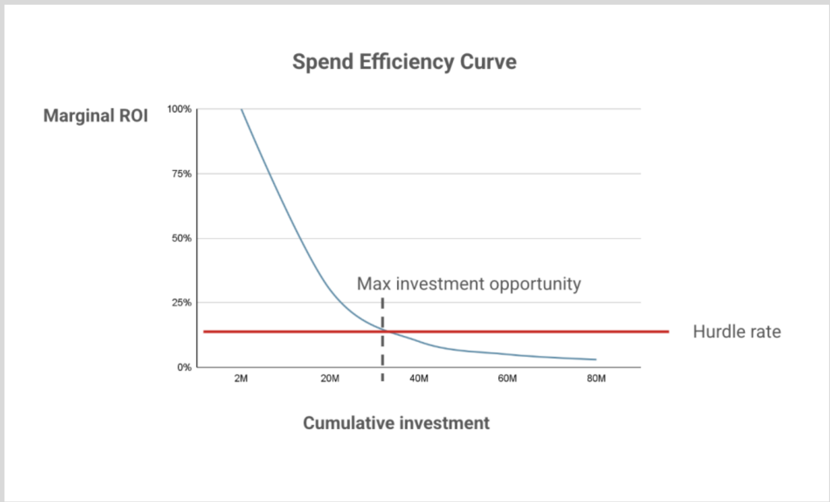

Figure 2: Calculating the maximum investable opportunity through a spend efficiency curve

In Step B, the final budgets are decided for each channel. In Step C, the budgets are allocated through a waterfall approach, i.e., from highest LoP to lowest LoP calculated via quantitative modeling. This is illustrated in Figure 3.

B	C	D	I	AA	AB	AC
Region	Country	SKU	Channel	Investment Level	LoP (LTV/pSAC)	PoP (PMM/pSAC)
AMER	BR	Premium	Google SEM - BKWS	$59,609	1.82	9.32
APAC	TH	Premium	VAC Mobile	$234,530	5.46	9.14
EMEA	TR	Premium	VAC Mobile	$151,474	2.13	6.62
AMER	AR	Premium	Google SEM - BKWS	$103,367	2.55	5.82
EMEA	TR	Music	Google SEM - BKWS	$4,373	1.22	5.64
EMEA	TR	Premium	VAC Mobile	$151,474	1.76	5.47
EMEA	HU	Premium	VAC Mobile	$79,007	1.22	4.99
EMEA	HU	Premium	Google SEM - BKWS	$9,727	1.22	4.93
EMEA	PL	Premium	VAC Mobile	$114,970	2.20	4.67
EMEA	TR	Premium	DV360 AdX	$110,200	1.68	4.53
EMEA	TR	Premium	VAC Mobile	$151,474	1.45	4.50

Figure 3: Waterfalling your budget from the highest to lowest LoP

Investments in all typical paid channels such as direct response (DR), partnerships, and offers/incentives can be allocated with this approach.

Note: While we recommend using incrementality to measure incremental pSAC, measured via Market-Mix-Modeling (MMM) or Conversion Lift Studies (CLS), readers may decide to use attribution instead. This is a strategic decision that can be made based on the level of sophistication that exists or is desired within the company.

Step 3: Apply Strategic Overrides

While data-driven insights guide the majority of investments, strategic considerations are also integrated. For example, the framework accounts for long-term growth opportunities or market-specific nuances that may not be immediately reflected in quantitative models. Strategic overrides ensure alignment with broader business objectives, allowing flexibility to invest in high-potential but uncertain initiatives. This approach enables businesses to remain agile, responding to emerging trends or competitive pressures with calculated risks that may yield significant future benefits.

Step 4: Operationalize Investments

Once budgets are allocated, the next step involves operationalizing these investments. This is no small feat and involves aligning several teams such as Paid Media, Media Agency, Finance, Partnerships, Data Science, Marketing Analytics, and Growth. This is a critical step to ensure results are achieved at the end of this exercise. This includes implementing channel-specific strategies and managing operational workflows. For example, in the case of paid media, we need to get the max investable amount for each opportunity combination likely from the agency (Step 1A) and then communicate the final granular budget allocation back to the agency. As the agency kicks off the quarter/year, they need to ensure they are tracking and not exceeding the allocated budget and not under-investing either. Furthermore, as the market opportunity and internal metrics change, these allocations need to be revised. Investing appropriately in the right process and tools is absolutely imperative to achieving success. For the Partnerships channel, on the other hand, the decision-making is not as frequent. The right metrics can be incorporated into deal calculators to guide future decision-making. By establishing clear processes and accountability, businesses can minimize inefficiencies and accelerate the time-to-market for new initiatives.

Step 5: Monitor Performance and Iterate on Methodology

Consistently monitoring campaign performance is essential for identifying areas for improvement. Key metrics are tracked against targets, and regular performance reviews are conducted to recalibrate investments. The framework's iterative nature enables the incorporation of new data and insights, ensuring ongoing refinement of methodologies. Businesses that embrace this iterative approach are better positioned to adapt to market dynamics and leverage real-time insights to optimize outcomes.

Results

The Investment Framework's application has driven measurable improvements in marketing efficiency across a range of digital subscription businesses. Cumulatively, it demonstrated the potential to deliver nearly $30M in incremental margins within its first year of implementation. This success was evident across key acquisition channels:

- **Direct Response (DR):** DR campaigns prioritized lower-cost markets, resulting in significant increases in paid subscriber growth while maintaining profitability thresholds. Leveraging innovations like automated bidding and dynamic creative extensions further amplified efficiency.

- **Offers:** By applying structured incentives, such as multi-month discounts and targeted early-bird offers, the framework delivered measurable improvements in ROI and customer acquisition outcomes.
- **Partnerships:** Strategic collaborations were rigorously evaluated to align with profitability and long-term organizational goals. Investments with minimal strategic value were reallocated, ensuring optimal resource utilization across the partnership portfolio.

Discussion

The framework's versatility is evident in its applications, such as the launch of new product offerings or new channels. Similarly, global expansion strategies have been optimized through market-specific adaptations, allowing for effective investment in emerging markets. Additionally, the framework, through the mechanism of aligning everyone on a north star metric, is also able to adapt to changing business priorities, as was seen when one company changed their primary objective from margins to paid subscriber growth. By incorporating insights from diverse markets and tailoring approaches accordingly, the framework has demonstrated its ability to address a wide range of business challenges. Furthermore, its adaptability highlights the importance of combining robust analytics with strategic foresight to navigate complex ecosystems effectively.

Another key strength of the framework is its ability to bridge short-term performance goals with long-term strategic objectives. By integrating quantitative optimization with strategic overrides, businesses can maintain a balance between immediate results and sustained growth. This balance is crucial in competitive industries where agility and foresight often determine success.

Conclusion

The Investment Framework exemplifies the power of data-driven decision-making in subscription-based businesses. While it was developed in the marketing organization, it incorporates principles from across various functions such as banking and consulting. Its evolution reflects a commitment to refining strategies in response to market complexities and emerging technologies. By integrating metrics such as pSAC, LTV, and incrementality, the framework ensures that investments are not only efficient but also aligned with strategic goals.

As businesses in the subscription space continue to grow, this framework provides a scalable model for addressing future challenges. These principles can act as a blueprint for organizations aiming to navigate the complexities of digital ecosystems while maximizing ROI. In conclusion, the Investment Framework is not merely a tool for resource allocation but a comprehensive approach to driving growth in a systematic, sustainable manner. Its ability to adapt to various contexts and deliver measurable results underscores its value.

Future Research

Future research could explore the following themes:

- **Machine Learning Integration:** Enhance predictive capabilities by leveraging machine learning to automate the identification of high-impact opportunities and optimize budget allocation in real time.
- **Dynamic Personalization:** Implement advanced segmentation models to tailor offers, messaging, and creative assets based on user behavior and demographics, improving conversion rates and retention.
- **Application to Emerging Models:** Expand the framework to support freemium and hybrid monetization strategies, addressing complexities in measuring LTV and incrementality.
- **Cross-Channel Attribution:** Develop sophisticated multi-touch attribution models to account for fragmented

These advancements will ensure the framework remains effective and relevant in navigating the complexities of the digital subscription landscape.

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