Pennsylvania State University, The Behrend College

Strategic Document #3 – Final Report

Company: Digby Electronic Sensors
Industry: Navigational Instrument Manufacturing
Product: Electronic Sensors

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Table of Contents:

Our Mission

"Digby Electronic Sensors strives to develop products that are high-quality, reliable, and efficient, in order to fulfill the ever-evolving demands of our discerning customers. Our unwavering commitment to excellence drives us to push the boundaries of innovation, ensuring that every product we create meets the highest standards of performance and functionality."

Our Company

At Digby, our core values are at the center of everything we do. We're dedicated to innovation, quality, and ethical practices, and we strive to deliver cutting-edge navigational instruments that not only meet but exceed the expectations of our customers. With our Blue Ocean strategic approach, we combine these values with our exceptional cost-efficiency to deliver high-quality products at competitive prices.

Company Performance

Over the last three years, our company has demonstrated strong financial performance, driven by our Blue Ocean Strategy. To understand this success in more detail, below is our complete performance overview with highlights of key metrics over the past 3 years.

Team Digby	Rd. 6	Rd. 7	Rd. 8	Industry Avg.	TREND
ROS	19.30%	20.30%	21.10%	12.37%	
Asset Turnover	1.04	1.01	0.93	1.190555556	
ROA	20.10%	20.60%	19.60%	13.88%	
Leverage (Assets/Equity)	1.4	1.2	1.1	1.488888889	
ROE	27.30%	24.00%	22.40%	19.89%	
Emergency Loan	$ -	$ -	$ -	$ 2,057,758.44	
Sales	$173,287,986.00	$170,549,390.00	$173,265,547.00	$207,833,067.11	
EBIT	$ 56,351,164.00	$ 56,180,466.00	$ 59,233,833.00	$ 42,177,165.72	
Profits	$ 33,409,226.00	$ 34,681,762.00	$ 36,626,757.00	$ 22,960,204.17	
Cumulative Profit	$ 85,359,512.00	$120,041,274.00	$156,668,031.00	$ 76,978,616.33	
SG&A / Sales	11.20%	11.50%	11.10%	9.37%	
Contrib. Margin %	53.30%	54.90%	55.60%	39.17%	
Stock Price	$120.29	$153.98	$174.15	$103.00	
EPS	$15.53	$16.51	$17.99	$10.64	
Variable Costs	$81,005	$76,968	$76,913	$133,713	
Upward Trend		Downward Trend			

Comparisons exclude non-human competitors

Return on Sales (ROS):

Our company excelled in ROS, achieving 19.30% in round 6 ***(1st in the industry***), 20.30% in round 7 (***2nd in the industry***), and 21.10% in round 8 (***2nd in the industry***). Since round 6, our ROS consistently outperformed competitors and industry averages, with the industry averaging 16.27% across rounds 6-8. With a ROS of 21.10%, our company was 4.83% above the industry average.

Asset Turnover:

Our company's asset turnover remained competitive, reaching 1.04 in round 6 (***5th in the industry***), 1.01 in round 7 (***5th in the industry***), and 0.93 in round 8 (***5th in the industry***). While slightly below the industry average asset turnover ratio of 1.19 in rounds 6-8, our company continued to maintain a strong position in asset utilization.

Return on Assets (ROA):
Our company's ROA remained impressive, achieving 20.10% in round 6 (***1st in the industry***), 20.60% in round 7 (***2nd in the industry***), and 19.60% in round 8 (***3rd in the industry***). Compared to the industry average ROA of 17.63% in rounds 6-8, our company was 2.37% above the industry standard.

Return on Equity (ROE):
Our company's ROE remained strong, achieving 27.30% in round 6 (***1st in the industry***), 24.00% in round 7 (***2nd in the industry***), and 22.40% in round 8 (***3rd in the industry***). Despite a slight decrease, our company maintained a strong position, exceeding the industry average ROE of 19.89% in rounds 6-8 by 2.51%.

Sales:
Our company's sales performance remained solid, reaching $173,287,986 in round 6 (***4th in the industry***), $170,549,390 in round 7 (***3rd in the industry***), and $173,265,547 in round 8 (***4th in the industry***). While still below the industry average sales of $207,833,067.11 in rounds 6-8, our company consistently demonstrated a competitive market presence.

Earnings Before Interest and Taxes (EBIT):
Our company's EBIT remained strong, achieving $56,351,164 in round 6 (***1st in the industry***), $56,180,466 in round 7 (***1st in the industry***), and $59,233,833 in round 8 (***1st in the industry***). Surpassing the industry average EBIT of $42,177,165.72 in rounds 6-8, our company continued to demonstrate financial strength.

Profits:
Our company's profits continued to rise, reaching $33,409,226 in round 6 (***1st in the industry***), $34,681,762 in round 7 (***1st in the industry***), and $36,626,757 in round 8 (***1st in the industry***). Despite the industry average profit of $22,960,204.17 in rounds 6-8, our company maintained a significant lead, outperforming the industry by $13,666,552.83.

Cumulative Profit:
Our company's cumulative profits showed substantial growth, totaling $85,359,512 in round 6 (***1st in the industry***), $120,041,274 in round 7 (***1st in the industry***), and $156,668,031 in round 8 (***1st in the industry***). Significantly exceeding the industry average cumulative profit of $76,978,616.33 in rounds 6-8, our company maintained a strong financial position.

Selling, General, and Administrative Expenses/Sales (SG&A/Sales):
Our company's SG&A/Sales ratio remained competitive, standing at 11.20% in round 6 (***4th in the industry***), 11.50% in round 7 (***3rd in the industry***), and 11.10% in round 8 (***5th in the industry***). Despite a slight increase, our company was only 1.73% above the industry average SG&A/Sales ratio of 9.37% in rounds 6-8.

Contribution Margin%:
Our company's Contribution Margin % continued to lead, reaching 53.30% in round 6 (***1st in the industry***), 54.90% in round 7 (***2nd in the industry***), and 55.60% in round 8 (***2nd in the industry***).

Outperforming the industry average Contribution Margin % of 39.17% in rounds 6-8, our company maintained a significant competitive advantage.

Variable Costs:
Our company's variable costs remained consistent and competitive, totaling $81,005 in round 6 (***2nd in the industry***), $76,968 in round 7 (***2nd in the industry***), and $76,913 in round 8 (***2nd in the industry***). Over the last three years, the only company that has been able to achieve a lower variable cost is Erie. They could do so because they only compete in 2 segments (traditional and low-end segments). Despite variations, our variable costs were well below the industry average of $133,713 in rounds 6-8, showcasing our commitment to cost efficiency and profitability.

Over the past three years, our company has achieved a strong and consistent performance in key financial metrics, driven by our Blue Ocean Strategy. We have put ourselves in excellent position to grow and expand our business. Overall, as we move forward, our commitment to the Blue Ocean Strategy remains strong. We believe it will allow us to explore new opportunities, innovate, and maintain a competitive advantage that positions us as industry leaders.

Strategic Opportunities

The planned acquisition of Erie presents a strategic opportunity for our company, positioning us as a leading player in both the low-end and traditional segments of our industry. With the chance to double our market share in each segment, the acquisition would elevate our standing from 20% to 40% in the low-end sector and from 9% to 22% in the traditional segment. This move aligns with our financial strength, boasting available cash of $125 million, and estimating Erie's market cap at $212 million. Our funding strategy involves using cash for $125 million and securing the remaining $87 million through a combination of debt and equity financing.

The proposal to pay back the acquisition cost over the next 10-15 years, considering our robust 2023 profit projection of $36.6 million, further solidifies our financial strength. We believe this move will enhance our market position as it will allow us to leverage Erie's niche expertise and low-cost advantage while also providing access to high-margin products in segments with substantial demand. Overall, this acquisition would represent a pivotal step toward increased market share, product diversity, and long-term profitability for our company.

Strategic Outlook

Introducing an enhanced automation strategy could be a compelling initiative for Digby, especially in the Performance and Size market segments. For example, increasing the level of automation from a 6 to 7 in these specific segments offers numerous advantages. Not only does this streamline production processes, but it also results in lower material and labor cost, enhancing operational efficiency. This move also algins with our low-cost strategy, as automation tends to drive down per-unit costs over time. By investing in automation, our company can increase our competitiveness by delivering products more efficiently.

Beyond just increasing our automation, we could explore the option of technology partnerships, allowing the integration of cutting-edge technologies without the need for complete acquisitions. Currently some of our product’s struggle meeting the expectations of customer wants, and in return face a loss of profit. Therefore, increasing our technologies could help us meet those expectations. There would be some obstacles that we would face, like regulations and licensing agreements, but with new technology this would allow us to reduce the reliance on external suppliers and other costs in the future. By combining these two initiatives, we would be enhancing what our products have to offer and increase our competitive edge within the industry.

Another strategy we could install would be to sell the production line in the size market segment, which could be a smart potential move for the company for serval reasons. Firstly, the product in question has consistently been the lowest selling in our portfolio, indicating a potential misalignment with market demands or customer preferences. By leaving this product line, we would be able to streamline our operations and focus resources on more profitable areas. Currently, Dune holds a market share of 9% in the Size market segment, and its actual market share in units is only 8.6%, suggesting a gap that might be addressed through strategic restructuring or reallocation of resources. Additionally, divesting from this product could have a positive impact on the company’s contribution margin, allowing for greater profitability and financial stability.

QSPM Analysis

In order to determine the strategic direction of our company looking forward, our team at Digby has developed a Quantitative Strategic Planning Matrix (QSPM). Through the QSPM analysis, we aimed to identify and focus on the most promising strategic initiative that aligned with our business goals and provided a clear roadmap for success. Our Quantitative Strategic Planning Matrix (QSPM), outlining our company’s three top strategic initiatives, can be seen on the next page.

Continue to Next Page to View QSPM

QSPM		SO2 - Leverage our strong financial position to manage growth and extend our business reach (O2, S8)		ST1 - Utilize our robust automation proficiency to decrease expenses across various business functions and processes (T9, S2)-		WO1 - Utilize strong cash position to fund more into research and development to keep up with competitors and further product differentiation (S4, W3, W5)	
Key Factors	**Weight**	**AS**	**TAS**	**AS**	**TAS**	**AS**	**TAS**
OPPORTUNITIES							
O1 - Implement Automation and AI	0.08	1	0.08	4	0.32	1	0.08
O2 - Geographical Industry Establishments	0.02	0	0	0	0	1	0.02
O3 - Increase in Construction Activity	0.02	2	0.04	0	0	0	0
O4 - Federal Funding for Defense	0.07	0	0	0	0	0	0
O5 - Trade-Weighted Index increase	0.04	0	0	0	0	0	0
O6 - CHIPS and Science Act	0.06	0	0	0	0	0	0
O7 - Joint Coalition Between Industry Associations	0.09	0	0	0	0	2	0.18
O8 - Industry Association AIA	0.04	1	0.04	0	0	0	0
O9 - The Infrastructure Investment and Jobs Act	0.06	0	0	0	0	0	0
O10 – Business Product Expansion	0.04	1	0.04	0	0	1	0.4
THREATS							
T1 - Rising Interest Rates	0.02	0	0	0	0	0	0
T2 - Failing Exports and Supply chain	0.07	1	0.07	1	0.07	0	0
T3 - Falling Private Funding for R&D	0.06	1	0.06	0	0	4	0.24
T4 - Decline in Construction Activity	0.04	0	0	0	0	0	0
T5 - International Emergency Economic Powers Act	0.05	0	0	0	0	0	0
T6 - Department of Energy Appliance Labeling System	0.05	0	0	0	0	0	0
T7 - Contract Oversight	0.03	0	0	0	0	0	0
T8 - High Wages	0.06	1	0.06	2	0.12	0	0
T9 - Large Expenses	0.07	1	0.07	2	0.14	0	0
T10 - Potential Pandemic	0.03	0	0	0	0	0	0
TOTAL	**1.00**		**0.46**		**0.65**		**0.56**
STRENGTHS							
S1 – Investment in Promo and Sales Marketing (Higher than Industry Average)	0.04	3	0.12	0	0	0	0
S2 - Robust Automation Proficiency	0.12	0	0	3	0.36	0	0
S3 – Strong Capabilities to Reduce Costs (Most Efficient in the Industry)	0.10	1	0.10	2	0.20	0	0
S4 – Strong Cash Position	0.05	1	0.05	0	0	1	0.05
S5 – Strong Financial Management	0.04	1	0.04	0	0	0	0
S6 –Leadership Capabilities	0.05	0	0	0	0	0	0
S7 – Efficient Sale Processes and Effective Pricing Strategies	0.01	0	0	0	0	0	0
S8 – Strong Debt Management and Utilization of Assets	0.01	0	0	0	0	0	0
S9 – Operations in Five Key Industry Sectors	0.02	0	0	0	0	0	0
S10 – Efficient Inventory Management Practices	0.07	1	0.07	1	0.07	1	0.07
WEAKNESSES							
W1 – Underutilization of Strong Cash Position	0.09	1	0.09	0	0	2	0.18
W2 – Production Underutilization (Higher Production than Capacity)	0.02	0	0	0	0	0	0
W3 – Lack of Investment in R&D	0.07	1	0.07	0	0	4	0.28
W4 –Poor Forecasting Capabilities	0.04	0	0	0	0	0	0
W5 – Increase in Automation Levels from Competitors (Reducing Our Competitive Advantage)	0.05	0	0	0	0	4	0.20
W6 – Lack of Motivation from Workforce	0.05	1	0.05	0	0	0	0
W7 – Underutilization of TQM Initiatives	0.04	2	0.08	1	0.04	0	0
W8 – Insufficient Budget Allocation for HR Activities	0.03	1	0.03	0	0	0	0
W9 – Lack of Distribution Network	0.07	1	0.07	0	0	0	0
W10 – Lack of Ability to Set Clear Priorities	0.03	0	0	0	0	0	0
TOTAL	**1.00**		**0.77**		**0.67**		**0.78**
SUM TAS			**1.23**		**1.32**		**1.34**

In our QSPM, we evaluated three key initiatives from our TOWS matrix. After careful consideration, we identified 'WO1 - Utilize our strong cash position to fund more into research and development to keep up with competitors and further product differentiation (S4, W3, W5)' as our focus strategic initiative. We decided to proceed with this initiative as it ended with the highest Total Attractiveness Score (TAS) of 1.34. This initiative involves leveraging our strong financial position (S4) to address our company's weaknesses of insufficient investment in R&D (W3) and the increasing threat from competitors' automation (W5).

This strategic choice also aligns well with our generic business strategy, which is a blue ocean strategy. By investing in research and development, we are taking on a proactive approach to stay competitive, prioritizing innovation and creating unique, high-quality products for our customers. This initiative matches the core principles of a blue ocean strategy, which focuses on market growth and differentiation through innovation.

Functional Strategies and Additional Resources

With the implementation of our focus strategic initiative, our team at Digby has developed a series of functional strategies and have altered the allocation of various key resources. Seen below are five resources that we believe need attention, and included are their corresponding functional strategies:

1. Research and Development (R&D):
    a. *Functional Strategy:* Increase the budget and resources allocated towards R&D.
    b. To ensure our focus strategic initiative is achieved successfully, we must increase our funding towards R&D, utilizing our strong cash position. This could include investments in R&D aimed at better aligning our Pfmn, Size, and MTBF with consumer preferences. Although product material costs may rise, we believe that our overall market share and demand will increase as a result of creating better quality products that customer desire.
2. Human Resources (HR):
    a. *Functional Strategy:* Increase funding into HR initiatives/programs in order to build a productive workforce with expertise in R&D.
    b. According to Capsim, increasing funding in HR programs "results in higher productivity and lower turnover." If we are looking to expand our product line and invest more in R&D, then we need to ensure productivity is high.
3. Financial Management:
    a. *Functional Strategy:* Implement efficient financial management practices, such as the issuance of debt and equity, to appropriately fund, monitor, and control R&D investment costs.
    b. Because we are investing heavily in R&D, it is important for our team to have financial management practices that are utilized effectively in order to obtain a positive ROI.
4. Total Quality Management (TQM):
    a. *Functional Strategy:* Enhance quality control processes by funding more TQM initiatives aimed at improving quality assurance.

    b. Because we are developing new products, we need to ensure they are up to our standards, in order to maintain our competitive advantage.
5. Product Marketing and Positioning:
    a. *Functional Strategy:* Develop and refine product positioning and marketing strategies.
    b. While introducing new and differentiated products into the market, we need to ensure that they are positioned appropriately and that the necessary funding is provided for marketing purposes.

By implementing these functional strategies and altering the allocation of various key resources, we believe that we will be able to successfully achieve our focus strategic initiative of 'utilizing our strong cash position to fund more into research and development to keep up with competitors and further product differentiation (S4, W3, W5)'.

Investment Strategy

In order to obtain long-term success utilizing a broad cost strategy, we have strategically forecasted a series of investments over the upcoming three years, as outlined below:

Plant Improvements ($6,000):

- We have allocated $6,000 toward plant improvements over the next three years. This has slightly decreased from previous years because we invested heavily in automation in the early rounds.

R&D ($15,000):

- We have allocated $15,000 toward Research & Development over the next three years. Since plant improvements have decreased, we have more funds to allocate toward making our products better for the customer. Investing more in R&D aligns with our strategic focus as well.

Promo Budget ($20,000):

- We have allocated $20,000 toward Promo Budgets which is only a $2,000 increase from the previous three years. This is because we are trying to continue to expand our product reach.

Sales Budget ($20,000):

- Similar to the Promo Budget, we have allocated $20,000 toward our Sales Budget. This is also only a $2,000 increase from the previous three years.

Admin ($7,000):

- We have allocated $7,000 toward the admin expenses for the next three years. This investment is essential for the smooth operation of our company. This investment ensures that our resources are managed efficiently.

Total Quality Management (TQM) ($30,000):

- Quality Management is essential for maintaining our position as a provider of high-quality, low-cost sensors. Therefore, we have allocated a large portion of our budget to TQM in order to deliver products that exceed our customers' quality expectations. Similar to our previous strategic document, we have broken down TQM into 10 categories: CPI Systems, Vendor/JIT, Quality Initiative Training, Channel Support Systems, Concurrent

Engineering, UNEP Green Programs, Benchmarking, Quality Function Deployment Effort, CCE/6 Sigma Training, and GEMI TQEM Sustainability Initiatives. Continuing with our Blue Ocean Strategy, we have allocated the majority of our TQM budget towards initiatives aimed at reducing material, labor, and admin costs. However, because we now have a much stronger cash position, we have also decided to increase funding towards other TQM activities such as Channel Support Systems, Concurrent Engineering, and Quality Function Deployment Effort. Our goal is to continue investing in the growth of our company, ensuring the production of high-quality products at reduced costs, and enhancing accessibility for all. The full TQM budget breakdown can be seen below:

- CPI Systems ($4,000): Investments in CPI Systems drive reductions in material costs, which align with our strategy to minimize production costs and offer competitive pricing. However, we have decided to keep the allocation of funds into CPI Systems the same, compared to the previous 3 years.
- Vendor/JIT ($4,000): Vendor/JIT investments lead to reductions in both material costs and administration costs by improving our supply chain and inventory control. However, we have decided to keep the allocation of funds into Vendor/JIT activities the same, compared to the previous 3 years.
- Quality Initiative Training ($3,500): Quality Initiative Training produces reductions in our labor costs, a crucial component of our cost leadership strategy. Again, we have decided to keep the allocation of funds into Quality Initiative Training the same, compared to the previous 3 years.
- Benchmarking ($3,500): Benchmarking ensures that our administrative functions are efficient and cost-effective. Because of our stronger cash position now, we have decided to raise our allocation into benchmarking activities by $1,500, compared to the previous 3 years.
- UNEP Green Programs ($3,500): UNEP Green Programs provide guidance on a Green Economy, which can lead to reductions in material costs and raise demand for our products due to environmentally friendly practices. Again, because of our stronger cash position, we have decided to raise our allocation into UNEP Green Programs by $1,500, compared to the previous 3 years.
- CCE/6 Sigma Training ($3,500): Investments in CCE/6 Sigma Training optimize both labor and material efficiency, allowing us to continue offering competitive pricing. However, we have decided to keep the allocation of funds into CCE/6 Sigma Training activities the same, compared to the previous 3 years.
- GEMI TQEM Sustainability Initiatives ($3,000): Adopting TQEM strategies reduces material costs and provides some reduction in labor costs. However, we have decided to keep the allocation of funds into GEMI TQEM Sustainability Initiatives the same, compared to the previous 3 years.
- The remaining $5,000 will be allocated towards Channel Support Systems, Concurrent Engineering, and Quality Function Deployment Effort. These initiatives don’t reduce labor, material, or admin costs. However, they can help increase demand and reduce R&D cycle times, which are both extremely beneficial for our company and our focus strategic initiative. As a result, we have raised our allocation into these activities by $2,000, compared to the previous year.

Overall, our budget allocations have been carefully designed to align with our Blue Ocean strategy, allowing us to maintain competitive pricing, enhance product quality, and ensure efficient operations while expanding our market presence.

Financial Strategy

The NPV Tables are listed in the appendix as well as the projections and calculations for the expected case. As shown in Table 1, our investments total is $98,000 for the expected case scenario. This is calculated by taking the sum of each year's investments. The investments for each year are divided into the departments of R&D, Promo Budget, Sales Budget, Admin, TQM, and Plant Improvements. These specific values were calculated on our current needs and strategic goals. Our Free Cash Flow values are the direct value of sales for the current year. Similarly, the Present Value of FCF's is simply the sales at a discounted rate per year. Shown at the bottom of the table is the NPV which is the sum of CF's less the sum of the PV of FCF's. This results in an NPV value of $217,775 for our expected scenario. Our company will be financing our investments primarily through retained earnings. Looking forward, we will increase our dividend with our shareholders from $4.00 to $10.00 within the coming rounds.

Table 4 shows the pro-forma breakdown of each year in the Expected Case Scenario. It is important to note that there are some changes compared to our last pro-forma. First, now that we have 8 years of financial statements available, our revenue is now adjusted based on our calculated average revenue growth rate of 7.14%. This was calculated by finding the average growth in revenue for our company over the first 8 years of the simulation, not just using the segment growth rate. Second, Variable costs are forecasted using our 'Average Variable Cost %' of 0.76% instead of the segment growth rate. This was also calculated using our average increase in VC from rounds 1-8.

Table 2 shows our Best-Case Scenario. Here the main difference from our expected scenario is the growth rate of 8%. Keeping all investments the same, this will increase our revenues by over 7%. Also, because this is the Best-Case, we can expect Variable Costs to decrease by just over 5%. If these both occur, we can expect NPV to increase by over $25,000 or 12%.

Table 3 shows our Worst-Case Scenario. The main difference is that we used a -5% growth rate. Similar to the best case, the investments will not change. This results in Revenues decreasing by 5% and Variable Costs increasing by over 7% compared to the Expected Case. With these factors we can project that our NPV will decrease by over $15,000 or -9%.

Appendix

Table 1:

Overall NPV - Expected Case Scenario			
3 Year Pro-Forma			
Year	**9**	**10**	**11**
Revenues	$ 185,604	$ 198,847	$ 213,036
VC	$ 77,654	$ 78,243	$ 78,836
Net Sales	$ 107,950	$ 120,605	$ 134,200
R&D	$ 5,000	$ 5,000	$ 5,000
Promo Budget	$ 7,000	$ 7,000	$ 6,000
Sales Budget	$ 7,000	$ 7,000	$ 6,000
Admin	$ 3,000	$ 2,000	$ 2,000
TQM	$ 10,000	$ 10,000	$ 10,000
Plant Improvements	$ 2,000	$ 2,000	$ 2,000
Investment	$ 34,000	$ 33,000	$ 31,000
Free Cash Flow	$ 107,950	$ 120,605	$ 134,200
PV of FCFs	$ 100,888	$ 105,341	$ 109,547
Sum of CFs	$		315,775
Initial Investment	$		98,000
NPV	**$**		**217,775**

Table 2:

Overall NPV - Best Case Scenario			
3 Year Pro-Forma			
8% Growth - Best Case			
Year	**9**	**10**	**11**
Revenues	$ 200,452	$ 214,755	$ 230,079
VC	$ 73,771	$ 74,331	$ 74,894
Net Sales	$ 116,586	$ 130,253	$ 144,936
R&D	$ 5,000	$ 5,000	$ 5,000
Promo Budget	$ 7,000	$ 7,000	$ 6,000
Sales Budget	$ 7,000	$ 7,000	$ 6,000
Admin	$ 3,000	$ 2,000	$ 2,000
TQM	$ 10,000	$ 10,000	$ 10,000
Plant Improvements	$ 2,000	$ 2,000	$ 2,000
Investment	$ 34,000	$ 33,000	$ 31,000
Free Cash Flow	$ 116,586	$ 130,253	$ 144,936
PV of FCFs	$ 108,959	$ 113,768	$ 118,311
Sum of CFs	$		341,038
Initial Investment	$		98,000
NPV	**$**		**243,038**

Table 3:

Overall NPV - Worst Case Scenario			
3 Year Pro-Forma			
-5% Growth - Worst Case			
Year	9	10	11
Revenues	$ 176,323	$ 188,905	$ 202,384
VC	$ 83,866	$ 84,502	$ 85,143
Net Sales	$ 102,552	$ 114,574	$ 127,490
R&D	$ 5,000	$ 5,000	$ 5,000
Promo Budget	$ 7,000	$ 7,000	$ 6,000
Sales Budget	$ 7,000	$ 7,000	$ 6,000
Admin	$ 3,000	$ 2,000	$ 2,000
TQM	$ 10,000	$ 10,000	$ 10,000
Plant Improvements	$ 2,000	$ 2,000	$ 2,000
Investment	$ 34,000	$ 33,000	$ 31,000
Free Cash Flow	$ 102,552	$ 114,574	$ 127,490
PV of FCFs	$ 95,843	$ 100,074	$ 104,070
Sum of CFs	$ 299,987		
Initial Investment	$ 98,000		
NPV	$ 201,987		

Table 4:

2032 (Round 9)						
Name	Primary S	Segment (	Units Sold	Price	Revenue	Variable Costs (Labor, Material, Carry)
Daze	Trad	10.40%	1885	$25.99	$47,530.60	$14,206.76
Dell	Low	10.80%	3040	$18.00	$52,916.38	$14,902.34
Duck	High	16.40%	1003	$36.00	$33,246.30	$19,672.38
Dot	Pfmn	20.10%	1088	$31.00	$30,090.08	$17,426.72
Dune	Size	17.80%	774	$31.00	$21,820.29	$11,445.69
				TOTALS	$185,603.65	$77,654

2033 (Round 10)						
Name	Primary S	Segment (	Units Sold	Price	Revenue	Variable Costs (Labor, Material, Carry)
Daze	Trad	11.34%	2098	$25.99	$50,922.16	$14,314.51
Dell	Low	11.77%	3398	$18.00	$56,692.24	$15,015.36
Duck	High	17.88%	1183	$36.00	$35,618.59	$19,821.59
Dot	Pfmn	21.91%	1326	$31.00	$32,237.17	$17,558.89
Dune	Size	19.40%	924	$31.00	$23,377.28	$11,532.50
				TOTAL	$198,847.44	$78,243

2034 (Round 11)						
Name	Primary S	Segment (	Units Sold	Price	Revenue	Variable Costs (Labor, Material, Carry)
Daze	Trad	12.36%	2357	$25.99	$54,555.72	$14,423.08
Dell	Low	12.83%	3834	$18.00	$60,737.53	$15,129.25
Duck	High	19.48%	1413	$36.00	$38,160.17	$19,971.93
Dot	Pfmn	23.88%	1643	$31.00	$34,537.46	$17,692.07
Dune	Size	21.15%	1120	$31.00	$25,045.38	$11,619.97
				TOTAL	$213,036.25	$78,836

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