Unit Economics of a Blockchain Game/Web3 LifeStyle App

Step-by-Step Unit Economics Calculation for STEPN

1. Customer Acquisition Cost (CAC):
   - Current CAC: $1800 per user per year.
   - Expected CAC Reduction: With GST correction, CAC might reduce, but we'll use the current value for calculation.
2. Revenue Components:
   - Obligatory Shoe Price: $1000 per user.
   - Marketplace Fees: $200 per user.
   - Deflationary Sinks (e.g., leveling up, minting new Sneakers): $400 per user.
   - Ad Revenue: $250 per user.
3. Total Revenue per User:
   - Total Revenue = Obligatory Shoe Price + Marketplace Fees + Deflationary Sinks + Ad Revenue
   - Total Revenue = $1000 + $200 + $400 + $250 = $1850 per user.

Detailed Breakdown

1. Customer Acquisition Cost (CAC):

   - The cost associated with acquiring one user is currently $1800. This includes marketing, onboarding, and other related expenses to attract and retain a user for one year.

2. Revenue from Obligatory Shoe Price:

   - Each user is required to purchase an NFT Sneaker, which costs $1000.
   - Revenue per user from shoe price: $1000.

3. Revenue from Marketplace Fees:

   - Users engage in buying, selling, or leasing NFTs on the marketplace.
   - Average marketplace fees per user: $200.

4. Revenue from Deflationary Sinks:

   - Users spend GST to level up and mint new Sneakers.
   - Average revenue from deflationary sinks per user: $400.

5. Revenue from Ad Revenue:

   - The platform generates ad revenue from user activity.

- Average ad revenue per user: $250.

Total Revenue Calculation:

- Total Revenue per User: $1850.

Comparison of CAC and Total Revenue:

- Current CAC: $1800.
- Total Revenue per User: $1850.

Conclusion:

- Net Revenue per User:
- Net Revenue = Total Revenue - CAC
- Net Revenue = $1850 - $1800 = $50 per user.

Key Points:

- The current unit economics are slightly positive, with a net revenue of $50 per user.
- Sustainability Considerations:
- Cost Efficiency: As STEPN scales and optimizes its marketing and acquisition strategies, the CAC is expected to decrease.
- Revenue Growth: Enhancing in-app engagement and expanding revenue streams (like additional in-app purchases, partnerships) could improve average revenue per user.
- User Retention: Improving user experience and introducing new features can help in retaining users longer, potentially lowering CAC and increasing lifetime value.

LTV/CAC Ratio:

1. Customer Acquisition Cost (CAC):

CAC is the cost to acquire a single customer. It includes all marketing, sales, and onboarding expenses. For STEPN, this is given as $1800.

2. Lifetime Value (LTV):

LTV is the total revenue a customer is expected to generate over their lifetime as a customer. It is calculated by multiplying the average revenue per user (ARPU) by the average customer lifespan.

Key Components for LTV Calculation:

- Average Revenue Per User (ARPU): The average amount of money a customer generates in a year.
- Average Customer Lifespan: The average duration (in years) a customer remains active and generates revenue for the company.

Given Data:

- Obligatory Shoe Price: $1000
- Marketplace Fees: $200
- Deflationary Sinks: $400
- Ad Revenue: $250

Total Annual Revenue per User (ARPU):
ARPU = $1000 + $200 + $400 + $250 = $1850

Estimating Average Customer Lifespan:

Since STEPN is in the Beta phase, estimating the average customer lifespan can be challenging. However, for the sake of this calculation, let's assume an average customer remains active for 2 years.

Calculating LTV:

LTV = ARPU x Average Customer Lifespan
LTV} =$1850 x 2 = $3700

Calculating LTV/CAC Ratio:

LTV/CAC Ratio = $3700/$1800 = approx 2.06

Detailed Breakdown:

1. Customer Acquisition Cost (CAC): $1800
2. Average Revenue Per User (ARPU): $1850 per year
3. Average Customer Lifespan: 2 years
4. Lifetime Value (LTV): $3700

LTV/CAC Ratio:
LTV/CAC Ratio = 2.06

Conclusion:

A LTV/CAC ratio of 2.06 indicates that for every dollar spent on acquiring a customer, STEPN is expected to generate approximately $2.06 in revenue over the customer's lifetime. This ratio is a good indicator of the business's ability to sustainably acquire customers and generate value.

Considerations for Improvement:

- Reducing CAC: Through more efficient marketing strategies, partnerships, and organic growth.
- Increasing ARPU: By introducing new features, additional in-app purchases, and premium services.
- Extending Customer Lifespan: By enhancing user engagement, improving customer support, and fostering a strong community.

By focusing on these areas, STEPN can improve its LTV/CAC ratio, ensuring long-term sustainability and growth.