

WELCOME TO FOUNDATION BUSINESS SIMULATION



Presented by:

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**A Web Based Process by Management Simulation Inc.
(www.capsim.com)**

Objectives

- Learn as a team to operate a \$40 million simulated electronic sensor business
- Learn to make strategic decisions - 3 to 5 years beyond today
- Learn the language of business and its tools
- Learn why a business has different departments
- Learn how competition affects your results
- Be able to work more effectively in a business/organization
- Learn how to learn using the web
- Increase critical thinking skills

Why Simulate

- You can make mistakes and learn
- Try different strategies to grow the business
- Enjoyable
- **Compresses Time** – can do 8 years of business in days or weeks

How Does it Work?

- Form teams of 3-6 participants to run a company
- No limit to number of teams
- Practice Simulation Rounds
 - Learn process
 - Define roles
 - Make team decisions
 - Debrief sessions after decisions
- Complete 8 simulated years of operations
- Process is distant learning friendly
- Can be a seminar setting or spread over time

Foundation® Business Simulation

- Our basic business simulation designed to teach all the essential elements of running a business:
 - **Finance**
 - The **cause and effect** relationships between **functional areas** satisfying **customer demands** and **competitive analysis**
- A great tool to provide executive education and training.

The Competition

ANDREWS

DIGBY

***6 Companies/Teams**

BALDWIN

ERIE

1 Product Line - Sensors

No other New Competitors

CHESTER

FERRIS

***Each starts competition with \$40 Million in Sales**

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Research & Development



Production



Marketing

Finance



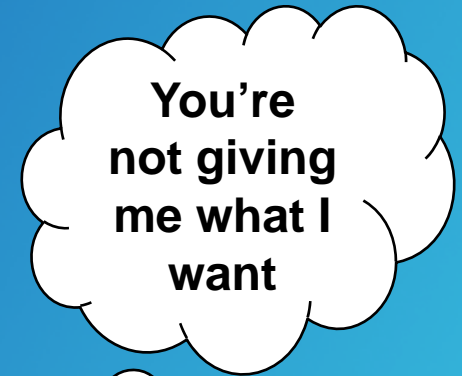
Low Tech Customers

“I want these sensors to be cheap”

“I want them to have been around for a while – no new stuff for me!”

“They have to be average quality/reliability.”

“The technology doesn’t have to be cutting edge or newest stuff.”



High Tech Customers

“These sensors have to be small, like micro, and fast”

“I need them to be right out of design; I’m talking ZERO years on the market, not older stuff”

“I’ll pay more to get what I want.”

“I like pretty high reliability/quality, but it’s not that important to me.”

And I’m not getting what I want!



A great management tool driven by forecasts and projections. Allows “What if” Scenarios by the company.

- Balance Sheet
- Profit & Loss
- Cash Flow
- Financial Ratios



R&D This is where existing products are revised, and new products are invented (teams enter their decisions in the green cells on each screen).

File View Lndo Strategy Proformas Last Year's Reports Help

Andrews F9900 Research & Development Round 1 - 2005

Name	New Pfmn	New Size	MTBF	Revision Date	Age at Revision	R&D Cost
Able	6.4	13.6	21,000		0.0	\$0
Na	0.0	0.0	0		0.0	\$0
Na	0.0	0.0	0		0.0	\$0
Na	0.0	0.0	0		0.0	\$0
Na	0.0	0.0	0		0.0	\$0
Total						\$0

Marketing Teams enter prices, promo and sales budgets on this screen. A/R and A/P policies are also established here.

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Andrews F9900 Marketing Round 1 - 2005

NAME	Price	Promo Budget	Sales Budget	Unit Sales Forecast	Your Sales Forecast	Gross Revenue Forecast	Cost of Goods	Gross Margin Forecast	Less Promo & Sales
Able	\$34.00	\$1,000	\$1,000	892	0	\$30,335	\$23,763	\$6,572	\$4,572
Na	\$0.00	\$0	\$0	0		\$0	\$0	\$0	\$0
Na	\$0.00	\$0	\$0	0	-	\$0	\$0	\$0	\$0
Na	\$0.00	\$0	\$0	0	-	\$0	\$0	\$0	\$0
Na	\$0.00	\$0	\$0	0	-	\$0	\$0	\$0	\$0
Total		\$1,000	\$1,000	892		\$30,335	\$23,763	\$6,572	\$4,572

Notes: The Unit Sales Forecast is only useful as a benchmarking tool. The worksheet assumes a modest product from each competitor in every segment. It does not know what your competitors have actually offered. Override the Unit Sales Forecast with your estimate in Your Sales Forecast. The Gross Revenue Forecast assumes that inventory will be on hand to meet demand. Cost of Goods ignores overtime costs.

A/R Lag (days)
A/P Lag (days)

Revenue Forecast

Legend: Cost Of Goods (yellow), Marketing (red), Margin After Mktg (green)

Unit Sales Forecast by Segment

Legend: High (cyan), Low (red)

www.trinity-corporation.com

Production Teams set their production schedules here. Changes in capacity and automation are also entered on this screen. When enabled, optional Human Resources decisions are entered here (if it is not enabled, the entry cells are yellow).

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Andrews F9900 **Production** **Round 1 - 2005**

Schedule	Able	Na	Na	Na	Na	TOTAL
Unit Sales Forecast	892	-	-	-	-	892
Inventory On Hand	87	-	-	-	-	87
Production Schedule	1,287	-	-	-	-	1,287
Production After Ad	1,274	-	-	-	-	1,274

Margins	Able	Na	Na	Na	Na	TOTAL
2nd shift/Overtime%	60.7%	0.0%	0.0%	0.0%	0.0%	
Labor Cost/Unit	\$10.59	\$0.00	\$0.00	\$0.00	\$0.00	
Material Cost/Unit	\$16.04	\$0.00	\$0.00	\$0.00	\$0.00	
Total Unit Cost	\$26.63	\$0.00	\$0.00	\$0.00	\$0.00	
Contribution Margin	21.7%	0.0%	0.0%	0.0%	0.0%	

Physical Plant	Able	Na	Na	Na	Na	TOTAL
1st Shift Capacity	800	-	-	-	-	800
Buy/Sell Capacity	0	0	0	0	0	
Automation Rating	3.0	-	-	-	-	
New Autom. Rating	3.0	0.0	0.0	0.0	0.0	
Investment (\$000)	\$0	\$0	\$0	\$0	\$0	

STAFFING	Last Year	This Year
Complement	248	248
Needed Complement	250	248
1st Shift Complement	154	154
2nd Shift Complement	94	94
Overtime%	1.3%	0.0%
Turnover Rate	10.1%	10.0%
New Employees	25	25
Separated Employee	0	0
Recruiting Spend	\$0	\$0
Training Hours	0	0
Productivity Index	100.0%	100.0%

Recruiting Cost	\$25
Separation Cost	\$0
Training Cost	\$0
Total HR Admin Costs	\$25

Capacity vs. Production

Category	Overtime Capacity	Base Capacity	Production
Able	~1500	~800	~1200
Na	0	0	0
Na	0	0	0
Na	0	0	0
Na	0	0	0

Price vs. Unit Cost

Category	Margin	Material	Labor
Able	~\$7	~\$15	~\$5
Na	0	0	0
Na	0	0	0
Na	0	0	0
Na	0	0	0

Finance Managers issue and retire stocks and bonds, and take out short term (current) debt on this screen.

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Andrews F9900 Finance Round 1 - 2005

Plant Improvements

Total Investments (\$000)

Sales of Plant & Equipment

Common Stock

Shares Outstanding (000)

Price Per Share 1/1/2005

Earnings Per Share

Max Issue (\$000)

Issue Stock (\$000)

Max Retire (\$000)

Retire Stock (\$000)

Dividend Per Share

Current Debt

Interest Rate

Due This Year

Borrow (\$000)

Cash Positions

December 31, 2004

December 31, 2005

Outstanding Bonds

Series Number	Face (\$000)	Current Yield	2004 Close
11.0S2005	\$867	10.8%	\$101.74
12.0S2007	\$1,733	11.3%	\$106.34
13.0S2009	\$2,600	11.5%	\$113.07

Long Term Debt

Retire Long Term Debt (\$000)

Issue Long Term Debt (\$000)

Long term interest rate

Maximum issue this year

Liabilities & Owner's Equity

Retained Earnings

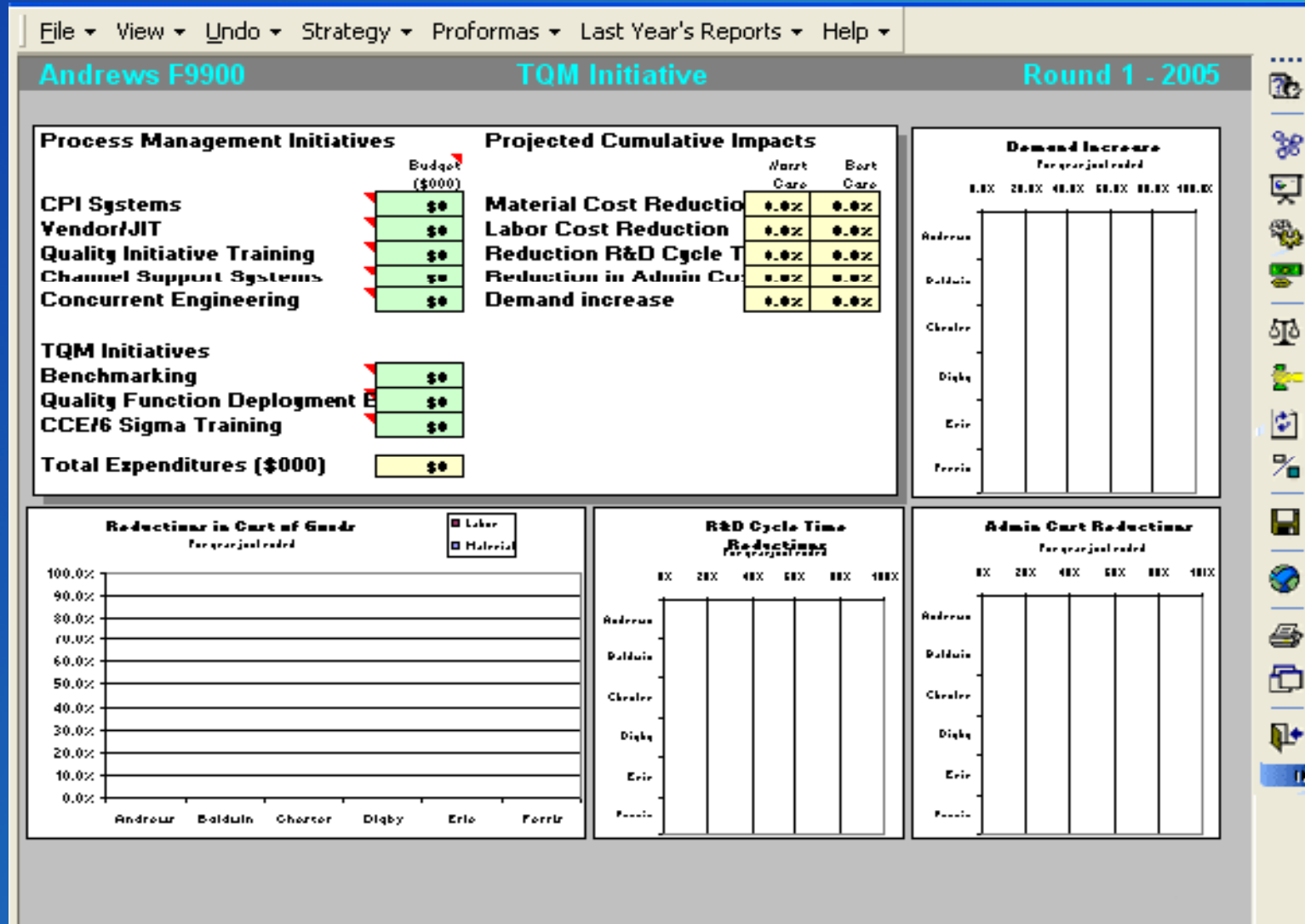
Common Stock

Long Term Debt

Current Debt

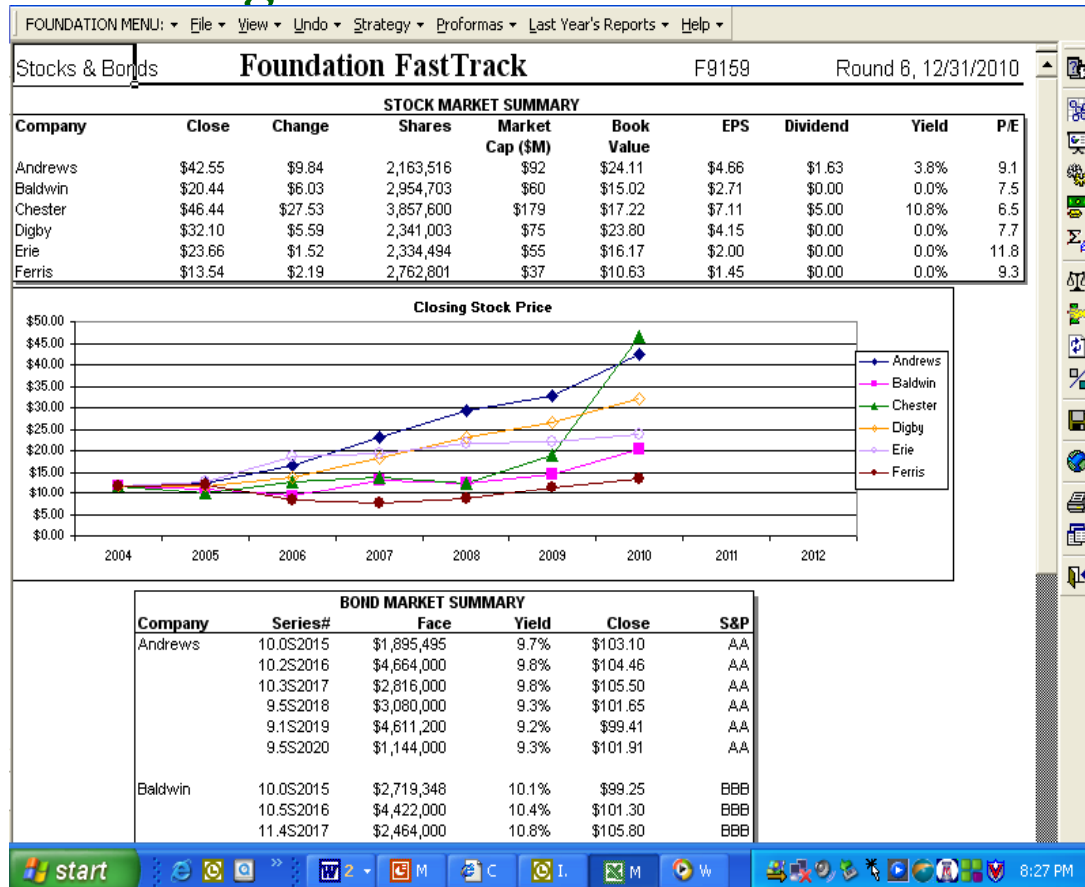
A/P

TQM: When the optional TQM module is enabled, students can create initiatives that best suit their strategies.



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Page 2 - Stocks & Bonds



Reveals:

- Stock Price
- Earnings Per Share (EPS)
- Market Capitalization
- Dividend pay shareholders
- Bond Rating (S&P)
- S&P rating of BBB and higher - considered a good credit risk
- Rating of BB and below is “junk” bond rating

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Page 3 – Financial Analysis

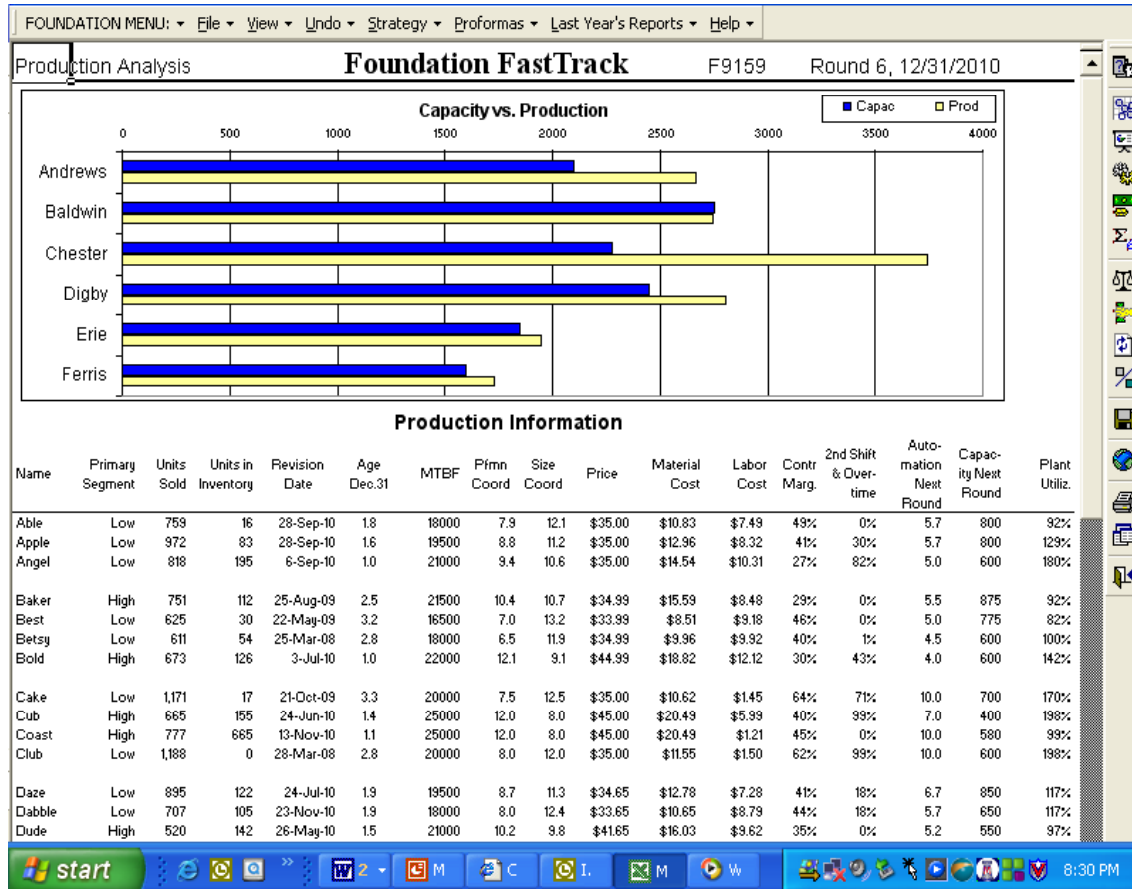
Financial Analysis						
Foundation FastTrack						
F9159 Round 6, 12/31/2010						
Cash Flow Statement Survey	Andrews	Baldwin	Chester	Digby	Erie	Ferris
Cash flows from operating activities						
Net Income (Loss)	\$10,079	\$8,019	\$27,426	\$9,721	\$4,676	\$4,017
Adjustment for non-cash items						
Depreciation	\$4,112	\$4,817	\$6,672	\$4,999	\$4,147	\$3,173
Extraordinary gains/losses/writeoffs	\$60	\$39	\$0	\$0	\$0	\$0
Changes in current assets and liabilities						
Accounts payable	\$305	\$782	(\$318)	(\$112)	\$201	\$226
Inventory	(\$2,355)	(\$1,809)	\$1,654	(\$13)	\$689	(\$1,940)
Accounts receivable	(\$570)	(\$1,378)	(\$4,996)	(\$632)	(\$612)	(\$463)
Net cash from operations	\$11,632	\$10,469	\$30,438	\$13,963	\$9,101	\$5,013
Cash flows from investing activities						
Plant improvements (net)	(\$2,600)	(\$7,700)	\$0	(\$12,120)	(\$9,100)	(\$9,200)
Cash flows from financing activities						
Dividends paid	(\$3,523)	\$0	(\$19,288)	\$0	(\$3)	\$0
Sales of common stock	\$572	\$1,694	\$0	\$2,666	\$2,002	\$2,024
Purchase of common stock	(\$3,695)	\$0	\$0	(\$3,127)	(\$1,884)	\$0
Cash from long term debt issued	\$1,144	\$3,388	\$0	\$5,333	\$4,004	\$4,048
Retirement of long term debt	(\$2,750)	(\$3,000)	(\$2,600)	(\$2,600)	(\$2,600)	(\$2,600)
Change in current debt	\$0	\$0	\$2,380	\$2,600	\$2,600	\$2,600
Net cash from financing activities	(\$8,252)	\$2,082	(\$19,508)	\$4,872	\$4,119	\$6,072
Net change in cash position	\$781	\$4,851	\$10,930	\$6,715	\$4,120	\$1,885
Closing cash position	\$21,088	\$7,765	\$10,930	\$18,084	\$14,472	\$2,352
Balance Sheet Survey						
Cash	\$21,088	\$7,765	\$10,930	\$18,084	\$14,472	\$2,352
Accounts Receivable	\$7,333	\$8,424	\$24,235	\$8,572	\$5,102	\$6,309
Inventory	\$6,838	\$8,331	\$19,126	\$11,439	\$2,051	\$11,284
Total Current Assets	\$35,259	\$24,520	\$54,291	\$38,096	\$21,625	\$19,945
Plant and equipment	\$61,680	\$72,250	\$100,080	\$74,980	\$62,200	\$47,600
Accumulated Depreciation	(\$21,965)	(\$22,138)	(\$28,039)	(\$22,851)	(\$19,879)	(\$14,483)
Total Fixed Assets	\$39,715	\$50,112	\$72,041	\$52,129	\$42,321	\$33,117

Reveals:

- How much cash we have
- Where cash is going to and coming from
- Numbers in (\$XXX) “sucking” out cash
- Too much inventory can cause a costly emergency loan
- Too much equipment purchases without a funding plan causes costly emergency loans
- Large amounts of Plant and Equipment \$\$ may mean you are trying to have low cost or adding new products
- How you stack up against competition

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Page 4 – Production Analysis

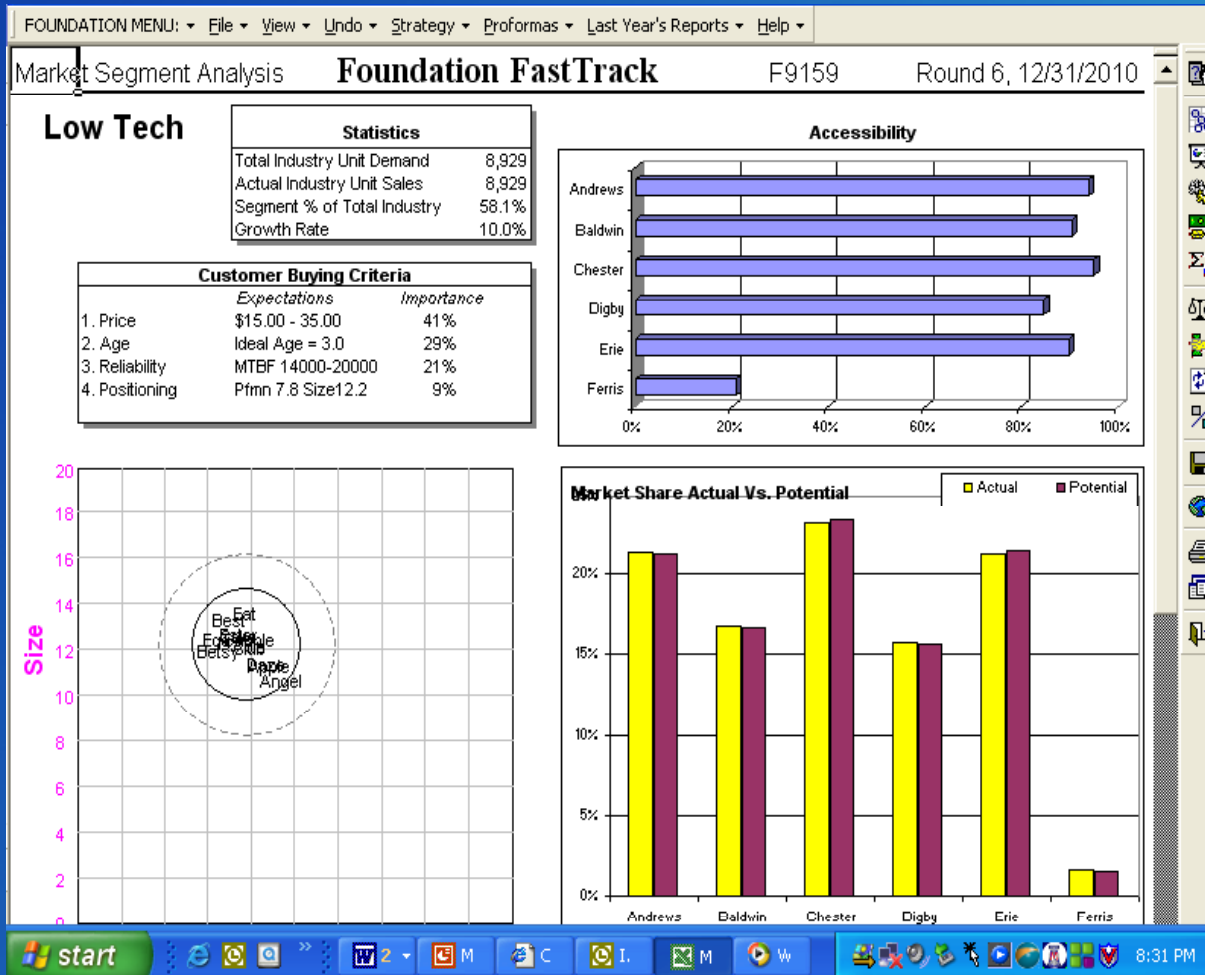


Reveals:

- How much of the time you are operating your factory
- How much automation your product process has versus your competition
- Compares how many sensors you and competition can make
- Compares how many sensors each competitor produces compared to you
- Shows how much inventory competitors had compared to you
- Shows who ran out of sensors and missed sales opportunities

Foundation® FastTrack Sample Report

Pages 5-6 Market Segment Analysis

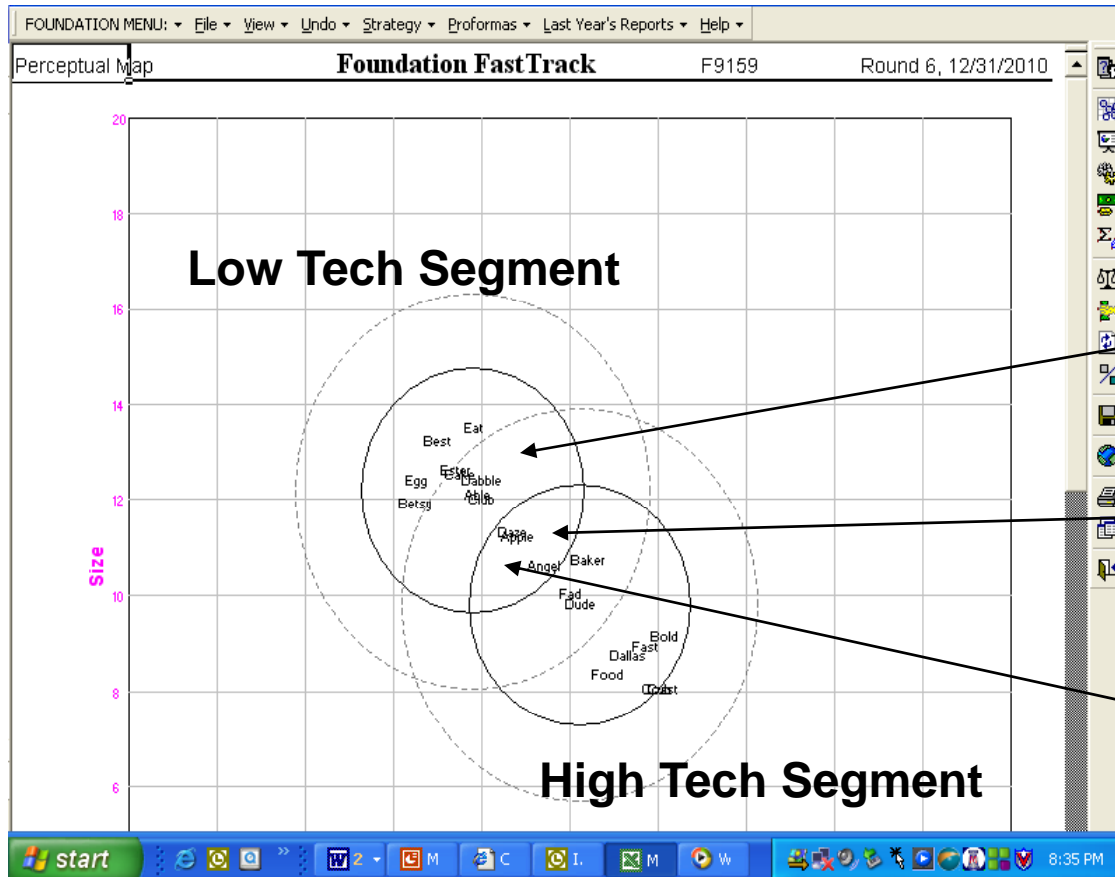


Reveals:

- How much you sold
- Competitive info
- How customers like products
- Missed sales opportunity
- If you build enough inventory to avoid missed sales
- Your products' market share compared to competition
- Price range, product age, reliability, size, speed customers want
- Size of market in units

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Page 8 – Perceptual Map



Reveals:

- Where all products are competing
- The more products, the more fierce the competition
- Products designed outside the dotted circle produce no sales
- Products designed inside the solid circles have higher sales than in between the two circles
- Products that straddle the fence between segments may be sofa-beds: not great sofas, not great beds.
- Products positioned at the trailing-edge of any given segment will have lower material costs than they would have at the leading-edge or center of the segment (given an identical MTBF rating).

To Do List

- Establish business strategy for your company
- Analyze Reports from Foundation FastTrack to see industry results after your decisions
- Make tactical (short term) decisions across each functional/departmental area (align to strategy!)
- Upload your team's decisions and confirm on the website
- See results after Professor processes all team decisions
- Rejoice in the great job you did against competitive pressures
- Begin the process again by looking at your last round's/year's results and making new decisions

Conclusion

- Simulation is a fun way to learn
 - How to work as a team
 - How to perform under stress
 - Business acumen
 - Strategic and tactic decision making
 - Functions of departments
 - Business finance basics
 - Critical thinking
- Contact Alphonso Spence @ 937-271-1297 or alphonso@trinity-corporation.com