Introduction
An overview of the Capstone® Simulation

Objectives of the Capstone Simulation

- Demonstrate effectiveness of multi-discipline teams working together.
- Use strategic thinking.
- Test your business acumen.
- Understand overall interaction and impact of various parts of a business on one another.
- Grow the awareness of competition.
- Take away practical skills in business management.

Why Simulate?

- Risk-Free
- View Alternative Strategies
- Compresses Time (1 Round=1Year)
- Enjoyable
- Selectivity vs Integration

Industry Overview
The Story: Background on Your Company

FTC required Sensors Inc. to be broken up into separate companies:
- Andrews
- Baldwin
- Chester
- Digby
- Erie
- Ferris

Your job: Operate one of the companies and make it successful.

The Start

When Sensor Inc. breaks up, each of the new companies starts off with the following scenario:

- $100 Million in Sales
- 5 Product Lines
- 5 Market Segments
- Closed Marketplace

The Marketplace: A Look Into The Segments

Customers (OEMs) need sensors for their products to function.

Used for diverse applications

Five clear market segments
- Low End
- Traditional
- High End
- Performance
- Size

Customer demands vary between the five segments.

Sensors: An Overview of Your Company’s Product

Each year, consumers will expect faster (higher performance) and smaller products (lower size).

Perceptual map used to track changing consumer demands in size and performance.

*Note the drift towards the lower right (manifolds of faster and smaller products) as consumer demand changes over time.

Market segments change over time.

Round 1 Consumer Segment Expectations

Round 8 Consumer Segment Expectations
Low End Consumer Characteristics

What the customers say

- Price sensitive. Prefer price to be lowest possible.
- Prefer less cutting edge products (bigger Size & Low Performance)
- I want to spend as little money as possible.
- What the customers say

- I want them to have been around for a while, no beta testing!
- They have to be highly reliable...but not enough to drive up the price!
- The technology doesn’t have to be cutting edge.
- I want the newest sensor you have!
- We need the ideal package - high performance and miniaturized for our products!
- Only the most cutting-edge products will satisfy me!

Traditional Consumer Characteristics

What the customers say

- Price sensitive, but willing to spend more than Low End customers
- "Average" Performance and Size
- I want them to have been around for a while...no beta testing!
- They have to be reasonably reliable...but not enough to drive up the price!
- I want good sensors...not cutting-edge, but reliable.
- We are willing to pay for what I need.

High End Consumer Characteristics

What the customers say

- Not price sensitive, willing to pay highest prices.
- High Performance and Small Size
- Price is not an issue, I want the best product in the market!
- I want the newest sensor you have!
- We need the ideal package - high performance and miniaturized for our products!
- Only the most cutting-edge products will satisfy me!

Performance Consumer Characteristics

What the customers say

- Not price sensitive, willing to pay moderately high prices
- Highest Performance and Less important Size
- I want them to have been around for a while...no beta testing!
- Reliability and Performance are very important and must be high
- I prefer newer technology!
**Size Consumer Characteristics**

**What the customers say**

- Not price sensitive, willing to pay moderately high prices
- Average performance but Maximum miniaturization
- Ideal MTBF: 16000-21000
- Ideal Age: 1.5 years old

**The Decision Making Process**

**Segment Growth**

According to a Market Analyst, there will be continuous growth in the sensor market.

- I see the entire market growing at around 14% or 15% per year. The high tech market alone will be growing at 16%.

**Your goal:** Prepare your company’s products to meet the needs of the growing market.

**Decision Areas**

Coordinate strategy and tactics across the following areas of the company:

- HR
- TQM
- Labor Negotiations
- Advanced Marketing
**R&D**

- Ensure the perceived age of the product meets customer demands
- Build the quality and reliability (MTBF) of the products
- Invent new products to address the changing marketplace and take advantage of new opportunities
- Determine the specifications of the products to meet customer expectations

**Marketing**

- Set the price for each product
- Build customer awareness through investing in promotion
- Establish a sales force and distribution channels
- Set the sales forecast for each product
- Set Credit Policies (A/R and A/P)

**Production**

- Purchase machinery to automate production facilities
- Buy or sell capacity on product lines
- Set production schedule
- Manage the majority of the company’s fixed assets
- Staff your facility with workers

**Finance**

- Acquire capital to fund growth and operations
  - Issue Stock
  - Short-Term Debt
  - Issue Long-Term Bonds
- Issue dividends to shareholders
- Balance debt portfolio
- Manage Proformas
Proformas: A Look Into the Future

Proformas use decisions made in the current year to project company performance for the next year.

Analyzing them is critical for company success.

The following proformas are available:
- Balance Sheet
- Income Statement
- Cash Flow Statement
- Financial Ratios

Success Measures

- In the real world, companies have different goals. Using the same success measures, YOU get to choose the parameters on which your company is measured.
- Some of the Criteria that are used:
  - Cumulative Profits
  - Average Market Share
  - Average ROA (Return on Assets)
  - Average Asset Turnover
  - Average ROE (Return on Equity)
  - Ending Stock Price
  - Ending Market Cap

- You or the professor choose the percentage weighting for each selection.

Balanced Scorecard

- Improving company financial picture in preparation for final debrief
- Point System
- Gauges company performance based on four perspectives
  - The Customer
  - Internal Business Process
  - Innovation and Learning
  - Financial

- In the simulation, a Proforma Balanced Scorecard is available to project results for the upcoming year.
**Analyst Report**

- Evaluates your company in ten categories:
  - Margins
  - Profits
  - Emergency Loans
  - Working Capital
  - Market Share
  - Forecasting
  - Customer Satisfaction
  - Productivity
  - Financial Structure
  - Wealth Creation

**Things to do each year (each round)**

- Establish business strategy for your company
- Analyze Capstone Courier to see industry results
- Make tactical decisions across each functional area (aligned to strategy)
- Rejoice in your superior business acumen
- Await results when Professor processes
- Upload official decisions and confirm on the website

**Competition Rounds**

- Double click on: Capstone.xls
- Choose: Work with my decisions online
- Enter your User ID and Password
- Go to Decisions

**The Six Basic Strategies:**

The “Six Basic Strategies” give you a starting point. Make sure before you start making any decisions to go over the strategies and choose one that you feel comfortable using.

Keep in mind that all these strategies are proven to work, if you’re not doing well it’s more likely that you’re executing the strategy incorrectly.
**Research and Development**

- **R & D**
- **Marketing**
- **Production**
- **Finance**
- **Additional Modules**

**Go to Decisions > R&D**

- **For Existing products:** Change product's attributes to meet "Customers Buying Criteria"  
  - Change: Size, Performance & MTBF

**Changes in R&D affect:**

1. Age of the product (current age/2)
2. Revision Date (when will the product be available for sale)
3. Cost

- **For New Products:** Change product's attributes to meet "Customers Buying Criteria"  
  1. Give name to new product
  2. Choose: Size, Performance & MTBF
  3. Buy Capacity & Automation (buy it this year, use it next year)

**Marketing**

- **R & D**
- **Marketing**
- **Production**
- **Finance**
- **Additional Modules**

**Go to Decisions > Marketing**

1. **Enter: Price** (Look at Customer Buying Criteria)
2. **Enter: Promo Budget & Sales Budget** (Look at Six Basic Strategies + Student Guide)
3. **Enter: Your Sales Forecast** (Look at Online Manager Guide or Student Guide > Forecasting)
4. **Enter: A/R & A/P** (Look at Online Manager Guide)

**Production**

- **R & D**
- **Marketing**
- **Production**
- **Finance**
- **Additional Modules**

**Go to Decisions > Production**

1. **For Existing products:**
   - Enter Production Schedule:
     - Buy or sell capacity (if applicable)
     - In "Buy/Sell Capacity" cell:
       - Buy: enter (+) number
       - Sell: enter (-) number
   - Change Automation in: New Autom. Rating (if applicable)

2. **For New Products:**
   - Buy Capacity: Buy/Sell Capacity > enter positive number
   - Choose automation level:

3. **Discontinue a Product:**
   1. If no inventory > Sell all capacity (enter negative number in Buy/Sell Capacity)
   2. If there is inventory > Sell all but 1 unit of capacity

**Finance**

- **R & D**
- **Marketing**
- **Production**
- **Finance**
- **Additional Modules**

**Go to Decisions > Finance**

1. **Your Goal is:** Cash Position by the End of Year should be POSITIVE
2. **Borrow Money**
3. **Issue 10-year bonds:** Long Term Debt
4. **Issue Stocks:** Selling common stock to the public
5. **Borrow 1-year notes:** Current Debt
6. **Retire Money**
7. **Retire bonds early**
8. **Retire stocks**
9. **Dividends**
10. **Issue Dividends:** Give money to Shareholders

**Important:** these numbers are as good as your FORECASTING. The real numbers might be different.