Memorandum

To: Wendell Weeks, Chief Executive Officer, Corning Incorporated
Peter Volanakis, Chief Operating Officer, Corning Incorporated
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From: Meng Fan, Jinsoo Han, Shiting Liu, Khoeun Som, and Erika Wolfe
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Re: Maintaining the Success of the Growth and Strategy Council

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Executive Summary

Corning Incorporated has continuously reinvented itself since the company's founding in 1851 and, by doing so, it has become one of the world's leading materials companies. The Growth and Strategy Council (GSC) was created to facilitate innovation at Corning Incorporated, but is facing challenges resulting from the growing pace of new business. An analysis of the external and internal environments presents a foundation for understanding the challenges facing the GSC. The size of the GSC meetings, the ability of the GSC to prioritize the proposals, and the lack of knowledge regarding new business models, present a serious threat to the future success of the Council. To overcome these issues, ensure the future of the GSC, and to pursue that company's strategy of continuous innovation, Corning Incorporated should hire specialists to consult with the Growth and Strategy Council and to advise the leaders in their decision making process.

Introduction

In order to purse its strategy of continuous innovation, Corning Incorporated established The Growth and Strategy Council (GSC) in 2001. The GSC is designed to “speed growth, get urgency across all the businesses, and to pace and regulate the resources” (Henderson & Reavis, 2009). The Council’s objective is “to maintain a balanced and robust innovation portfolio through pacing investments in individual programs and making resource allocations between Corning’s existing and developing businesses” (Henderson & Reavis, 2009). As Corning Incorporated is working to produce new business at a faster pace, the GSC is confronted with several challenges: “Would the centralized decision making body slow the innovation process or stifle it altogether? Could the centralized body continue to work well while Corning grew in scale? What would it take to keep the GSC working well?” (Henderson & Reavis, 2009). Analyzing the external and internal environment will aid understanding of the key issues facing the GSC, and it will then be possible to determine the solution Corning Incorporated should implement to overcome these challenges and ensure the future success of the Growth and Strategy Council.

General Environment

The beginning of the 21st century was economically challenging for Corning Incorporated. The company’s revenues dropped from $6.3 billion in 2001 to $3.1 billion in 2002, and the company’s stock price fell from $100 in August 2000 to $1.50 in July 2002. The company lost $5.4 billion and was forced to lay off thousands of employees. By 2008, Corning Incorporated recovered, and the company was able to maintain its global leadership position in glass liquid crystal with 24,800 employees in the company. The company’s stock recovered to $23 per share in February 2008 (Henderson & Reavis, 2009).

In 2008, Corning’s operations centered on different glass technologies, each of which catered to a different market and had different cycle times. The four business segments included: display technologies, telecommunications, environmental technologies, and life sciences. In the early 2000s, technology was advancing rapidly and this required that Corning invest in new technologies in order to maintain and develop each of its four business segments.

Innovation at Corning followed what was referred to as the "Governance of Innovation Pipeline" (Henderson & Reavis, 2009). The process required building a deep understand of a specific technology and solving problems with a unique combination of materials and processes. The innovation process was overseen by several managers who used Corning's Governance of Innovation Pipeline to move new business through the stages of product development.

The role of the GSC, as the company's innovation management council, varied from overseeing the market to determining the pacing of investments across the programs and helping the company decide whether two competing products could succeed in the same market space. The main goal of the council was to maintain balance through pacing investments in individual programs and allocating resources between Corning's existing businesses and developing businesses (Henderson & Reavis, 2009). The collective experience of the members that served on the GSC also provided expertise and judgment that helped the program address key issues and opportunities.

Industry Analysis: Porter's 5 Forces

Understanding the industry environment would allow Corning to better compete with its competitors, occupy more market share, and develop intelligent business strategies. Analyzing the threat of new entrants, bargaining power of suppliers, bargaining power of buyers, threat of substitutes, and rivalry among competitors, will demonstrate that this is an attractive industry with high profit potential.

The threat of new entrants is low. First, there are high barriers to entry since entrance into this industry requires significant financial resources. Second, Corning Incorporated has established the necessary economies of scale, and new entrants would not affect the company's profitability. Third, product differentiation in this industry is extremely important. If new entrants cannot differentiate their products from the existing companies, it would be difficult for new entrants to remain in the market.

The bargaining power of suppliers is low. There are many different suppliers for the different types of product lines. This makes it easy for companies in the industry to secure a supplier. As Corning Incorporated is a large company, it is able to negotiate good prices from suppliers. There are many suppliers that are willing to cooperate with Corning Incorporated because the suppliers can earn substantial profits from Corning's purchases. Therefore, it is easy for Corning Incorporated to find a supplier in the industry, and the bargaining power of supplier is low.

There are two different buyers in this industry: businesses and consumers. The bargaining power of business buyers is high. Business buyers are the biggest purchasers of Corning's products. Business buyers purchase Corning's glass and ceramics as the raw materials for manufacturing other products. Business buyers are sensitive to the price of Corning's products, as slight differences in material prices would impact the cost of production. Conversely, the bargaining power of the consumer buyers is low. Consumer buyers do not have as much bargaining leverage when compared to business buyers.

The threat of substitutes is low. Neither business buyers nor consumers are likely to substitute for Corning Incorporated's product because few substitutes exist. Additionally, switching costs would be high for business buyers to substitute Corning's products with another manufacturer's products.

The rivalry among existing competitors is high. There are many competitors in this industry, including TE Connectivity Limited and Mitsubishi Electric Corporation (Morningstar, Inc. 2015). In this industry, product differentiation is the key component to compete against competitors. The exit barriers are high because significant amounts of resources have been invested in the manufacturing operation.

Internal Analysis: Company Strategy and VRIS Analysis

The strategy Corning Incorporated utilizes is related constrained diversification. Less than 50% of the company's revenue comes from any individual business segment: the display business earns 44.59% of revenue, the telecommunication business earns 30.35% of revenue, the environmental technology business earns 12.92% of revenue, the life sciences business earns 5.24% of revenue, and other segments earn 6.9% of revenue (Henderson & Reavis, 2009). The corporation has developed its business into varied but linked segments that require advanced technology. The four segments are able to succeed by sharing technologies, core competencies, and expertise.

Corning Incorporated is able to pursue the related constrained diversification strategy by utilizing the following three core competencies: the ability to innovate, expertise in four business segments, and unique and effective operations that allow the corporation to perform better than competitors. First, the ability to innovate is valuable and rare because it is the basis for advancing into new products. The company's ability to innovate largely affects the corporation's revenue, and it neutralizes threats from competitors. Corning's level of innovation would be expensive for other competitors to emulate because Corning has invested approximately $367 million in research, development, and engineering from 2004 and 2007, and the investment is increasing annually. Corning's ability to innovate is non-substitutable. As a result, Corning's ability to innovate produces a sustainable competitive advantage.

Corning's second core competency is its expertise in four business segments. This is valuable and rare because Corning has developed and patented its own technology since the corporation established a specialized research lab and hired its first research scientist. This is expensive to imitate for competitors and non-substitutable. Obtaining expertise in four different business segments is a sustainable competitive advantage for Corning, allowing the company to excel in four different and profitable segments.

The third core competency is the company's unique and effective operations. This is valuable as this process allows Corning to discover high-potential projects, and it is rare because very few companies have a similar operations strategy. The Corporate Technology Council (CTC) is responsible for setting corporate strategy and running the corporation. It is expensive to imitate and non-substitutable. Corning Incorporated's unique and effective operations is a sustainable competitive advantage for the company.

Value Chain Analysis

The value chain for Corning Incorporated is vertical. Corning obtains materials from its own divisions—Corning Discovery Labware, Corning Specialty Materials, and Corning Optical Fiber—and from a strong network of suppliers around the world. The unique divisions of Corning allow it to complete research and development, and manufacture products in four key business segments. Corning sells products through business-to-business and business-to-consumer delivery systems. The most common outbound logistics method for Corning is business-to-business. In regard to marketing and sales, Corning offers online services that communicate product information to consumers. Corning has also recorded videos for advertising to increase the company's recognition among consumers. As Corning is separated into four main divisions, each division is responsible for its own after-sales and customer services (Corning Incorporated, 2015).

For the development of innovation and technologies, Corning Incorporated has five stages for "new and existing business," which include (1) gathering information and building knowledge, (2) determining feasibility, (3) testing practicality, (4) proving profitability, and (5) managing the lifecycle (Henderson & Reavis, 2009). The Corporate Technology Council determines which projects have the largest potential and opportunity for growth by focusing on the first two stages. The GSC focuses on the last three stages, which project long-term investment opportunities.

Corning Incorporated has a stronger value chain than its competitors. First, Corning has a very high focus on and investment in research and development. Second, Corning utilizes a unique process to create increasingly innovative products. Third, it is hard for competitors to emulate Corning Incorporated's value chain in terms of its diverse business segments and product lines.

Financial Analysis

The strategy developed by Corning Incorporated has led to strong performance over the last five years. Net sales increased by 89.6% in the last five years, from $3.09 million in 2003 to $5.86 million in 2007, demonstrating great growth and improving revenue. For example, net income increased by 1064% during these five years, from negative $223 million to $2,150 million (Henderson & Reavis, 2009).

Appendix A displays the increase in return on equity from -4% to 23%, proving that Corning Incorporated has a strong ability to generate profit and to manage shareholders' capital. The return on assets increased from -2% to 14.1%. This metric indicates that Corning has the ability to recover from debt and earn a higher profit. The operating margin has improved from -21% to 18%, demonstrating that Corning can generate increased profits. The asset turnover ratio has decreased, reflecting that the pressures from production capacity have lessened. These key financial ratios reveal that Corning Incorporated has a strong ability to grow, generate profits, and succeed financially in its industry.

Key Issues

As Corning Incorporated is growing rapidly, there are several issues threatening the success of the Growth and Strategy Council, the company's unique process for innovation management. First, while a large number of people attend the GSC meetings, there are only a few people who engage in making the decisions. This is an issue because as attendance at the meetings increases, it presents the possibility that "honest and frank dialogue" may not be sustainable (Henderson & Reavis, 2009). Second, there is an issue with the GSC's ability to prioritize business proposals. The ability to prioritize is important because it helps to guarantee that "the right growth opportunities go in front of the GSC at the right time" (Henderson & Reavis, 2009). Third, as the business continues to grow, the GSC will be "exposed to very different businesses and business models" (Henderson & Reavis, 2009). The members of the GSC may not have the expertise required to make decisions on these new opportunities. When unfamiliar business ideas and business models are presented to the GSC, it is challenging for the members to understand the concepts and make informed decisions as to whether or not the concept would be a viable opportunity for Corning Incorporated to pursue.

Strategic Options

In order to overcome these key issues, there are three strategic options Corning Incorporated could pursue. The first option is that Corning could limit the number of attendees at the GSC meetings. Corning should only permit the key decision makers, employees who have had a long history with the company, and employees with expertise on the business model being presented to attend. Implementing this option would help facilitate open discussion at the meetings as less people would be involved; and this option would be free to implement. This option, however, could create tension in the company and anger some employees who would like to attend but would no longer be allowed to do so. The second option is that Corning could screen the proposals that are scheduled to be presented at the meetings. By reviewing the proposals prior to the meetings, the GSC would be able to prioritize the opportunities and ensure that only the most viable prospects are presented. This option would be free to implement as well; however, it would require a time commitment. Additionally, screening the proposals may cause the GSC to overlook a potentially viable business venture. The third option is that Corning could hire specialists to collaborate with the key decision makers on the GSC and to facilitate the decision making process. To implement this decision, Corning would hire specialists with expertise on unfamiliar business segments or models. The specialists would assist the GSC leaders with the decision making process. Although hiring specialists would cost money, the specialists would help the decision makers understand the proposals with which they are unfamiliar and make better informed decisions concerning future opportunities. Each of these strategic options would help to ensure the success of the GSC by helping the GSC run more efficiently and effectively, and allow the key decision makers to make stronger, well-informed decisions.

Recommendation

After reviewing these three options, it is recommended that Corning Incorporated implement the third option of hiring specialists to aid in the GSC's decision making process. To implement this option, Corning will need to hire specialists in emerging fields. The specialists would be required to attend the GSC meetings and to consult with the key decision makers on the proposals. The specialists would facilitate the decision making process by explaining the positives and negatives related to investing in new business models and business extensions, and how to allocate resources to such opportunities. The specialists' advice would increase the GSC's understanding of the proposals, thus allowing the GSC to make well-informed decisions. Hiring the specialists would require a financial investment. However, as the specialists would work as freelance consultants, the investment would be modest.

Based on the analysis of the general environment, the internal environment, the key issues, and the available strategic options, Corning Incorporated should pursue the third strategic option: hire specialists to advise members of the Growth and Strategy Council in the decision making process. This strategy would allow decision makers to choose the options that are most viable, make decisions more quickly, and allocate resources effectively. Ultimately, this strategy would allow the Growth and Strategy Council to manage the growth of new business more effectively and to achieve Corning Incorporated's goals of guaranteeing the future success of the Growth and Strategy Council and pursing continuous innovation through an expertly managed operations system.

References

Corning Incorporated. (2015). *Company Profile.* Retrieved from http://www.corning.com/news_center/media_resources/company_profile.aspx

Henderson, R. & Reavis, C. (2009, April 15). *Corning Incorporated: The Growth and Strategy Council*. Retrieved from https://mitsloan.mit.edu/LearningEdge/CaseDocs/08-056.Corning.GSC.Henderson.pdf

Morningstar, Inc. (2015). *Corning Inc GLW.* Retrieved from http://financials.morningstar.com/competitors/industry-peer.action?t=GLW

Appendix A

Key Ratios	2003	2004	2005	2006	2007
ROE	-4%	-60%	11%	26%	23%
ROA	-2%	-23%	5%	14.2%	14.1%
Operating Margin	-21%	-39%	13%	16%	18%
Asset Turnover	0.39	0.40	0.41	0.40	0.29

This table displays key financial metrics corresponding to Corning Incorporated's financial data from 2003 to 2007. The data was obtained from *Corning Incorporated: The Growth and Strategy Council* (Henderson & Reavis, 2009).