**Business Manager App**

**Project Brief:**

Lack of innovation is the biggest cause of failure in startups. Do not copy, always try to research customers money making model not your money making model.

**There are 10 important business concepts you must master before starting a business:**

**1. Innovation**

**2. Cashflow**

**3. Margin**

**4. Manpower**

**5. Scalability**

**6. Single Signal**

**7. Laggard**

**8. Competitor**

**9. Feedback**

**10. Echo-system**

**Innovation:**

You solve a problem that a customer can not solve himself.

There are following terms to investigate customers money making model before starting a business: -

**1. Profitability:** Profitability refers to a company's ability to generate profits from its operations. It is typically measured by metrics such as

net income,

gross profit margin, or

return on investment (ROI).

Example: A fictional company, XYZ Electronics, generated $10 million in revenue and had $8 million in expenses in a particular year. As a result, their net income (profit) for the year was $2 million, indicating a profitable operation.

**2. Liquidity:** Liquidity measures a company's ability to meet its short-term financial obligations. It assesses the availability of cash or assets that can be quickly converted into cash.

Example: ABC Manufacturing has $500,000 in cash, $200,000 in marketable securities, and $1 million in accounts receivable. They also have short-term liabilities (such as accounts payable and short-term loans) totaling $800,000. With a total liquidity of $1.7 million and short-term liabilities of $800,000, they have sufficient liquidity to cover their obligations.

**3. Growth:** Growth refers to the increase in a company's revenue, customer base, market share, or other key metrics over time. It is an important indicator of a company's success and potential.

Example: XYZ Retail experienced a revenue growth rate of 15% over the past year. Their revenue increased from $5 million to $5.75 million, demonstrating healthy growth in their business.

**4. Productivity:** Productivity measures how efficiently a company utilizes its resources to generate outputs or deliver its products/services. It can be assessed by metrics such as **revenue per employee or units produced per hour**.

Example: XYZ Manufacturing produced 10,000 units of their product in a month, with a workforce of 100 employees. This translates to a productivity rate of 100 units per employee per month.

**5. Gross Margin:** Gross margin indicates the profitability of a company's core operations by measuring the difference between revenue and the cost of goods sold (COGS). It is expressed as a percentage.

Example: ABC Retail sold goods worth $500,000 during a period, and the COGS for those goods amounted to $300,000. The gross margin is calculated as ($500,000 - $300,000) / $500,000 \* 100 = 40%.

**6. Revenue:** Revenue represents the total income generated by a company from its primary business activities, such as sales of products or services.

Example: XYZ Software Company generated $1.5 million in revenue in the first quarter of the year, primarily from software license sales and service subscriptions.

**7. Inventory Turnover:** Inventory turnover measures how quickly a company sells its inventory within a given period. It helps assess the efficiency of inventory management.

Example: ABC Wholesale had an average inventory value of $500,000 in a year and their cost of goods sold (COGS) was $2 million. The inventory turnover ratio is calculated as $2 million / $500,000 = 4. This implies that they sold and replaced their inventory four times during the year.

**8. Cash Flow:** Cash flow represents the movement of cash in and out of a company over a specific period. It shows the company's ability to generate and manage cash.

Example: XYZ Restaurant had cash inflows of $50,000 from sales and other sources, while their cash outflows, including operating expenses, rent, and salaries, amounted to $40,000. Their net cash flow for the period is $10,000.

**9. Brand Equity:** Brand equity refers to the value and perception associated with a brand. It encompasses factors like brand recognition, customer loyalty, and brand reputation.

Example: ABC Beverage Company has built a strong brand equity over the years, with high brand recognition, loyal customers, and a positive reputation for quality and innovation. This brand equity contributes to increased sales and customer preference.

**10. Customer Acquisition and Retention:** Customer acquisition focuses on attracting new customers to the business, while customer retention focuses on keeping existing customers satisfied and engaged.

Example: XYZ E-commerce implemented marketing campaigns that resulted in 10,000 new customers during a promotional period. Additionally, they achieved a customer retention rate of 80%, indicating that 80% of their existing customers continued to make purchases.

**11. Speed of Transaction:** Speed of transaction measures how quickly a company can process a transaction or complete a sale, often crucial in customer satisfaction and operational efficiency.

Example: ABC Bank introduced a new online banking system that reduced the average transaction time from 10 minutes to 2 minutes, significantly improving the speed of customer transactions.

**Write a python app to calculate customers money making model.**

Customer\_money\_making\_model.py

# Profitability

revenue = 10000000

expenses = 8000000

net\_income = revenue - expenses

print("Net Income:", net\_income)

# Liquidity

cash = 500000

marketable\_securities = 200000

accounts\_receivable = 1000000

short\_term\_liabilities = 800000

total\_liquidity = cash + marketable\_securities + accounts\_receivable

has\_sufficient\_liquidity = total\_liquidity >= short\_term\_liabilities

print("Has Sufficient Liquidity:", has\_sufficient\_liquidity)

# Growth

previous\_revenue = 5000000

current\_revenue = 5750000

growth\_rate = (current\_revenue - previous\_revenue) / previous\_revenue \* 100

print("Growth Rate:", growth\_rate)

# Productivity

units\_produced = 10000

num\_employees = 100

productivity\_rate = units\_produced / num\_employees

print("Productivity Rate:", productivity\_rate)

# Gross Margin

revenue = 500000

cost\_of\_goods\_sold = 300000

gross\_margin = (revenue - cost\_of\_goods\_sold) / revenue \* 100

print("Gross Margin:", gross\_margin)

# Inventory Turnover

cost\_of\_goods\_sold = 2000000

average\_inventory = 500000

inventory\_turnover = cost\_of\_goods\_sold / average\_inventory

print("Inventory Turnover:", inventory\_turnover)

# Cash Flow

cash\_inflows = 50000

cash\_outflows = 40000

net\_cash\_flow = cash\_inflows - cash\_outflows

print("Net Cash Flow:", net\_cash\_flow)

# Brand Equity

brand\_recognition = "High"

customer\_loyalty = "Strong"

brand\_reputation = "Positive"

brand\_equity = (brand\_recognition, customer\_loyalty, brand\_reputation)

print("Brand Equity:", brand\_equity)

# Customer Acquisition and Retention

new\_customers = 10000

existing\_customers = 50000

customer\_retention\_rate = (existing\_customers / (existing\_customers + new\_customers)) \* 100

print("Customer Retention Rate:", customer\_retention\_rate)

# Speed of Transaction

previous\_transaction\_time = 10

current\_transaction\_time = 2

transaction\_speed\_improvement = (previous\_transaction\_time - current\_transaction\_time) / previous\_transaction\_time \* 100

print("Transaction Speed Improvement:", transaction\_speed\_improvement)