# Green University

# ASSIGNMENT

## CASE STUDY 01

### Section : DC-221

Name : Khondokar Saim

ID : 221902353

Lecturer : MD Saddam Khan

Subject : GED-301 DC

Date : 31 / 05 / 2023

To determine the optimal price and achieve a revenue target of $5000,000 in the first year of operation, we need to consider the cost per unit, competitor pricing and the price elasticity of demand.

Given the competitor prices ranging from $2.99 to $4.99, it's important to position the flagship product competitively while maximizing profitability. The cost per unit for producing and maintaining the app is $0.50.

Considering the price elasticity of demand with an elasticity coefficient of $-2$, a 1% increase in price leads to a 2% decrease in quantity demanded. This indicates that demand is relatively elastic, and pricing decisions need to carefully balance price and quantity.

To achieve the revenue target, we can calculate the number of units needed to be sold using the formula :

Revenue = Price × Quantity

Given the revenue target of $5,000,000, we can re-arrange the formula -

Quantity = Revenue / Pricing

Now let's consider different price points and calculate the resulting quantity demanded :-

Price : $1.99
Quantity : $5,000,000 / $1.99 ≈ 251,256 units

Price : $2.99
Quantity : $5,000,000 / $2.99 ≈ 167,223 units.

Price : $3.99
Quantity : $5,000,000 / $3.99 ≈ 125,313 units.

Price : $4.99
Quantity : $5,000,000 / $4.99 ≈ 100,200 units

To maximize profitability, we need to find a price that balances the trade-off between maximizing the quantity demanded and maximizing the profit margin per unit. Considering the cost per unit of $0.50, let's calculate the profit per unit for each price:

Price : $1.99

Profit Per unit = $1.99 − $0.50 = $1.49

Price : $2.99

Profit Per unit = $2.99 − $0.50 = $2.49

Price : $3.99

Profit Per unit = $3.99 − $0.50 = $3.49

Price : $4.99

Profit Per unit = $4.99 − $0.50 = $4.49

Considering the analysis, it appears that a Price of $2.99 offers a reasonable balance between maximizing the quantity demanded and maximizing the Profit margin Per unit. This Price allows for a relatively high quantity demanded (167,223) units while maintaining a healthy Profit margin $~~$2.49 Per unit.

By selling approximately 167,223 units at a Price of $2.99, TechConnect can achieve the revenue target of $5,000,000 in the first Year of operation.