

Global Partnership Assessment in the High-Growth India Aerospace Market
Case Study: An India & U.S. Corporate Collaboration,
A Critical Analysis of a Strategic Alliance Using the Combined Tools of
SWOT & PEST Analysis

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Abstract

The purpose of this case study is to analyze the perceived benefits of combining SWOT (Strengths, Weaknesses, Opportunities and Threats) and PEST (Political, Economic, Social and Technological) methodologies to analyze the viability of a collaborative, international business relationship.

Examples of SWOT, PEST and other theories of strategic management, their evolution and innovative practical application to the international business world are illustrated. Several authors are cited that offer a different conceptual construct and practical application for utilizing SWOT.

The case study strategic business analysis does not specifically delineate any research design, and no where is mentioned the data collection or research methodology. The case study is more of a real-world, practical example of the utilization and integration of strategic business analysis tools.

The firms involved in the collaborative analysis did not cite a review of the research literature as justification for the validity and reliability of their analysis. Indeed, it may be that the apparent dearth of scholarly studies of the use of SWOT in combination with PEST would preclude any such literature review. Certainly, the research literature on the combined or integrated use of the same appears to be non-existent.

The case study business consortium chose to put to good use the combined tools of SWOT and PEST as an integrated strategic analysis solution, without justification.

Purpose

This case study examines three companies, two from the U.S., the other from India, that utilized a combination of SWOT and PEST analyses to assess the viability of a collaborative, international, India-focused business construct (consortium). The India-based company sought partners with experience and excellence in aerospace market opportunities inside and outside of India. The U.S. based companies were interested in leveraging their wealth of expertise, and expanding businesses to India.

Business opportunities in India are significant, and many Indian companies are looking outside of their borders to access the intellectual and financial capital to move successfully into markets (Karki, 2005). India, like the rest of Asia, is a high growth area for the aerospace industry, which includes markets like general aviation, commercial aviation, airports, airlines, aircraft manufacturing, aviation education and training, aerospace consulting, satellites, and space travel (Boeing, 2008).

Interestingly, the proposed international consortium in this case study chose to employ the use of SWOT in concert with another method known as PEST (political, economic, social and technological). This team decided that SWOT filled an important role as an individual business analysis tool, while PEST was used as an international market analysis tool with special emphasis on India (Schildhouse, 2006). The case study PEST analysis focused on the external political, economic, social and technological factors that evaluate international market viability with a focus on India.

Method

Roots

The use of SWOT (Strengths, Weaknesses, Opportunities and Threats) analysis is prevalent in the business world with the linear, straightforward concepts adaptable to a multitude of users and industries. The theoretical underpinnings for SWOT have roots in the 1950s when the ideas of internal and external factors emerged as a qualitative tool for strategic management (Selznick, 1984). Throughout the decades since, SWOT has garnered proponents and opponents, but the simplicity of the form continues to attract theorists, corporations and entrepreneurs. PEST Analysis is a simple, useful and widely-used tool that helps you understand the "big picture" of your Political, Economic, Socio-Cultural and Technological environment (Schildhouse, 2006).

In 1957, sociologist Philip Selznick discussed "matching an organization's internal factors with external environmental circumstances" (Selznick, 1984, p. 7). Later, in the 1960s, a Harvard Business School Management Group developed the idea of SWOT (Blagg, 2008). The team of Andrews, Christensen, Learned and Guth described the framework which was later adopted successfully by organizations like the Boston Consulting Group (Karki, 2004).

Albert Humphrey is also credited with being one of the founders of the SWOT technique during research at Stanford in the 1960s (*Businessballs*, n.d.). Three other major frameworks have emerged in strategic management since the advent of the SWOT analysis including Strategic Planning Matrix in the 1970s, Competitiveness in the 1980s and Core Competencies in the 1990s (Karki, 2004). PEST analysis initially appeared in the literature, though without the catchy acronym, through a separate discussion of each factor.

SWOT Analysis and Perceptions

SWOT analysis assists an organization with identification of business strategies that are appropriate to follow, and delves into the internal organizational strengths and weaknesses and external environmental opportunities and threats. Formulation of strategy that specifically addresses the strengths and weaknesses of enterprises and the opportunities and threats which exist in the marketplace is the objective of SWOT (Proctor, 1997).

SWOT Analysis Framework ("SWOT Analysis," n.d.)

Environmental Scan	
/	\
Internal Analysis	External Analysis
/\	/\
Strengths Weaknesses	Opportunities Threats
SWOT Matrix	

Traditional SWOT analysis as a business planning and strategic management tool is sometimes critiqued for being too simplistic, reliant on the opinions of only a few (sometimes only one) of the key players of a business, and subjective due to the qualitative nature of the model.

The simplistic characteristics of SWOT, which might seem an asset to some is seen as a limitation to others. More importantly, the simplistic nature of the model should not be allowed to corrupt the data analysis and the resultant conclusions and recommendations (Novicevic, Harvey, Autry, & Bond III, 2004).

The simplistic characterization might also be the impression of those with less than a full understanding of the possible ways that the data can be analyzed and interpreted. A New Mexico State University tutorial offers a multi-level perspective of SWOT with the beginner level focused on undergraduate students, the intermediate level for MBA students and the advanced level for doctoral students. The latter examples include sophisticated discussions of non-linear SWOT analysis, chaos theory and complexity patterns (*SWOT Analysis Tool*, n.d.).

Multiple perspectives are needed in order to insure the quality of the analysis. A single viewpoint, even from a CEO with a broad perspective, might be improved by the inclusion of opinions from a cross-section of stakeholders ("SWOT Analysis," n.d.).

The criticism of the of the qualitative nature of SWOT is a continuation of the ongoing debate by academia regarding the effectiveness, validity and reliability of qualitative versus quantitative data (Gall, Gall, & Borg, 1963/2007, p. 484-485). A review of the literature has found a case where quantitative application of SWOT is in use, and perceived as an effective system (Shinno, et al, 2006).

SWOT Variations

There are a plethora of variations of SWOT that are found in the literature. In some cases, these variants assist the user in the interpretation, analysis and implementation of the data and findings.

TOWS Analysis is a variant of the classic business tool, SWOT Analysis. TOWS and SWOT are acronyms for different arrangements of the words Strengths, Weaknesses, Opportunities and Threats. Practical tools like TOWS Matrix are a “mechanism for facilitating the linkage and framework and identifying and formulating strategies” (“SWOT Analysis,” n.d.). The TOWS is useful as a graphical depiction of strategic decisions based on the SWOT analysis.

SWOT / TOWS Matrix (“SWOT Analysis,” n.d.)

	Strengths	Weaknesses
Opportunities	S-O strategies	W-O strategies
Threats	S-T strategies	W-T strategies

- S-O strategies pursue opportunities that are a good fit to the company's strengths.
- W-O strategies overcome weaknesses to pursue opportunities.
- S-T strategies identify ways that the firm can use its strengths to reduce its vulnerability to external threats.
- W-T strategies establish a defensive plan to prevent the firm's weaknesses from making it highly susceptible to external threats.

Other tools like the Opportunity Model (Morris, 2005) stress the importance of a business edge, while Scan Analysis (“A Model for Strategic,” n.d.) is used as a case study tool. Cross Impact Analysis & Gap Analysis (Proctor, 1997) are used to identify the environmental factors and set goals, with Dual-perspective SWOT (Novicevic, Harvey, Autry, & Bond III, 2004) addressing a perceived incompleteness of the traditional model by analysis of intelligence and planning.

PEST

“A PEST analysis most commonly measures a market; a SWOT analysis measures a business unit, a proposition or idea” (Businessballs, n.d.). A PEST analysis completes the external factors covered by the SWOT organizational analysis of the opportunities and threats (Schildhouse, 2006).

The subject case study presents the SWOT analysis prior to the PEST analysis, although some argue that the PEST should be completed first because it can assist in identifying the organizations external SWOT factors (Businessballs, n.d.).

Howard Thomas of Warwick Business School is the author of an article that analyzes the environment and competitive dynamics of management education (Thomas, 2007). He uses the PEST analysis to examine the external factors that influence the strategic decisions including “government, competitors, technological and social change and the dynamics of buyer and supplier markets” (Thomas, 2007, p. 10). He details the PEST analysis findings environmental factors in terms of “forces and drivers”.

Other Theories

The perceived over-simplification and practical application of strategic management theoretical concepts draws the ire of the Postmodernists. Grandy and Mills pose the question of “strategy as simulacra?”, and espouse the perspective of radical reflexivity (2004). This theoretical perspective questions any worldview as too simplistic, and that leads to a hyperreality where the organizational principles are neatly ordered, but with no origins in reality. Baudrillard’s first order (ordered but not real), second order (models/copies of first order) and third order simulacra (objects totally within the simulation) create a situation where it becomes impossible to identify the process or reality.

In apparent polar opposition to the postmodernist perspective, other theorists have engineered a quantitative adaptation of SWOT to industry needs. The Tokyo Institute of Technology and the Japan Machine Tool Builders Association developed a statistics-based, multiple variable analyses of dependence, interdependence and weighted averages. The intent of the model is the same as in conventional SWOT, but the complex interrelationships are clarified and quantified (Shinno, et al., 2006).

Strategic management theorists in India have posited their own ‘Root-Branch’ framework. This conceptual construct is an innovative, realistic and timely model that focuses on the international growth of the Indian economy. Rajnish Karki states that Indian corporate strategy should be built around “attaining a consistency among various components of the ‘root business’ and strategic direction, ‘branch’ (2004, p. 1).

Combined Use of SWOT and PEST

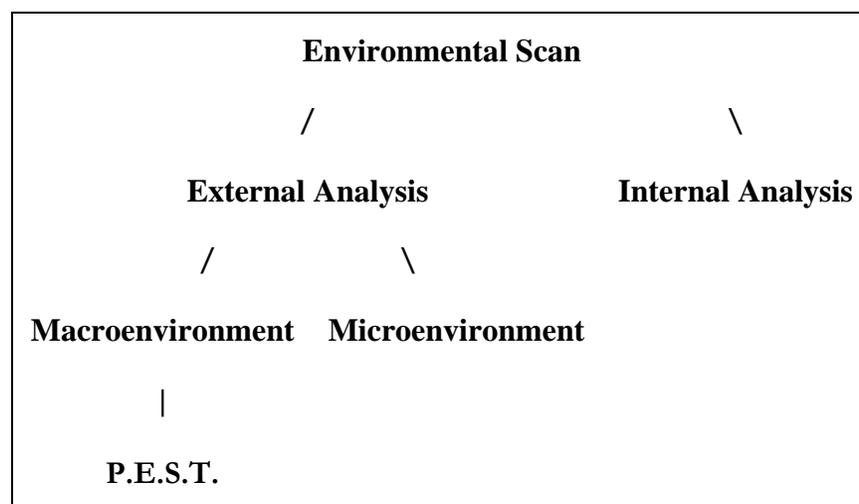
The utilization of combined SWOT and PEST analysis methodology is not well documented in the research literature. In fact, although SWOT analysis alone is mentioned quite often, PEST analysis alone is difficult to find in the research literature. Obviously, review of the research literature relating to the combination of the two techniques yields little material. There are a few related articles that mention the use of SWOT with PEST, although the literature reviewed is not scholarly research (Schildhouse, 2006).

A recent interview with Honeywell's director of aerospace sourcing, Willis D. Pugh confirmed that their company believes that "SWOT works very well with PEST, and drills down further to help understand the risk analysis associated with a particular project" when evaluating different regions and different countries (Schildhouse, 2006, p. 2).

Pugh suggests that the combined use of SWOT and PEST as part of a fully integrated strategic, high level, sophisticated and practical approach. Specifically, Pugh believes that PEST "drills down into the external factors more thoroughly than SWOT alone, and helps to evaluate the risk associated with business and projects in various international regions" (Schildhouse, 2006, p.2).

The subject case uses a slightly different application, a SWOT analysis of each of the three individual proposed consortium members, followed by a PEST analysis as an integral piece of the larger market analysis.

PEST Analysis Framework ("SWOT Analysis," n.d.)



Conclusions & Recommendations

The extensive use of SWOT, and to a lesser extent PEST by businesses small and large suggests their practical value in the real world. This case study centered on a collaborative analysis of three small companies that combined SWOT and PEST analysis as a strategic analysis tool for international business.

There are some criticisms regarding the qualitative nature of SWOT as too subjective. However, a Japanese machine tool company has developed a quantitative SWOT model that shows the flexibility and adaptability of the tool (Shinno et al, 2006). Another criticism by theorists posits that models like SWOT are too simplistic and create a hyperreality that is contrived and unreal (Klages, 2003).

Criticisms aside, there are examples of companies that are using these strategic management tools in day-to-day business. Some of these companies have developed sophisticated constructs to take both SWOT and PEST to the next level. One practical application of the use of SWOT with PEST by a large international corporation suggests the value to business across the board.

The use of SWOT with PEST by the three small companies in the case study seems like a prudent use of these valuable models. The uses of PEST to drill further down into the external factors are an effective market analysis tool, and especially relevant to international markets.

An example of the outcomes of the SWOT & PEST analysis with critical business information redacted follows:

SWOT Analysis

A SWOT analysis was performed on XXX to audit its strengths, weaknesses, opportunities, and threats. This is a SWOT Analysis of the current XXX organization in anticipation of a significant growth opportunity.

STRENGTHS:	WEAKNESSES:
<ul style="list-style-type: none"> ➤ Advantages of Proposition – Exponential growth ➤ Financial Returns – Immediate cover of costs ➤ Capabilities – Strong, flexible contract staff ➤ Competitive advantages – Rapid response ➤ Unique selling points – Boutique, niche, specialized ➤ Resources – Right People ➤ Experience, Knowledge, data – 20+ yrs min, reputation ➤ Innovative – XXX ➤ Geographical Location – Close to XXX business ➤ Pricing – Low overhead, high value ➤ Accreditations, Qualifications & Certifications ➤ Communications – Excellent due to small size ➤ Culture, Attitudes, Behavioral – Special ➤ Morale, Commitment & Leadership 	<ul style="list-style-type: none"> ➤ Disadvantages of Proposition – Loss of Individual Control ➤ Gap in Capabilities – XXX ➤ Competitive disadvantages – XXX ➤ Financial Reserves ➤ Marketing - Reach limited ➤ Locations – XXX ➤ Processes, Systems & IT ➤ Management Cover/Succession ➤ Gaps in Capabilities – Due to size and scope of operations ➤ Vulnerabilities – Size, legal capabilities, insurance ➤ Timescales, Deadlines – XXX ➤ Reliability of Data – Limited due to network
OPPORTUNITIES:	THREATS:
<ul style="list-style-type: none"> ➤ XXX Plan – Consortium of XXX XXX ➤ Market developments – XXX, XXX ➤ Competitors' vulnerabilities – XXX paradigm ➤ Industry or lifestyle trends – XXX ➤ Technology development and innovation - XXX ➤ Global influences – XXX ➤ New markets-Vertical /Horizontal -Vertical.-XXX, other business-Horizontal ➤ Niche target markets – XXX, XXX ➤ Geographical export/import-XXX ➤ New XXX – XXX, XXX ➤ Tactics – XXX, XXX, XXX ➤ Business and product develop. – Industry alliances ➤ Partnerships, agencies- XXX, XXX, XXX 	<ul style="list-style-type: none"> ➤ Competitors – XXX, XXX ➤ Political Effects – More than one country consideration ➤ Legislative effects – US Dept of State changes ➤ Competitor intentions – Continue to study, XXX ➤ New tech., Svcs. & Ideas – XXX ➤ Vital contracts and partners – XXX, XXX, XXX ➤ Obstacles faced – XXX ➤ Sustainable financial backing – XXX ➤ Economy – XXX ➤ Seasonality, weather effects – XXX

(++)---Very Positive
 (+)-----Positive
 (+/-)---Neutral
 (-)----- Negative
 (--)-----Verv Negative

PEST Analysis

A PEST analysis was performed as a Market Analysis tool for an upcoming growth opportunity that includes XXX, XXX and several other partners that would form a consortium called XXX.

<p style="text-align: center;">POLITICAL:</p> <ul style="list-style-type: none"> ➤ Ecological/Environmental Issues – Value-added to int’l marketing, de facto in domestic market (+/-) ➤ Current Legislation Home Market (+) ➤ Future Legislation – MPL will be future (++) ➤ European/Asian/Int’l Legislation – OK now, must Track (+) ➤ Regulatory Bodies And Processes – XXX (+/-) ➤ Government Policies – XXX (+/-) ➤ Government Term and Change – U.S. New President (+/-) ➤ Trading Policies – XXX (+/-) ➤ Funding, Grants And Initiatives – XXX (-) ➤ Home Market & International Pressure Groups – XXX (++) ➤ Wars And Conflict – XXX (--) 	<p style="text-align: center;">ECONOMIC:</p> <ul style="list-style-type: none"> ➤ Home Economy Situation – XXX (+) ➤ Home Economy Trends – Global, XXX (++) ➤ Overseas Economies And Trends – Global, XXX (++) ➤ General Taxation Issues – Int’l operations cost (+/-) ➤ Taxation Specific To Product/Services (+/-) ➤ Seasonality/Weather Issues – XXX (+/-) ➤ Market And Trade Cycles – XXX, XXX (++) ➤ Specific Industry Factors – XXX (+/-) ➤ Market Routes And Distribution Trends – XXX (++) ➤ Customer/End-User Drivers – XXX (+/-) ➤ Interest And Exchange Rates – XXX (++) ➤ International Trade/Monetary Issues – Mostly positive, XXX (+)
<p style="text-align: center;">SOCIAL:</p> <ul style="list-style-type: none"> ➤ Lifestyle Trends – Mobility, travel, globalization (++) ➤ Demographics – XXX(++) ➤ Consumer Attitudes And Opinions – XXX (++) ➤ Media Views – XXX (+/-) ➤ Law Changes Affecting Social Factors –XXX(+/-) ➤ Brand, Company, Technology Image – XXX(++) ➤ Consumer Buying Patterns – XXX (++) ➤ Role Models – XXX(++) ➤ Major Events And Influences – XXX (++) ➤ Buying Access And Trends – Global, XXX(++) ➤ Ethnic/Religious Factors – XXX (+/-) ➤ Advertising And Publicity – Global pricing (++) ➤ Ethical Issues – XXX (++) 	<p style="text-align: center;">TECHNOLOGICAL:</p> <ul style="list-style-type: none"> ➤ Competing Technology Development – XXX (+/-) ➤ Research Funding – XXX (++) ➤ Associated/Dependent Technologies – XXX (++) ➤ Replacement Technology/Solutions – XXX (++) ➤ Maturity Of Technology – XXX (++) ➤ Manufacturing Maturity and Capacity – XXX (++) ➤ Information And Communications - XXX (++) ➤ Consumer Buying Mechanisms/Technology – XXX (++) ➤ Technology Legislation- XXX (+/-) ➤ Innovation Potential – XXX (++) ➤ Technology Access, licensing, patents (+) ➤ Intellectual Property Issues – XXX (-) ➤ Global Communications (++)

The SWOT/PEST combination is mentioned in some web-based academic reference material, but overall there is very little in the literature. Research is necessary to assess the perceived effectiveness of the combined use of SWOT and PEST as a strategic management tool.

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