**Polaroid Turnaround Plan – Chethan Mittapalli**

1. **What financial, competitive and operating analyses would you show the Board that demonstrates the situation facing the company (you can use data through 1995 for your analyses)? Show these analyses and summarize your conclusions. How do these analyses help set the context for your turnaround plan?**

**Financial Analysis from 1998-95**

**Price cutting by competitors**

Polaroid is known for instant photography and established a monopoly for a long period of time. But, two developments in conventional photography began to erode the value proposition of instant photography. First, Japanese camera makers developed point-and-shoot cameras with photographs of much higher quality than was possible with instamatic cameras. As conventional photographs retained their quality advantage and introduction of the one-hour photo-developing lab made the prints cheaper and quicker to obtain, the benefits of instant photography were becoming harder for a consumer to justify.

Instant camera sales fell from a peak of 13 million in 1978 to 4.5 million in 1990. Sales had leveled off and our profits had taken a serious tumble because of Kodak competition and price-cutting that put enormous pressures both inside and outside the company to diversify from Instant photography.

**Need to Change Camera-Film Business Model**

Polaroid revenue model revolved around selling the cheaper camera to customers and then making money on the film sold to the customers. It was a very good model and made Polaroid reluctant to change to any other business model. This was one of the important factor for Polaroid engineers and management to not diversify to any other products or segments such as Hardware since they found these segments to be not attractive when they compare to high margin Polaroid film business. It is high time that Polaroid look to other options now as the customers have various alternatives in digital cameras and the business model no longer works as Polaroid cannot depend on selling films any more to a larger audience. So, Polaroid has to diversify and move away from its core instant photography market and cut down on R&D expenses in instant photography.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Polaroid Analysis from 1988-95** | **1988** | **1989** | **1990** | **1991** | **1992** | **1993** | **1994** | **1995** |
|  |  |  |  |  |  |  |  |  |
| **Altman Z Score (1.2X1+1.4X2+3.3X3+0.6X4+1.0X5)** | 6.12 | 4.68 | 3.90 | 3.74 | 3.44 | 3.10 | 3.01 | 2.75 |
| **X1 (Working Capital / Total Assets)** | 0.71 | 0.59 | 0.58 | 0.62 | 0.60 | 0.58 | 0.58 | 0.56 |
| **X2 (Retained earnings divided by Total assets)** | 0.52 | 0.26 | 0.33 | 0.41 | 0.40 | 0.35 | 0.37 | 0.32 |
| **X3 (earnings before Interests and taxes divided by total assets)** | 0.09 | 0.17 | 0.17 | 0.13 | 0.11 | 0.08 | 0.09 | 0.04 |
| **X4 (Market value of equity divided by book value of total liabilities)** | 5.50 | 3.28 | 1.73 | 1.49 | 1.24 | 1.06 | 0.86 | 0.87 |
| **X5 (sales divided by total assets)** | 0.95 | 1.07 | 1.16 | 1.10 | 1.07 | 1.01 | 1.00 | 0.99 |
| **Working capital** | 1381 | 1047 | 992 | 1167 | 1195 | 1275 | 1336 | 1257 |
| **Total Assets** | . | . | . | . |  |  |  |  |
| **# Of shares** | 66.47 | 73.98 | 68.64 | 54.52 | 48.06 | 46.83 | 47.07 | 45.37 |
| **Market Price** | 78.3 | 57.9 | 28.8 | 30.6 | 30.9 | 32.7 | 26.4 | 29.7 |
| **Market Cap** | 5205 | 4283 | 1977 | 1668 | 1485 | 1531 | 1243 | 1348 |
|  |  |  |  |  |  |  |  |  |
| **Sales** | 1863 | 1905 | 1972 | 2071 | 2152 | 2245 | 2313 | 2237 |
| **Sales growth** |  | 2.2% | 3.5% | 5.0% | 3.9% | 4.3% | 3.0% | -3.3% |
| **Gross Margin (%)** | 50.6% | 53.9% | 53.1% | 51.8% | 49.4% | 46.7% | 47.8% | 47.9% |
| **SGA** | 36.8% | 33.3% | 34.3% | 35.8% | 35.3% | 34.0% | 34.1% | 38.0% |
| **Operating Margin (%)** | 9.33% | 15.97% | 14.42% | 11.91% | 9.93% | 8.26% | 8.66% | 3.99% |
| **Depreciation (%)** | 4.40% | 4.59% | 4.42% | 4.13% | 4.14% | 4.47% | 5.11% | 5.93% |
|  |  |  |  |  |  |  |  |  |
| **Profit Margin** | -22.60 | 145.00 | 151.00 | 683.70 | 99.00 | 67.90 | 117.20 | -140.20 |
| **Profit Margin** | -1.21% | 7.61% | 7.66% | 33.02% | 4.60% | 3.02% | 5.07% | -6.27% |
| **ROE** | -2.23% | 30.81% | 27.14% | 88.46% | 12.24% | 8.85% | 13.56% | -19.53% |
| **Asset Turnover** | 0.95 | 1.07 | 1.16 | 1.10 | 1.07 | 1.01 | 1.00 | 0.99 |
| **Financial Leverage** | 1.93 | 3.77 | 3.06 | 2.44 | 2.48 | 2.88 | 2.68 | 3.15 |
| **EBIT to Interest Coverage** | 5.61 | 3.40 | 3.34 | 3.78 | 3.12 | 3.06 | 3.56 | 1.57 |
| **EBIT to Interest and Principal Coverage** | 0.64 | 0.87 | 0.91 | 0.80 | 0.79 | 0.64 | 0.67 | 0.24 |
|  |  |  |  |  |  |  |  |  |
| **Current ratio** | 10.71 | 4.50 | 5.00 | 7.76 | 8.67 | 10.19 | 9.73 | 7.28 |
| **Accounts Receivable Turnover** | 4.33 | 4.15 | 4.46 | 4.35 | 4.37 | 4.03 | 4.27 | 4.06 |
| **Accounts Payable Turnover** | 7.69 | 8.66 | 7.95 | 7.80 | 7.73 | 8.99 | 7.74 | 7.75 |
| **Inventory Turnover** | 1.77 | 1.66 | 1.78 | 1.90 | 1.86 | 2.07 | 2.09 | 1.89 |
| **Accounts Receivable Days** | 84 | 88 | 82 | 84 | 84 | 91 | 85 | 90 |
| **Accounts Payable Days** | 47 | 42 | 46 | 47 | 47 | 41 | 47 | 47 |
| **Inventory Turnover Days** | 207 | 220 | 205 | 192 | 197 | 176 | 175 | 193 |
| **Cash Flow Cycle** | 244 | 266 | 241 | 229 | 233 | 227 | 213 | 235 |

**Decreasing Altman Z Scores, Sales growth and Margins**

The Altman Z score helps us predict the probability of a company going bankrupt in next few years and is a good signal about the financial health of the company. The exhibit shows Altman Z score for 1998-95, as shown Z score decreases from 1988 and reached grey zone in 1995 where Z <3 and more importantly Z was near the danger zone from 1993-95. Although sales have increased to two billion in 1992, sales growth is stagnant and is hovering around -3 to 5 % from 1988-95. Also, profit margins have taken a hit and are decreasing from 7% in 1989 to -6.27% in 1995. So, Polaroid needs to act now to reorganize the company and take necessary steps to analyze root causes of the problem and turnaround the situation.

**Hostile takeover and Recapitalization**

In 1988, Polaroid had no debt, a reasonably healthy cash flow, a respected brand name, and an extensive distribution network among shops and kiosks selling film. Shamrock Holdings made a $2.6 billion offer to buy Polaroid. The company rejected the offer and resisted the takeover through an employee stock ownership program and a stock buyback. They issued a lot of bonds and borrowed a lot of money, and that's what put them in the hole they're in today. But ultimately, the shareholders who didn't get out quickly did a lot worse than if the company had accepted the bid from Shamrock Holdings. Polaroid remains a troubled company, one that few include on their recommended lists because of high spending and an uncertainty for the company's long-term future in instant photography.

Recapitalization has changed the financial structure of the company from a debt free company to a finance leverage of 1.99 and 3.77 in 1988 and 1989 as Polaroid issued debt and brought back shares from the investors with an ESOP model. This increased the Interest and principal payments for the company and EBIT to Interest coverage ratios and EBIT to Interest Principal coverage ratios have decreased from 1988-1995. Ideally, it is good to maintain above 2 but this ratio is decreasing that might effect bond ratings and terms with the banks in future. This recapitalization can have huge impact on financials if the profit margins go down in future.

**Need for diversification and increase in Polaroid capability**

Polaroid need to diversify its business from its core instant photography business to other products, such as imaging, floppy disks, fiber optics, batteries, sonar measuring instruments, and instant photo systems for medicine. There were three important areas of capability that Polaroid did not invest in: low-cost electronics manufacturing capability, rapid product development capability, and new marketing and sales capability. Strong, low-cost electronics manufacturing capability would have been fundamental to increasing the typically smaller margins in the hardware business. At the same time, fast product development capability would have been necessary to permit the timely introduction of innovative products in a market where product life cycles were measured in months, as opposed to the years Polaroid was accustomed to.

**Need for change in Culture**

"Polaroid was clearly a technology-driven, not market-driven company”. The people in the company were basically scientists, not business people, and the company needed business discipline. There was never sufficient respect for the fact that the market matters, that a company is the servant of the market, not the other way around. In particular, Polaroid was unable to do the kind of radical reinvention that had helped it make the transition from World War II defense contractor to postwar consumer Technology Company. Polaroid liked to start from scratch, develop its products through its own innovation, technologies, and capabilities. And there was also a fairly strongly held belief that it was good to start small and then try to build on that.

**Vertical Integration and High Fixed Costs**

Vertical integration meant not only a difficult transition to electronic imaging but also a heavy burden of fixed costs. Polaroid always controlled everything they did: the media, the chemistry, the hardware, everything. But in electronics imaging, there's no one company in the world that holds the whole supply chain increasing the fixed cost heavily.

**2. What internal and external factors would you point to that have helped cause the decline of Polaroid's market, competitive and financial position from 1990-1995? Which are the most important and why?**

**Failure of Captiva and Helios – Huge Write offs**

Polaroid for the first time reached $2 billion in early 1991 and also won the lawsuit for $875 against Kodak. Polaroid started exploring new markets for instant cameras and developing products in new media.

Polaroid introduced two products: the Captiva instant camera and Helios Medical imaging system. Captiva sold well in Europe, US and Japan. Polaroid's 1993 annual report suggested that the healthy sales of Captiva signaled the ongoing potential for instant photography products and potential to grow in all geographic areas of the world, especially in the developing countries.

However, Captiva's success was short-lived. Within a few years, sales of the cameras dropped, and the company cut back production. Unfortunately, Captiva never paid for itself. The turnaround time for research and product development in Polaroid is very long compared to industry and took more than ten years to develop Captiva after a lot of money invested in an incremental innovation.

For Helios, Polaroid started making it at much more than industry price of $65000 and cost of goods was in the $85,000 range. So, Polaroid was comparing its cost of goods with price of competitors who were making a margin on it. Although the products were superior, but nobody cared, as economics didn’t work.

**Unnecessary R&D costs and write-offs**

The basic problem of the company was that every dollar went into R&D from 1987 or 1988 onward. It was wasted. They didn't develop one real product that made a decent return on capital. They spent several hundred million dollars to improve the quality of their instant film. But at the end of the day, the people who needed to use it, both consumer and the industrial applications, they would have survived with the film as it was. They spent hundreds of millions on medical imaging that again was totally superseded by digital. They spent hundreds of millions generating a smaller sized, folding instant disposable camera that generated some consumer sales but did not return its investment. Polaroid put their R&D efforts from the period from 1987 to 1993 or 1994 into imaging applications, all of which were doomed to fail.

**Restructuring Effects**

The restructuring effects in 1998 did have huge spillover effects during 1990-95 as Capital structure changed and company is financially leveraged. The important ratio is Market Capitalization to Debt ratio that kept coming down from 5.5 to 0.87 as Market price of the stocks has come down and long-term debt in the company increased. Also, company was not able to cover Interest and principal payments easily with new capital structure.

**Razor Blade Model**

Polaroid tried to use their conventional revenue model of Razor Blade for all its products and didn’t change to the market conditions. The competitors such as Kodak have started to innovate in Digital world and shifted their business models to razor model of hardware camera sales and sold to customers decreasing the recurring costs for the customers. In Polaroid, especially industrial customers were finding it unnecessary to buy Polaroid films more than 15 times a year. So, Polaroid should start exploring other business models and try to use its existing relationships with industrial customers to focus on this segment and start selling digital products to them.

**Poor Marketing**

Polaroid was a technology driven company and not market driven company. So, sales and marketing were completely ignored and Polaroid was of the view that if technology were available then the customers would buy the product. This was a big misconception and led to spending unnecessarily in products such as Captiva and Helios that customers did not find value in. This would have been avoided with better market research and developing products catering to market requirements as Polaroid had all the capability to develop technologically great products.

**Poor industry trends in Imaging and Instant Photography**

Polaroid's future was not optimistic as imaging industry showed modest two percent increase in overall amateur photography sales due to "pricing pressures and a relatively mature domestic marketplace." Due to low demand, Polaroid's instant film products continue to be a source of weakness in the industry and remain skeptical regarding its ability to generate significant growth in the longer term.

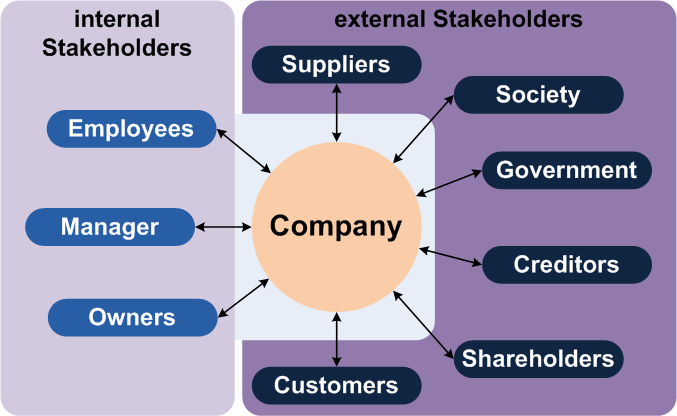
**Erosion of Market Cap and Investor Confidence**

Investors lost confidence in Polaroid after failure of its two key products Captiva and Helios. The market share price came down drastically from $75 in 1988 to $30 in 1995. The investors were skeptical and were inclined towards taking smaller bets and in shorter term. They were not ready to take bigger gambles to transform the company radically and were concerned about future of Polaroid product line.

The most important factors for Polaroid failure were unwanted R&D costs in products without proper market research, reluctance to change its conventional business model, slow down in instant photography markets and slow product diversification.

**3. Who are the key players and constituents that you need to consider in developing your plan? How would you go about learning of their needs and issues? How will you incorporate them in your turnaround plan?**

A comprehensive turnaround plan provides a plan for rebuilding support from all stakeholders and below exhibit shows some of the major stakeholders in any big organization like Polaroid.



**Internal Stakeholders**

|  |  |  |
| --- | --- | --- |
| **Stakeholder** | **Needs** | **Issues** |
| **Board of directors** | * Strong financials * Good ROI * Strong product pipeline and long term vision of the company * Ensure all stakeholders are happy * Market share * Decision making | * Stagnant sales * Decrease in profit Margins * Investors, Creditors and customers are not happy * Decreased market share * Highly leveraged * High Fixed costs |
| **Owners** | * Good ROI * Strong financially and keep innovating new products * Good Market share * Keep investors happy | * Bad Financials * Decrease in profits and sales * Instant photography is declining * Market share declining |
| **CEO** | * Turnaround Polaroid * High Salary * Stock options * Increase market share * Make Polaroid as a Sustainable business * Increase profits | * Decrease in profits and sales * Restructuring issues * Instant photography is declining * Market share declining * Everything going against the CEO * Need to lead the entire turnaround * Low profits on new services |
| **Employees** | * Stable job * Healthy financial situation of the company * Stock options * Increase in share price * Develop new products | * Cost Cutting * Layoffs * Stock price going down * Cut down products and divisions * Restructuring issues |

**External Stakeholders**

|  |  |  |
| --- | --- | --- |
| **Stakeholder** | **Needs** | **Issues** |
| **Suppliers and Vendors** | * Maintain existing contract and partnerships * Pay back all dues on time as per terms * Healthy financials of Polaroid to avoid any bankruptcies | * Declining financial state of company * Restructuring * Uncertainty on future relationships * Credit risk in case of bankruptcies |
| **Creditors** | * Payback loans * Healthy Interest Coverage Ratios * Good Financials * Good Market share and profit margins | * Decreasing ratios * Decrease in market share * Decrease in margins * No new stable revenue product lines |
| **Investors** | * Good ROE * Increasing share price * Stable cash flows * Solid long term pipeline for product line * Good Market share * Dividends * Solid Management and CEO | * Decreasing ROE * Stagnant revenues and decreasing profits * Decline in market share * Management changes * Restructuring * No solid product line * High leverage * Low Altman Z score |
| **Customers** | * Quality products * Customer centric products at reasonable price | * Expensive products * Old technology |

For a company like Polaroid that has been dependent on a single core technology of instant photography for more than 30 years, turning around the company would require a lot of effort and all the components of the turnaround plan would be applied "right away and all at once" and becomes necessary to deal with all the various stakeholders simultaneously.  A common source of failure is to initiate a too narrow turnaround approach and not understand all the various stakeholders’ needs and issues. A turnaround plan should be broad in scope dealing simultaneously with:

* Hard and soft issues.
* Financial, Strategic and operational initiatives.
* Addressing both short- and long-term needs and issues of all the stakeholders.
* Stabilization is further achieved by reintroducing predictability to the operations by setting performance targets, establishing information systems, and tracking progress.
* Stabilization requires discipline and conformance to new systems and controls.
* Internal stakeholders affected by or who can influence cash management and other emergency initiatives need to understand the new priorities, new procedures that are expected of them.
* External stakeholders need to see that their interests are being preserved.

**4. Most importantly, what is your turnaround plan for Polaroid beginning in early 1996? What would be the priorities and key strategies in your plan? What would be the phases and timing of your plan?**

**Strategy**

The turnaround plan for Polaroid beginning in early 1996 would be to 1) reposition Polaroid and go after digital markets extensively by changing its business model, 2) consolidating instant photography with extensive marketing and doing cost cutting in the organization by liquidating underperforming instant photography products and cutting down on additional R&D in instant photography and finally 3) acquiring companies that specialize in categories such as digital cameras, peripherals (floppy, cd’s) and software used in photography.

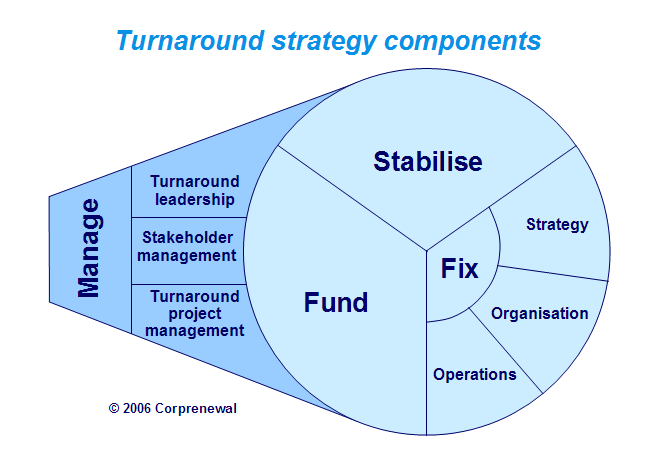
* Redefine Polaroid business model from conventional Razor Blade revenue model
* Partner with digital camera providers such as HP and Nikon to provide services in digital imaging, copier, printing in its kiosks as Polaroid’s unique value proposition is its relationship with customers, distributors and access to industrial customer segment
* Provide access to Polaroid kiosks equipped with digital imaging and providing software for imaging to professionals
* Provide storage such as floppy drives and disks to store images and equip kiosks with Polaroid printers and copiers to print the images
* Consolidate Instant Photography
* Expand existing instant photography products into new markets
* Market extensively existing product line with minor incremental changes in US without any new research and development but utilizing the existing technology.
* Generate as much additional revenues as possible from instant photography by targeting to new customer segments such as amateur photographers and new markets such as Russia, China, India and Asia Pacific.
* Cost cutting and liquidation of underperforming instant photographic products such as Captiva and Helios.
* Acquire small companies in digital services and peripherals in next few years using the cash from operations
* Acquire companies that specialize in categories such as digital cameras, peripherals (floppy, cd’s) and software used in photography.
* Polaroid can benefit by providing better customer experience and partnering with companies in the entire value chain from photo capture, digital processing, storage, printing and software.

**Priorities in order of importance**

1. Firstly, communicate the strategy to all the stakeholders in the company
2. Consolidate and liquidate under performing instant photography products in next one year.
3. Start marketing instant photography products extensively in US and expand to other markets such as Asia, China and India within one year.
4. Start partnering with digital camera providers such as HP and Nikon to provide services in digital image processing, capturing photos and software by end of 1996 and establish strong relationships in next two years.
5. Acquire small companies in peripherals such as cd’s, drives and digital imaging software that can complement Polaroid services in digital and instant photography in 1997.

**5. How would you implement the plan and how would you measure whether the plan was working or not?**

The implementation would consist of following steps: 1) fixing the problem (consolidating instant photograph division), 2) funding the restructuring for $250M in 1996 3) Reposition and manage (Change business model and acquisitions) and 4) stabilize the company for long term



**Fix and fund - Instant Photography Consolidation Plan**

* Firstly, start with consolidating instant photography, as stopping the bleeding would be the first step. So, Polaroid needs to concentrate on Selling unwanted assets, abandoning difficult markets, stopping unprofitable production lines, downsizing and outsourcing manufacturing to cheaper countries. Restructuring costs of $250M are invested in 1996 for consolidating the product line, marketing and expanding to other geographies.
* The future prospects of the Company's digital imaging businesses are uncertain and they are likely to continue to affect the Company's financial results adversely for the next few years.
* Polaroid should cut down its workforce by about 25% mostly in Instant photography research team and divisions that are not performing well and write off about 30% of under performing division products inventory.
* The Company's should reduce its digital imaging losses in Helios and license the technology to third party companies.
* Polaroid should continue to study the different areas of its businesses, including their cost structures, and explore prospects for aligning itself in various business relationships in instant photography to improve financial results.
* These procedures are used to generate resources, with the intention to utilize those for more productive activities, and prevent financial losses.
* Training and re-educating the sales force to sell new products and services and change the incentive system for employees to improve the productivity and work on profitability.
* Target new customer segments such as amateur photographers and people interested in instant photography by bundling the products with Polaroid services such as printing, cd’s, drives and software.

|  |  |  |
| --- | --- | --- |
| Implementation Plan | Timelines | Measurement Metrics |
| Cut down 25% of workforce | 3 months | * Decrease in SGA * Increase in Productivity * Increase in profitability |
| Sell unwanted inventory | 4 months | * Decrease in inventory * Decrease in inventory turnover days |
| Liquidate unused plants, assets | 6 months | * Increase in ROA |
| Liquidate Captiva and Helios | 6 months | * Increase in cash |
| Increase Marketing and expand globally | 3-12 months | * Increase in global marketing sales and product sales * Measure sales increase because of Marketing |
| Decrease R&D on instant photography | 1-12 months | * Reduction in SG&A |

**Redefine Polaroid business model Plan**

* Firstly, start with communicating the strategy to employees and shareholders about the repercussions of change in business model. There will be lot of resistance but Polaroid needs to work on changing the business model, as Polaroid needs to move to digital to catch up with competition.
* Partner with digital camera companies such as HP and Nikon as they have strong hold in digital cameras and have an incentive to partner with Polaroid that is strong in imaging and printing technologies. So, Polaroid needs to move to services in digital arena.
* Build research and development team in digital technologies in Polaroid and explore options for utilizing any of Polaroid instant photograph technologies to generate additional revenues.
* Expand digital imaging solutions to Polaroid kiosks and establish partnerships with HP that have presence in hardware and software.
* Training and re-educating the sales force to sell new products and services in digital services.

|  |  |  |
| --- | --- | --- |
| Implementation Plan | Timelines | Measurement Metrics |
| Partner with HP And Nikon for digital cameras | 6-18 months | * Increase in revenues * Increase in cross selling * Increase in profitability |
| Build R&D in digital imaging | 8-24 months | * Increase in R&D * Amount of increase in new products in digital? |
| Expand imaging solutions to kiosks | 12-24 months | * Increase in ROA |

**Acquire small companies Plan**

* Polaroid should acquire smaller companies that specialize in categories such as digital cameras, peripherals (floppy, cd’s) and software used in photography.
* Polaroid can benefit by providing better customer experience and partnering with companies in the entire value chain from photo capture, digital processing, storage, printing and software.

|  |  |  |
| --- | --- | --- |
| Implementation Plan | Timelines | Measurement Metrics |
| Acquire small companies that are specialized in categories such as digital cameras, peripherals and software | 12-36 months | * Measure synergies from categories |

Disruptive business model innovation will likely require changing the old business model to fit the new technology. This is very difficult for both big and small organizations to accomplish and especially difficult for organizations like Polaroid which are unreceptive to change. There are many things to consider to name a few: 1) Training and re-educating the sales force to sell new products and services. 2) Possibility of accepting lower profits on new services. 3) Potential of cannibalization-  (such as new services replacing existing services) 4) Managerial conflicts due to a new business model 5) Shareholders don’t like the change, some customers won’t accept it, and employees just don’t understand it.6) Provide renewed energy, excitement, rigor, discipline, and urgency. 7) Refocus the business around a compelling turnaround ambition, turnaround agenda and [turnaround strategy](http://www.turnaround-sa.com/turnaround%20strategy/turnaround%20strategy.php). 8) Form an effective leadership team. 9) Implement management processes to support the turnaround e.g. rigorous performance management systems. 10) Force a new mind set on the organization and provide [stakeholders](http://www.turnaround-sa.com/turnaround%20strategy/turnaround%20stakeholder%20management.php) with comfort things would change for the better. Finally, management and shareholders need to give enough time for Polaroid to get used to restructuring of the company.

**6) Finally, show how your plan would impact the financial performance of Polaroid. Show me at least three or four years of income statements beginning in 1996 (use 1995 as the base year). Show also at least one balance sheet three or four years after you have implemented the plan (again, use 1995 as the base year). Be as specific as you can in showing how the elements of the turnaround plan are impacting your financial statements**

**Polaroid Income Statement Balance sheet forecasts**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **1995** | **1996** | **1997** | **1998** | **1998** |  |
| **Polaroid Analysis from 1988-95** | Comments |
| **Cash** | 83.10 | 100 | 150 | 180 | 190 | Minimum cash requirement |
| **Receivables** | 550.40 | 441 | 485 | 558 | 658 | Accounts receivable days |
| **Inventories** | 615.50 | 493 | 532 | 599 | 693 | Inventory days |
| **Total Current Assets** | 1457.50 | 1033 | 1166 | 1337 | 1541 |  |
| **P,P&E Total (Net)** | 691.00 | 552.8 | 450.00 | 390.00 | 350.00 | Cut down the PPE by 20%(Liquidation of Captiva and Helios) |
| **(Accumulated) Depreciation** | 1473.40 | 1611.60 | 1714.40 | 1774.40 | 1814.40 |  |
| **(Equity) Investment** | 0.00 |  |  |  |  |  |
| **Investment (Other)** | 0.00 |  |  |  |  |  |
| **Intangible Assets** | 0.00 |  |  |  |  |  |
| **Other Assets** | 113.30 | 138.30 | 163.30 | 188.30 | 213.30 | Average % of sales |
| **Total Assets** | 2261.80 | 1586 | 1616 | 1727 | 1891 |  |
| **Current Liabilities** | 200.10 | 116.9 | 119.1 | 127.3 | 139.4 | Average % of assets |
| **Accounts Payable (Trade)** | 150.40 | 120.2 | 129.6 | 146.2 | 169.0 | Accounts payable days |
| **Income Taxes Payable** | 46.60 | 43.59 | 44.42 | 47.46 | 51.97 |  |
| **Other Current Liabilities** | 321.90 | 178.83 | 182.23 | 194.68 | 213.18 |  |
| **Total Current Liabilities** | 719.00 | 342.6 | 356.3 | 388.3 | 434.2 |  |
| **Long-Term Debt** | 526.70 | 593.29 | 752.88 | 730.01 | 628.77 |  |
| **Deferred Taxes and ITC** | 0.00 |  |  |  |  |  |
| **Other Liabilities** | 298.40 | 148.08 | 150.89 | 161.20 | 176.52 |  |
| **Total Liabilities** | 1544.10 | 1083.94 | 1260.05 | 1279.51 | 1239.46 |  |
| **Minority Interest** | 0.00 |  |  |  |  |  |
| **Preferred Stock** | 0.00 |  |  |  |  |  |
| **Ordinary Equity** | 717.70 | 527.66 | 454.35 | 494.89 | 574.94 |  |
| **Stockholders Equity** | 717.70 | 527.66 | 454.35 | 494.89 | 574.94 |  |
|  |  |  |  |  |  |  |
| **Net Sales** | 2236.90 | 1789.52 | 1968.47 | 2263.74 | 2671.22 | Increase in sales of 10% because of new products and decrease in sales of 30% because of cut down in product lines |
| **Sales Growth** |  | 80% | 10% | 15% | 18% |  |
| **Cost of Goods Sold** | 1165.90 | 931.22 | 1004.66 | 1132.72 | 1309.90 |  |
| **S,G&A** | 849.10 | 679.28 | 747.21 | 859.29 | 1013.96 | 20% reduction in SG&A of average |
| **Operating Income Before Depreciation** | 221.90 | 179.02 | 216.60 | 271.73 | 347.36 |  |
| **Operating Income After Depreciation** | 89.20 | 40.82 | 113.80 | 211.73 | 307.36 |  |
| **Interest** | 56.90 | 48.57 | 53.42 | 61.44 | 72.50 |  |
| **Non operating Income (Expense)** | 13.30 | 13.74 | 15.11 | 17.38 | 20.50 |  |
| **Special Items** | -247.00 | -250.00 | -150.00 | -75.00 | -100.00 | Restructuring costs for adding and making changes |
| **Pretax Income** | -201.40 | -271.49 | -104.73 | 57.92 | 114.36 |  |
| **Income Taxes** | -61.20 | -81.45 | -31.42 | 17.38 | 34.31 | 30% |
| **Income Before Extraordinary Items** | -140.20 | -190.04 | -73.31 | 40.54 | 80.05 |  |
| **Basic EPS** | -3.09 | -4.19 | -1.62 | 0.89 | 1.76 |  |
| **Fully Diluted EPS** | -2.61 |  |  |  |  |  |
| **Altman Z Score (1.2X1+1.4X2+3.3X3+0.6X4+1.0X5)** | 2.75 | 3.12 | 3.26 | 3.59 | 3.92 |  |
| **X1 (Working Capital / Total Assets)** | 0.56 | 0.58 | 0.65 | 0.70 | 0.74 |  |
| **X2 (Retained earnings divided by Total assets)** | 0.32 | 0.33 | 0.28 | 0.29 | 0.30 |  |
| **X3 (earnings before Interests and taxes divided by total assets)** | 0.04 | 0.03 | 0.07 | 0.12 | 0.16 |  |
| **X4 (Market value of equity divided by book value of total liabilities)** | 0.87 | 1.24 | 1.07 | 1.05 | 1.09 |  |
| **X5 (sales divided by total assets)** | 0.99 | 1.13 | 1.22 | 1.31 | 1.41 |  |
| **Working capital** | 1257.40 | 916.56 | 1047.27 | 1209.61 | 1401.62 |  |
| **Total Assets** |  |  |  |  |  |  |
| **# Of shares** | 45.37 | 45.37 | 45.37 | 45.37 | 45.37 |  |
| **Market Price** | 29.7 | 29.7 | 29.7 | 29.7 | 29.7 |  |
| **Market Cap** | 1348 | 1348 | 1348 | 1348 | 1348 |  |
|  |  |  |  |  |  |  |
| **Sales** | 2237 | 1790 | 1968 | 2264 | 2671 |  |
| **Sales growth** | -3.27% | -20.0% | 10.00% | 15.00% | 18.00% |  |
| **Gross Margin (%)** | 47.88% | 47.96% | 48.96% | 49.96% | 50.96% |  |
| **SGA** | 37.96% | 37.96% | 37.96% | 37.96% | 37.96% |  |
| **Operating Margin (%)** | 3.99% | 2.28% | 5.78% | 9.35% | 11.51% |  |
| **Depreciation (%)** | 5.93% | 7.72% | 5.22% | 2.65% | 1.50% |  |
|  |  |  |  |  |  |  |
| **Profit Margin** | -140.20 | -190.04 | -73.31 | 40.54 | 80.05 |  |
| **Profit Margin** | -6.27% | -10.6% | -3.7% | 1.7% | 3.0% |  |
| **ROE** | -19.5% | -36.0% | -16.1% | 8.19% | 13.92% |  |
| **Asset Turnover** | 0.99 | 1.13 | 1.22 | 1.31 | 1.41 |  |
| **Financial Leverage** | 3.15 | 3.01 | 3.56 | 3.49 | 3.29 |  |
| **EBIT to Interest Coverage** | 1.57 | 0.84 | 2.13 | 3.45 | 4.24 |  |
| **EBIT to Interest and Principal Coverage** | 0.24 | 0.18 | 0.48 | 0.83 | 1.08 |  |

**Income Statement**

* Sales are decreased by 20% in 1996 because of 30% decrease in revenues due to cut down in product lines and 10% increase in revenues because of additional revenue channels in digital and global expansion
* Sales are expected to grow at 10%, 15% and 18% from 1997 because of additional marketing, expansion to global markets and new revenues from digital products
* COGS is assumed at a constant % of sales and because of better productivity and processes they increase by 1% in 1997-99
* SG&A is decreased by 20% because of reduction in workforce in 1996 and remains constant at a constant % thereafter from 1996
* $250 Mn is used for restructuring in 1996 for severance packages and other restructuring charges
* $150M, $75M and $100M are spent in 1997,98 and 99 for small acquisitions in digital services industry
* Because of efficiency in processes, increase in revenues and cost cutting profit margins start to improve from 1998-99 and show positive net profits of $40M and $80M respectively.
* Profit margins increase from -10.6% in 1996 to 3.6% in 1999

**Balance Sheet**

* Cash of $150M is maintained in the balance sheet for working capital needs and company operations
* Working capital for trade creditor and interest payments.
* Restructuring costs such as professional fees, closure and retrenchment costs.
* Investment in new technology and systems.
* Maintain same inventory turnover days, payment days and receivable days so that suppliers and vendors are not affected.
* No additional investments into PP&E and trying to liquidate 20% of the assets in 1996
* Improve EBIT to Interest Coverage ratios as debt is repaid and not take additional debt
* Altman Z scores improve from 3.12 in 1996 to 3.9 in 1999 as all the ratios improve in the turnaround.
* ROE improves from -19.5% to 13.2% in 1999 because of improvements in profit margins, asset turnover and financial leverage ratios.
* The company becomes self-sustainable from 1999 and can start making few more small acquisitions and drift towards digital space.