Making the Right Decision, Given the Numbers

Alex has wanted to run a business division for a long time, and when the opportunity arose, he jumped at it. However, now that he's in charge, his first major strategic decision seems a lot less simple.

Alex has the opportunity to set the direction of the division and is faced with multiple strategic options.

A Once a Year Service

Alex's division is within the service industry. Each customer requires service only once per year, so units sold is identical to number of customers in any given accounting year. There are only two providers in the market: the division that Alex manages and their sole competitor, Betty's firm.

All variable costs (e.g., costs that change per unit sold) are accounted for by commission-based wages. The total variable costs for Alex's division are customers (#) multiplied by wages per unit sold, and thus equal total wages.

$$Total\ Wages\ (\$) = Customers\ (\#) * Wages\ Per\ Unit\ Sold\ (\$)$$

The firm also has fixed costs of $10,000. These costs have to be paid regardless of any decision Alex makes.

Metrics for Decision-Making

Alex is well aware of the various metrics that could be used to judge the success of a business.

1) Unit Market Share

Unit market share is often used by marketers. This consists of the units sold by the division in question divided by the total number of units sold in the market. In other words, units sold by Alex plus units sold by Betty.

$$Unit\ Market\ Share\ (\%) = \frac{Units\ Sold\ (\#)}{Total\ Units\ Sold\ In\ Market\ (\#)}$$

2) Total Revenue

Marketers often assess plans using total revenue: the number of units sold multiplied by the price per unit. This measures how much money comes in from customers.

$$Total\ Revenue\ (\$) = Units\ Sold\ (\#) * Price\ Per\ Unit\ (\$)$$

3) Accounting Profit

Perhaps the most commonly used metric in business is accounting profit. This is how financial accounting rules judge the profitability of a division in a single period (here, one year). This can be calculated as total revenue minus total variable costs and fixed costs.

$$Accounting\ Profit\ (\$) = Total\ Revenue\ (\$) - Total\ Variable\ Costs\ (\$) - Fixed\ Costs\ (\$)$$

4) Alex's View of Long-Term Value Generation

Businesses can also be assessed based on their long-term value generation for owners rather than just short-term profits in a single year. Alex decides to quantify this as accounting profit (short-term value generation) plus the projected value of customer relationships going forward (customer asset) at the end of the year.

$$Alex's\ Assessment\ Of\ Long\text{-}Term\ Value\ To\ Firm\ (\$) = Accounting\ Profit\ (\$) + Customer\ Asset\ At\ End\ Of\ Period\ (\$)$$

There is no consensus yet in Alex's business about how to calculate customer asset. Alex decided to generate an estimate of the value per customer going forward and calculate the customer asset as number of customers multiplied by this value per customer.

$$Customer\ Asset\ At\ End\ Of\ Period\ (\$) = No.Of\ Customers\ (\#) * Estimated\ Long\text{-}Term\ Value\ Per\ Customer\ (\$)$$

5) Alex's View of Total Value to Society

Finally, Alex wonders if looking at the value created for the firm's owners alone was enough. Surely the firm should be generating value to stakeholders beyond the owners?

Higher pay for workers is an important positive outcome. With this in mind, Alex decides to proxy total value to society as the value to two stakeholders: owners and employees. This would be the long-term value generated for the firm plus total wages for workers in the year. Alex realizes that this is imperfect (e.g., wages in the future are not captured). That said, Alex figures this is a good place to start.

$$Alex's\ View\ Of\ Social\ Value\ (\$) = Long\text{-}Term\ Value\ (\$) + Total\ Wages\ (\$)$$

The Scenarios to Choose From

Alex looked at five possible scenarios.

Scenario 1: Competitive Price

The division would charge $280 per unit, roughly comparable with Betty's price. Alex and Betty would both sell to 12,000 customers. Pay for employees would be $100 per customer served. Estimated long-term value per customer is hard to judge, but Alex estimates it would be around $180 for each current customer.

Scenario 2: Price Cut

An alternative strategy would be a radical price cut while keeping worker wages at $100 per customer served. Alex's division would sell to 14,000 customers at $200. (Betty would sell to 11,000 customers). Given the price cut, the estimated long-term value per customer is expected to significantly diminish to $100.

Scenario 3: Price Increase

Alex could raise the price to $300. Betty would likely mirror this, leaving both selling to 11,000 customers. Wages per customer served would be unchanged. This is expected to increase the estimated long-term value of customers to $220.

Scenario 4: Large Price Increase

Alex could also substantially increase the price to $325, which Betty would not mirror. Alex would expect to have 10,000 customers to Betty's 14,000. Wages would stay at $100 per customer served and the estimated long-term value of the customer would rise to $230.

Scenario 5: Increase Quality

Probably the most radical change is a plan put forward by employees. This involves a significant increase in the quality of the service, allowing $370 to be charged. Sales would fall to 9,000 (with Betty selling to 15,000 customers). Wages per customer served would increase to $160. Employees have said they could do the extra work without a greater burden on them (in other words, the change would increase employee wages without impeding their work-life balance). Given that customers would be paying much more, the expected long-term value of the customer would go up to $270.

Decisions and the Metrics You Use

Alex thinks that the best choice will depend on the metric he uses to assess the decision. What is the best choice given the information above and the choice of metric to measure success?

What should Alex choose to…

a) Optimize revenue?
b) Win the market (i.e., have the highest unit market share)?
c) Optimize accounting profit?
d) Optimize long-term value?
e) Optimize social value?

All things considered, what should Alex choose?