KODAK AND THE DIGITAL REVOLUTION (A) – CASE WRITEUP

EMBA 230
Management of Technology and Innovation
Professor Donnelly

12/03/2010
Robert Paul Ellentuck
EMBA 2011
The Copyright holder expressly prohibits any and all copying, faxing, scanning, Xeroxing, reproducing, transmission, dissemination, forwarding, printing, submission (either electronically or of a scanned or otherwise reproduced copy, or of the original document, a copy of the document, or of a portion of the original or copied document), or any and all other actions: electronic or otherwise, of any portion of this Copyrighted document or the entire Copyrighted document, which may in any way violate the rights of the Copyright holder. Such prohibition includes the original document, a copy of the original document, a portion of the original document, a portion of the copied document, an electronic version of the document, or any other potential version of the document (whether the technology exists as of the Copyright date, or is yet to be invented). This prohibition explicitly extends to all of the above actions, but is in no way limited to them. Any use of the Copyrighted document, in any manner, can only be with the prior consent and authorization that is both written and executed by the Copyright holder and the other party, relating specifically to this Copyrighted document. This Copyright, and all of the protections that it affords the Copyright holder explicitly extend to any document, image, file, data, or any other attachment in any form, electronic, printed, or in any other format, that are attached to this Copyrighted document in any manner or form, and to which the Copyright holder holds or is eligible, under the widest possible interpretation, to hold a Copyright to. The interpretation of the Copyright holder’s rights shall be as broad as the law allows, and in no way shall be limited by the right or restriction not being stated. The Copyright shall also extend to all future protections, as they become available. This Copyright is in no way intended to infringe on the rights of any other party.
INTRODUCTION

This case write-up focuses on the four assigned questions, listed below, and is supplemented by three situation analysis tools: Porter’s Five Forces, SWOT and PEST which have been included as Exhibits to the write-up. These tools have been used in order to analyze both the company and the industry environment, but are not discussed in detail.

QUESTION 1

The traditional photography industry was structured around the market leader producing cameras and selling them at a low cost (the razor-blade model), and making its profit in the sale of film and supplies needed to develop and print pictures. Kodak was long the market leader (until Fuji arrived) and was able to pour its profits into R & D which insured its dominance of the industry. Competitors were hesitant to compete with such a successful, market dominating firm. The high profits that film sales brought to retailers helped to insure that Kodak dominated shelf space in stores, making it even harder for a potential competitor. Much of the film developing occurred in independent kiosks, drug stores, and specialized firms; all utilizing Kodak products.

Digital imaging is far different. No firm dominates the sale of digital cameras, the market is highly competitive and Kodak incurred a loss (unintentional, as compared to the traditional model) in the sale of digital cameras. It is a market that is highly competitive on both features and price. While traditionally Kodak designed and manufactured its own cameras, digital cameras can use technology from different firms and the manufacture is frequently outsourced to China to lower costs. Digital images can be printed at home, taken to a lab at a drug store, emailed to a specialized firm, taken to the Wal-Mart photo lab, or emailed directly to the recipient. These images do not need to be printed, and can be stored in a computer or on the internet, and displayed via a computer.

Digital imaging is likely to replace traditional photography, especially in the consumer segment who value its convenience and lower cost. There may always be some demand for traditional film imaging, whether by specialized or high end photographers, as well as for inexpensive disposable cameras.

Value creation and appropriation have changed dramatically with the shift from traditional to digital imaging. With the highly competitive markets for cameras and a largely indistinguishable market for printing, the value creation is essentially with the consumer. The consumer is as likely to buy a Kodak camera as they are to buy a no-name camera if it has features and is lower priced. Brand loyalty or domination of the market no longer exists; the consumer buys whatever meets their needs that day. In terms of printing images, value is with the consumer as the consumer doesn’t care who made the machine when they get it printed at Costco or the equivalent, they want a lower price and convenience, and will print photo’s elsewhere to get them. The only exception may be for consumers who print at home and have a preferred paper, not caring about cost, and then the value creation and appropriation are with the manufacturer of the paper.
Kodak has an opportunity to succeed in digital imaging, but it will be extremely difficult. Kodak must establish a team made up of its management staff and digital photography specialists that can continuously design and produce marketable digital cameras and related products that suit consumer needs. Its team must constantly research these needs. Considering their declining sales, Kodak must develop cost-effective as well as cost-cutting strategies. Rather than providing the needs of all its target markets, Kodak should focus first on its most important market. Once this market becomes stable, the company can then move on to the next market. By doing so, the effect of strategic failures can be minimized. The strategy of the company should initially concentrate on sales generation and market stabilization. This is because the company needs to diversify its product lines. Its team must constantly generate ideas that are different from their competitors. Kodak must also continue to lessen its dependence on traditional film cameras and focus its major investments on digital cameras development and promotion.

QUESTION 2
Kodak’s response to Sony’s introduction of the Mavica was the figurative, if not literal, end for the company. It certainly was for film. Kodak CEO Colby Chandlers’ contention that “people liked color prints” and Kodak could introduce its own digital camera failed to consider what the product meant to the future of the industry and of Kodak. His contention that Kodak could introduce its own digital camera was a nice idea, but did Kodak rapidly move to do so? It did not, as the firm’s culture was so tied to film. The fact that the announcement “sent fear through the company” and that the rank and file reacted “photography is dead”, apparently was not picked up on by Chandlers, which causes one to wonder if he sought and gained opinions from the managers in his firm.

It took years for Kodak to commercialize a digital imaging product, and during that time Fuji began grabbing market share away from the company in film. Kodak began an ill conceived diversification effort in 1983 that left the firm with less of a focus on the threat caused by digital imaging and new competitors.

Kodak’s response was inappropriate to the threat that the Mavica posed. Kodak’s cultural ties to film prevented the firm from acting at a time and in a manner that may have helped preserve the company’s dominance in the imaging industry.

QUESTION 3
Fisher’s first step at Kodak, divesting the unrelated firms was a positive start. Getting Kodak focused on the core business of imaging was what the company needed. His next moves were positive as well, but he failed to transform the most important part of Kodak which was necessary for him to succeed. Fisher was unable to change the culture to one similar to Motorola that would have spurred discussion and debate, possibly rejuvenating the firm.

Kodak insiders resisted his initiatives to reinvent the company. An industry executive commented Fisher may have been able to transform the culture at the very top, but that he was not able to change the culture of the middle managers who did not understand the world (digital) that Fisher was trying to transform Kodak into.
With Fisher’s about face in 1998 in order to transform into a “network and consumables” based business model he stated that his previous plan was a failure. Instead he felt the company should provide services that people will pay for, and focusing on partners who would produce most of the hardware the company needed.

This about face may have allowed Kodak to be caught off guard by Fuji, when it slashed prices in 1998 in an effort to grab market share. This caused a substantial decline in market share in film for Kodak that continued into the early 2000s. Fisher seemed unable to respond, leading to massive job cuts of 20% of payroll in 1999 and a new CEO in 2000.

It is difficult to say in hindsight if one of Fisher’s attempts to transform the company was better than the other, but by failing to change the culture at Kodak he never had the support of the large ranks of middle managers at the firm. Fisher’s failure to transform Kodak’s culture may have been the reason that he failed to transform the company into the vibrant firm it had once been, it is possible that this failure would have doomed any strategy. Fisher wanted another Motorola, where the managers debated ideas openly, but at Kodak the managers apparently did what they were told by their superior.

**QUESTION 4**

Since January 1, 2000, Kodak’s revenues and net income have declined, its shares have dropped by 66 percent, and the company’s S&P rating has dropped by 5 grades. Kodak has tried to minimize its losses by reducing its workforce, laying off 7,300 workers in 2002. The company is struggling to survive, and while it has invested over $4 billion in digital technology since the nineties, it is not gaining ground in digital imaging. On September 25, 2003, Kodak’s CEO, Daniel Carp, proposed that the business invest heavily in the digital market, and devote its assets to become a "digital-oriented development company" in anticipation of becoming a $20 Billion Company by the year 2010.

2010 has come and Kodak is not the firm Carp envisioned. In an industry where innovation and differentiation are the keys to success. Kodak, along with several others, does dominate the digital camera market, but profits are slim to non-existent, and manufacturing has been outsourced. Kodak has a small share of the printer market through a relationship with Lexmark and a strong position in the small specialized paper market, which has good margins.

Overall for a firm that once dominated the camera, film, paper, and chemical industry for years; a firm that “blew” competitors away: Kodak is in an OK position, not good or bad, though they are mostly a shell of what they once were. When compared to the fact that if they had acted aggressively when the Mavica was introduced and had the firms culture been innovative, not extraordinarily conservative and focused on one product that would never change, the firm could be dominating digital imaging today, instead they are one among many competitors.

Kodak was in a position that if it had acted differently, and taken the lead in digital imaging, the market would have been theirs to take, and they could be the market leader (or the only brand), had the company adopted a different digital imaging strategy in the ‘80s and ‘90s. After decades of dominating the photographic industry, Kodak is now sharing the market, laying off employees, and lacks the dominance it once had.
Kodak’s strategy from the mid-1980’s onward has been marked by repeated errors and missteps which have cost it a near monopolistic position over the industry. Beginning with the Mavica introduction, the strategy was, people won’t want it and we can make the same thing if we want to. This was the opportunity to dominate the new technology and keep their leadership position, Kodak failed to act.

Beginning in 1983, Kodak went on a acquisition spree, which included Sterling Drug; the logic behind this strategy was that a pharmaceutical business was related to Kodak’s core chemical business. They failed to see that their core business was film, a consumer product. This acquisition spree cost the company a great deal of money, substantial debt, un amortized goodwill, and stockholder’s equity. From 1987 – 1992 their market share for film decreased by 5% and a number of foreign competitors entered the market. Imagine if Kodak had poured the money and time spent on unrelated acquisitions on their core business for the next century, digital imaging.

At the same time Kodak began to explore digital imaging again, but they could not make the needed break from film, and wanted to blend digital imaging with traditional silver halide. They felt they could blend the new and the old, and convince consumers through extensive advertising what the market wanted. While there was some effort to invest in new technologies, many managers did not want to support any product that would not be as profitable as traditional film. The firm did invest in R & D, developing 50 new products in electronic imaging. The most promising, the electronic image sensor was commercialized by other firms, not Kodak.

In 1990 the firm again attempted to pursue film based digital imaging. The technology was far more expensive than a traditional camera, film, and processing, Kodak believed that it could be the leader in the new technology, and convince consumers to buy it. The idea failed, and the CEO responsible stepped down in 1993.

In 1993, Fisher became the new CEO and immediately began to divest the unrelated acquisitions (Sterling Drug), and paid off debt. He then expanded into the Chinese market. Fisher then began pursuing digital imaging, and finally separated it from the silver halide division. Fisher spent heavily on R & D and attempted to bring products languishing in Kodak labs to market. He wanted Kodak to be in the equipment business. He reengineered the company from top to bottom. Fisher wanted Kodak to be a high technology company.

In 1998, that strategy failed and Fisher decided the company should be a network and consumables based company, focusing on services. The strategy was to outsource equipment and build alliances. Kodak would sell the sale of services.

In 2000, Carp was the new CEO and built a strategy around digital cameras and digital imaging, in order to increase demand for cameras, online photo manipulation, and image output. Carp wanted to expand film’s benefits, drive image output, simplify digital cameras, and grow in emerging markets.

By 2003 the strategy had resulted in digital cameras being unprofitable, weak fourth quarter earnings, and more layoffs. This occurred even though Kodak controlled most photofinishing in the U.S. and 15% of the digital camera market.

Although the company has previously implemented various strategies in order to operate in the digital sector, the strategies led to failure or less significant results. From the analysis, it is clear that this outcome is mainly due to the
company’s lack of understanding their target markets. Moreover, the company appears to be investing in strategies that are also offered by their competitors. This in turn results in strategies that are ineffective, leading to products and services offered which are even less differentiated from the competition. Instead, Kodak should develop strategies that directly match the needs of its target consumers. In addition, the company needs to focus on investing in its strengths.

Kodak’s strategies have not been effective, as the revolving door of CEO’s demonstrates. In addition, the profitability of the company remains poor. The company’s success with digital cameras has impacted the demand for traditional film and film processing, contributing to a reduction in Kodak’s sales. The result has been a decrease in profit as well as layoffs. This has occurred as Kodak remains highly dependent on what remains of its traditional photography product line to support the company.

It is clear that the strategy/strategies the company has pursued are not yielding profits for the firm. The company needs to further reevaluate their target markets, products, and services. It is possible that they may never regain the position they held, unless they are able to regain a dominate position in a market. It is possible that the culture that made Kodak a success when they were the only “player”, remains a major impediment to implement any strategy successfully.
## EXHIBIT I

### COMPANY ANALYSIS

- **SWOT ANALYSIS**

<table>
<thead>
<tr>
<th>STRENGTHS</th>
<th>WEEAKNESSES</th>
</tr>
</thead>
</table>
| - Many years of know how in the photography business.  
- Skilled at making highly marketable digital cameras.  
- Has strong administration team.  
- Strong brand name. | - Tend to invest greatly on ineffective business strategies.  
- Have just decided to again venture into the digital segment, making its experience for this sector limited.  
- Have lost billions due to strategic failures and economic changes. |

<table>
<thead>
<tr>
<th>OPPORTUNITIES</th>
<th>THREATS</th>
</tr>
</thead>
</table>
| - Booming demand for digital cameras can support Kodak’s objective to become digitally-oriented company.  
- Digital photo industry is expected to grow up to 26% until 2012 | - Foremost competitors and new entrants.  
- Emergence of Interactive products.  
- Economic forces.  
- Requirements for considerable capital investment. |
EXHIBIT II

INDUSTRY ANALYSIS

- **PEST ANALYSIS**

1. **POLITICAL**
   - Copyright law requires all photo stores to refrain from printing or releasing images taken by professional photographers without copyright release.
   - Images taken by amateur photographers may encounter difficulty in having their professionally looking images reproduced in print; thus, affecting photo printing sales.

2. **ECONOMIC**
   - In 2002, the increasing demand for digital cameras caused a 2.6% reduction in traditional film camera sales; this trend is expected to continue in the future; prints made out of traditional films declined by 700,000 during the same year.
   - Digital camera sales in 2002 amounted to $2.96 billion, taking a considerable portion of the total revenue of the industry.
   - Price decreases of digital cameras made them more affordable for consumers, resulting in even greater demand.

3. **SOCIOCULTURAL**
   - Men (58%) tend to purchase digital cameras more than women (48%); women, particularly those with children, however, are the ones who use digital cameras more.
   - Consumers use digital cameras to send them through email; most digitally captured images are stored for onscreen viewing.
   - Buyers have become more accustomed to buying technology-based products that contain several features such as digital cameras and picture capable cell phones.

4. **TECHNOLOGICAL**
   - Cameras have become an essential entertainment device.
- Rapid development in camera products brought about by technology requires considerable investments for highly-skilled staff, marketing efforts and production equipment.

- New digital cameras must have multiple features that are appropriate to current environment and customer needs.
EXHIBIT III

INDUSTRY ANALYSIS

• FIVE FORCES ANALYSIS

1. RIVALRY

- The amount of competition in the photography industry is high due to the presence of several competing companies. The competing companies are very aggressive in order to increase sales and market share.

- These companies also target similar market segments, making the competition even greater. Competition also increases as product and service differentiation decreases.

2. ENTRANTS

- The barriers to entry of the industry are fair as opening a photography business demands considerable capital. A large amount of capital will not only be necessary for opening the business itself but furthermore in order to obtain the best professionals and expertise for merchandise development as well as marketing. Moreover, time is necessary for the company to flourish; competing with major companies that have been operating for years is difficult. Besides capital and time, entering the same industry and competing with major photography businesses can be challenging due to customer loyalty and strong brand preferences.

3. BUYERS

- The buyer power in the industry is high mainly due to the technology factor. Changes in technology can be rapid and unpredictable, and demand for certain types of cameras can decrease at any time. In addition, the presence of several substitutes or alternatives heightens buyer power; buyers can easily shift from one brand to the next, depending on their specific needs. Furthermore, due to the large number of competing companies in the industry, products and services tend to be undifferentiated. This makes buyer concentration low, resulting in greater buyer power.

4. SUPPLIERS
- Supplier power as low due to the number of local and international suppliers for businesses operating in the photographic industry. The power of the suppliers as also low in the industry due to the size of the local market.

5. SUBSTITUTES

The photography industry is highly competitive; as several companies in the industry are producing and offering similar products or services. Buyers can easily substitute an expensive product for a less costly one. In addition, webcams, camcorders that capture still images as well as picture capable cell phones are possible substitutes that consumers may purchase instead of cameras, especially those who prefer onscreen picture viewing.
REFERENCES


The Copyright holder expressly prohibits any and all copying, faxing, scanning, Xeroxing, reproducing, transmission, dissemination, forwarding, printing, submission (either electronically or of a scanned or otherwise reproduced copy, or of the original document, a copy of the document, or of a portion of the original or copied document), or any and all other actions: electronic or otherwise, of any portion of this Copyrighted document or the entire Copyrighted document, which may in any way violate the rights of the Copyright holder. Such prohibition includes the original document, a copy of the original document, a portion of the original document, a portion of the copied document, an electronic version of the document, or any other potential version of the document (whether the technology exists as of the Copyright date, or is yet to be invented). This prohibition explicitly extends to all of the above actions, but is in no way limited to them. Any use of the Copyrighted document, in any manner, can only be with the prior consent and authorization that is both written and executed by the Copyright holder and the other party, relating specifically to this Copyrighted document. This Copyright, and all of the protections that it affords the Copyright holder explicitly extend to any document, image, file, data, or any other attachment in any form, electronic, printed, or in any other format, that are attached to this Copyrighted document in any manner or form, and to which the Copyright holder holds or is eligible, under the widest possible interpretation, to hold a Copyright to. The interpretation of the Copyright holder’s rights shall be as broad as the law allows, and in no way shall be limited by the right or restriction not being stated. The Copyright shall also extend to all future protections, as they become available. This Copyright is in no way intended to infringe on the rights of any other party.