

Case Study: TEE ENTERPRISES (TE)

Overview:

TE is a start-up focused on producing affordable clothing for customers. The company will begin operations in January 2028 and is projecting aggressive growth due to rising demand for sustainable products. You are tasked with building a financial model to help TE secure funding for expansion. The model should cover a 6 year period.

Assumptions and Inputs:

Revenue Assumptions:

1. Product Lines:

- Adire: Unit price ₦40,000
- Aso oke : Unit price ₦22,000
- Plain tees: unit price ₦ 4,000
- Jeans : unit price ₦ 30,000
- Crop top: unit price ₦7,000
- Aprons: unit price ₦ 9,000

2. Price increase rate:

- Adire: 6%
- Aso oke : 7%
- Plain tees: 5%
- Jeans : 8%
- Crop top: 11%
- Aprons: 3%

3. Sales Volume (Year 1):

- Adire: 99 units
- Aso oke : 34 units
- Plain tees: 92 units
- Jeans : 43 units
- Crop top: 90 units
- Aprons: 88 units

4. Growth Rates:

- Adire: 10% annually
- Aso oke : 9% annually
- Plain tees: 13% annually
- Jeans : 7% annually
- Crop top: 10% annually
- Aprons: 8% annually

Cost Assumptions:

1. Direct Costs per Unit:

- Adire: Unit price ₦30,000
- Aso oke : Unit price ₦19,000
- Plain tees: unit price ₦ 3,000
- Jeans : unit price ₦ 21,000
- Crop top: unit price ₦4,000
- Aprons: unit price ₦ 5,000

2. Direct cost increase rate

- Adire: 3%
- Aso oke : 5%

- Plain tees: 4%
 - Jeans : 4%
 - Crop top: 8%
 - Aprons: 2%
- 3. Fixed Operating Costs:**
- Rent: ₦300,000 annually
 - Salaries: ₦250,000 annually
 - Utilities: ₦200,000 annually
- 4. Variable Operating Costs:**
- Packaging: 2% of revenue
 - Logistics: 3% of revenue

Working Capital Assumptions:

1. **Accounts Receivable:** 10 days
2. **Accounts Payable:** 6 days
3. **Inventory:** 5 days of COGS

CapEx and Depreciation:

1. **Initial CapEx:**
 - Furnitures and fittings – N2,000,000
 - Motor vehicle – N3,500,000
 - Clothing Equipment – N2,000,000
 - Industrial sewing Machine – N1,000,000
2. **Depreciation rate:**
 - Furnitures and fittings – 20%
 - Motor vehicle – 10%
 - Clothing Equipment – 20%
 - Industrial sewing Machine – 10%

Debt and Financing:

1. Total funding required – N15,000,000
2. **Debt/Equity Ratio – 40:60**
3. **Interest Rate:** 15% annually
4. **Repayment Term:** 6 years (equal annual repayments).

Tax and Other Assumptions:

1. **Corporate Tax Rate:** 30%

Required Outputs:

1. **Three Financial Statements:**
 - Income Statement
 - Balance Sheet
 - Cash Flow Statement
2. **Debt Schedule:**
 - Repayment schedule with interest calculations.
3. **Working Capital Schedule:**
 - AR, AP, and inventory

Exercises:

1. Build a revenue forecast based on the product lines and growth rates.
2. Calculate COGS and gross profit margins for the first three years.
3. Create an operating expense schedule with fixed and variable costs.
4. Develop the working capital schedule using turnover assumptions.
5. Build the depreciation schedule for the CapEx investment.
6. Create a debt schedule, including interest and principal repayments.
7. Link all schedules to complete the three financial statements.