Integrated Business Decisions For New Product Launch

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Introduction

When companies provide extensive product options, it makes predicting and fulfilling customer demand highly complex. This simulation illustrates how a few key decisions can improve the ability of a company to effectively handle and fulfill uncertain demand. The company has been producing wearable devices for the past many years. Every year they make a decision to launch an upgraded version of the product or stick with the older version. Your team helps you with the projections, but you as the head of the company need to make the final decision. Your performance will be reviewed by the board after 1 year.

Options

Go for better design



Go for powerful battery



Go for gestures



Go for durability



You can choose multiple options

The product with all four options chosen looks as shown below. But remember choosing multiple options will have an impact on cost and price.



The product with all four options chosen:

- Has an improved design
- Has a powerful battery
- Provides gestures
- Is more durable

Old Product versus New Product





Old Product New Product

Demand data from previous two years

| Year1 | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | 68 | 70 | 80 | 80 | 68 | 77 | 85 | 80 | 71 | 82 | 93 | 156 |
| Year2 | 81 | 96 | 86 | 91 | 81 | 93 | 90 | 100 | 93 | 101 | 108 | 193 |

Cost and Price Data with all 4 options chosen (per unit)

| Variable Cost* | Basic 300 | Updated 380 |
|----------------------------|--------------|----------------|
| Price* | 500 | 600 |
| Markdown Price | 200 | 300 |
| Inventory Cost (per month) | 20 | 30 |

^{*}may vary depending upon chosen options and vendors

Decisions to be made

- What is the expected demand?
- Which options to choose?
 - Data points: expected sales, cost, price etc.
- Which suppliers to choose?
 - Data points: maximum capacity, lead time and cost.
- Modify production decision in every quarter?
 - Data points: production, sales, inventory and observed demand.

Evaluation

• You will be evaluated after 4 quarters by the board.