The SOWT Model Revisited - The Case of Bombardier

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ABSTRACT

This paper proposes an application of the SOWT model for assessing the strategic posture and development of Bombardier Inc. It also provides a discussion on how the model can be used on its own or in conjunction with other suggested frameworks, which consider the notion of information-knowledge as an asset and the concept of the virtual corporation. The SOWT model provides an alternative to the narrative format of the SWOT analysis (Strengths, Weaknesses, Opportunities, and Threats) often found in the current literature. The suggested frameworks represent workable tools that could be used on their own or in combination with other models.

INTRODUCTION

The SWOT analysis (Strengths, Weaknesses, Opportunities, and Threats) characterized early prescriptive models on strategy formation developed in the 1960s. This paper discusses possible applications of the SOWT model developed by Grandmont-Gariboldi (2005) using the example of Bombardier Inc., a Canada-based company. It also proposes other frameworks, which can be used in combination with the SOWT model.

Bombardier Inc. is one of the largest manufacturing companies in Canada. It exercises its activities of conception, development, fabrication, and commercialization in the fields of transportation equipment, civil and military aerospace, defense, and motorized consumer products. The company also offers services as well as support, maintenance, training, and operations management services.

THE CASE OF BOMBARDIER

Annex 1 presents a historical outline of the company. Based on Galbraith’s (2001) “center of gravity theory”, Bombardier’s success would result mainly from its ability to remain close to its center of gravity while diversifying and evolving in various segments. According to the theory, the firm’s success in implementing and managing diversification will depend on the degree to which it operates at the same center of gravity in a new industry. Following are the basic assumptions underlying the theory: 1] firms learn different and important lessons at the initial stage (the center of gravity) of the vertical chain in which they began their operations; 2] lessons learned at this stage influence a firm’s values, business lessons, management systems, succession path, organization, and mindsets; 3] different stages in the vertical chain represent different centers of gravity because they face different managerial problems and tasks. The essence of Bombardier’s center of gravity still lies in the firm’s Bombardier Manufacturing System (BMS), but the form has evolved.

Building on the concept of “metaiona” (i.e. shift of mind) introduced by Senge (1990), Grandmont-Gariboldi (2005) designed the SOWT framework, which is presented in Annex 2. It involves five wheels representing respectively the strengths and opportunities on the left side [SO], the weaknesses and threats
on the right side, and in the middle, the strategic actions that can be used to maximize the SO and minimize the WT. The three pillars at the basis are essential for a successful strategy. The critical part at the center of the SO wheels represents the main area(s) of leverage. In normal circumstances, focusing on the strengths and opportunities should allow to minimize weaknesses and threats. This is why the small circle is adjacent to the SO circles. The likely shrinking effect on the threats and weaknesses is reflected in the decrease of the size of the WT circles. However, some weaknesses and threats may never be eliminated. Thus, they have to be included as inherent part of the process as a whole. Also, the model allows shifting the small circle to the right in particular cases, such as crisis situations.

Annex 3 presents the strategic posture of Bombardier Inc. We identify the BMS as the main area of leverage and the virtual corporation and expert systems as some major tools for maximizing the SO side. While the company became a global leader in aerospace business aircraft and transportation, it is assuming a high level of debt, which could help improve its return on equity but can also lead to an increased risk for investors; as a consequence, the firm’s higher cost of capital could negatively affect its financial results.

It is well recognized that a firm’s success largely depends on its ability to manage its information asset for securing a competitive advantage. Oudan (2010) highlights major strategies for information age businesses. They include deploying and integrating IT platforms and designing an organization for knowledge leverage. The BMS can be considered as the firm’s main area of leverage. At the core of its strategic positioning, it allowed the firm to expand its operations from manufacturing ski-dos, then trains, and ultimately airplanes. Bombardier Inc. is the third largest aircraft company in the world in terms of yearly delivery of commercial airplanes overall, and the fourth largest in terms of yearly delivery of regional jets. In addition, moving towards the downstream side of the value chain, the firm managed to get closer to the customer by creating not only a Service Group but a Knowledge- and Service-Based Group with more explicit emphasis on the "Knowledge" content. More recently, using a computer modeling model at its Belfast manufacturing plan, “Bombardier can tell very quickly whether it can in fact build and/or assemble a part before it builds the factory or production line to make it. This also allows the teams to experiment with different layouts and material flows to optimise production for both time and money” (Grant, 2008). In Annex 4 we propose a perspective on “Information-Knowledge as an Asset”.

Other possible practical implications of information-knowledge as an asset include information technology-based interactive expert systems for enhanced customer value, timely decision making and continuous strategic repositioning by virtual corporations. A virtual corporation can be considered as a network of entities stripped to their core competencies using IT, leadership, human resources, and the synergy from strategic alliances, partnerships, and teams for creating stakeholders added-value. Annex 5 displays a framework introduced earlier by Grandmont-Gariboldi (2005), suggesting the use of the Virtual Corporation [VC] for strategic alliances. Included is a functional definition of a virtual corporation: a network of companies stripped to their core competencies using leadership, information technology, human resources, and the synergy from strategic alliances, partnerships, and teams, to create a Value Chain for customers and other stakeholders Added-Value. Using the VC is in line with one of the company's objective: a concomitant management of complexity and flexibility. However the caveats and risks of such an approach include: the difficulty of controlling the quality of partners-contractors; access control is difficult because of close-coupling of business partners that involves shared access to resources; and conflict of interest among business partners.
CONCLUSION

This paper provides a strategic assessment of Bombardier, a Canadian firm, which succeeded in diversifying in a managerial relatedness fashion, evolving from the snowmobile manufacturing sector to transportation, and to the aerospace, while remaining close to its center of gravity. We consider Bombardier’s manufacturing system as the main area of leverage for the firm’s strategic positioning as it allows maximizing the transfer of technologies within its operating units.

While providing an improvement over the narrative form of SWOT analysis often found in the current literature, the SOWT framework focuses on the strengths and opportunities and builds on the firm’s main areas of leverage for strategic positioning. It can also be used in combination with other frameworks as an interactive tool for strategic decision making. The case of Bombardier represents an excellent example for applying the proposed frameworks. The practical implications of the underlying concepts can be observed in the performance of a company, which succeeded in evolving from recreational automotive manufacturing into a world leader in commercial airplanes markets.

REFERENCES

Annex 1: Bombardier Inc. - Historical Strategic Profile

<table>
<thead>
<tr>
<th>Level</th>
<th>Focus</th>
<th>Actions</th>
</tr>
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<tbody>
<tr>
<td>Vocational or Spiritual</td>
<td>Mission</td>
<td>To be the leader in all the markets in which it operates</td>
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<tr>
<td></td>
<td>Goals</td>
<td>Excellence in design, manufacturing, and marketing in all its fields of business</td>
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<tr>
<td></td>
<td>Objectives</td>
<td>Short-T.: Focus on innovation, balance complexity &amp; flexibility, improve aerospace returns</td>
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<tr>
<td>Psycho-motor</td>
<td>Philosophy</td>
<td>Foster: innovation, motivation, commitment, entrepreneurship, continuity</td>
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<td></td>
<td>Leadership</td>
<td>Strongly evidenced by Laurent Beaudouin, Chairman, CEO.</td>
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<tr>
<td>Intellect [Technology]</td>
<td>Learning: Snowmobiles</td>
<td>Trains</td>
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<td></td>
<td></td>
<td>Airplanes</td>
</tr>
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<td></td>
<td>Teaching:</td>
<td>&gt;&gt;&gt;&gt;&gt;</td>
</tr>
<tr>
<td>Physical</td>
<td>Value chain activities [BMS]</td>
<td>Historical Center of gravity: assemble parts</td>
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<tr>
<td></td>
<td></td>
<td>Implemented in 1975 transferred in</td>
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<tr>
<td>Social or relational</td>
<td>Risk sharing</td>
<td>Suppliers: strategic alliances</td>
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<td></td>
<td></td>
<td>Production: partners, acquisitions for synergy</td>
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<tr>
<td></td>
<td></td>
<td>Finance: initial cost sharing</td>
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<tr>
<td></td>
<td></td>
<td>Marketing: Flex let, fractional ownership solution</td>
</tr>
<tr>
<td></td>
<td>Long-term: [emergent] Inside-out strategy creation</td>
<td>Diversification &amp; Growth based on: 1] mastering technologies [focus on R&amp;D. and transfer of technologies] 2] the firm’s capacity to occupy a leading position in its specialties</td>
</tr>
<tr>
<td>Current strategic posture</td>
<td>Current focus: 1] market penetration 2] growth from within - exploit BMS competitive advantage. 3] in particular, improvement of aerospace returns through BMS. Already in place with observed benefits.</td>
<td>Natural complements</td>
</tr>
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Galbraith’s
Annex 2: The SOWT model
Annex 3: SOWT The case of Bombardier
Annex 4: Information - Knowledge as an Asset

A FUNCTIONAL DEFINITION
A network of companies stripped to their core competencies

Leadership
- Host organization = strong center of gravity, a superintegrator.
- Identify core competencies
- Highly committed organization: chose partners... before opportunities arise
- Worthy of trust: compatible at various levels: business objectives, cultural, organizational, technical.
- Clear expectations

Information Technology
- A virtual environment & architecture including: E-Mail, EDI, Videoconferencing, networked CAD/CAM, virtual LAN services, groupware...
- Virtual Offices: where people do work:
  - telecommuting
  - office in a box
  - Virtual meetings

Human Resources
- Foster empowerment & entrepreneurship
- Staff/members must feel connected & valued for their contribution
- Relationships based on trust & respect
- Use cultural diligence
- Organization system alignment with shared goals
- Provide for feedback.
- Adapt rewards & compensation

And the synergy from strategic alliances, partnerships, & teams

To create a Value Chain
- Supported by a strategic value-added business process
- With a Market Orientation
- Giving substance to available information

For

Customers Added-Value
- Greater customer focus
- Higher customer responsiveness
- Improved quality

All Stakeholders Added-Value
- Increased cost ratio: VC/FC=> increased financial flexibility
- Improved cycle time, productivity
- Competitive advantage
- Increased profit opportunities & stock value

Annex 5: The Virtual Corporation