Using Interdisciplinary Thinking to Improve Strategy Formulation: A Managerial Perspective

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Strategy formulation is an integral function tangent to organizational success and competitive advantage. Many tools exist that enable managers to formulate and implement business strategies. However, a focus on synthesizing interdisciplinary intellectual views may potentially enhance organizational decision-making and vield fruitful outcomes to better position an organization within the respective industry. This article introduces the concept of Interdisciplinary Thinking (IT) stemming from stakeholders, as an integral function of the strategy formulation process.

The art and science of strategy formulation represents a challenging endeavor for corporations as the results carry heavy emphasis with respect to an organization's overall effectiveness within its industry and competition. It is no secret that business strategies drive business success levels. Moreover, the literature in the field exposes ideologies and methods of strengthening the strategy formulation process; however, is relatively silent in regards to innovations of the intellectual process contributing to strategy identification, development, and implementation. More specifically, the internal and external analyses that require organizational input (usually from top management) are in need of continuous development, according to changes in time. Simply conducting analyses historically, may not optimize the same returns without extending the thought processes that are involved with methodologies of strategy formulation.

Managers are continuously faced with uncertainties, especially with external environments, where options are sometimes to act impulsively or develop a meaningful method to strategy formulation (Mockler, 2003). There are numerous strategic tools intended to assist managers in decision-making, such as the conventional Strengths, Weaknesses, Opportunities, and Threads (SWOT) analysis (Panagiotou, 2003). Essentially, strategic management tools are effective and have proven to be successful; however, inclusion of intellectual input representing stakeholders, internally and externally, may further strengthen the process.

One notable method known as Cross-Functional Team (CFT) provides the opportunity for managers to survey members, cross-functionally within an organization, where ideally provides an opportunity for employee development, too (Clark, et al. 2002). A critical prerequisite of interdisciplinary thinking (IT) is to ensure associates are professionally attuned to the environment in which the organization operates in and apprised of environment changes, too. The intellectual contributions must all be considered as potentially valuable to the organization; therefore, it is necessary that contributions are significant and grounded with some insight into the environment.

Conceivably, strategy formulation is an arduous task, compounded by numerous variables and uncertainties. Among the many concerns, the decision of strategy formulation being a top-down process as opposed to bottom-up surfaces a real discussion for many organizations (Parnell, 2003). A closer look into this argument reveals a real decision facing many organizations; should non-management/executive associates be involved to some degree with strategy formulation?

This article discusses the interdisciplinary thinking process in full and methods of inclusion into strategy formulation, organizationally. The concept of interdisciplinary with respect to the thinking/intellectual process is in its infancy stage within the literature; more specifically, applied to the strategy formulation process in management. The presented thoughts are intended to serve as suggestions for improving the effectiveness of strategy formulation process.

Interdisciplinary thinking in the context of this article is intellectual knowledge obtained from associates representing broad and diverse professional backgrounds, both academically/educationally and professionally. However, the term interdisciplinary in itself means combining fields and/or interests of study that are mutually exclusive. The basic premise behind IT is simple: solicit thoughts from a diverse selection of associates specializing in different academic backgrounds, such as ones representing the broad arts and sciences. It is often understood that many corporations encounter the limitation of staffing professionals representing diverse academic backgrounds. Knowledge can certainly be perceived as an intangible, by where implementation may potentially yield tangible outcomes for any organization.

Moreover, the field of management crosses the wide boundaries of the arts and sciences, warranting the notion of viewing business solutions and challenges three-dimensionally. It is no longer sufficient to consider business problems one-dimensionally. Needless to state, the assessment of business core strategies requires change and innovation if corporations are to meet the demands of environmental changes, such as globalization and interpreting confronts from different vantage points. Organizations must continuously change according to derivatives in the respective environment in which they function in order to remain competitive.

Divisional Stakeholders

The foundation for business strategy development lies in the opportunity to effectively implement strategic management tools. The process usually involves stakeholders within (internal) and outside (external) of the corporation.

There is no question the single most important asset of any corporation is its people. One characteristic of a modern organization is all stakeholders involved in the analysis and actions of strategic planning (O'Shannassy, 2003). The internal stakeholders are normally involved in the daily operational functions of the business; therefore, they possess at different ranges, knowledge of potential benefit to the corporation. Internal associates, include, but not limited to, company associates/employees and management.

External associates, such as the greater community/customers and stockholders, etc. each may potentially contribute towards the strategy formulation process, also. While

soliciting such individuals may be of a challenge, the outcomes may be worthwhile for business considerations. A suggestion for inclusion of knowledge input is by way of a survey, soliciting for feedback/input, in general terms. The analysis of feedback from customers, suppliers, etc. is critical in formulating strategy directly associated with competition from respective corporations.

Building Interdisciplinary Organizations

While the concept of IT may be new in terms of jargon; however, some organizations implement the process to some degree. The range of implementation is based on such factors as organizational motivation and knowledge management, among others. In spite of, in order for its effectiveness to truly be assessed, full implementation is necessary.

Furthering the discussions, it is necessary to incorporate human resources, which are responsible for attracting and hiring qualified candidates for positions, among other duties to the development aspects of IT within an organization. Moreover, the basic notion is to hire highly competent individuals representing diverse academic training backgrounds and working history. Human resources must be involved in the strategic planning process of any organization; this provides them with an understanding of what is taking place and how to best recruit future associates (Meisinger, 2003).

Conventional hiring practices within corporations normally mirror the specific description of that position and the academic/professional preparatory background to fit that description. A movement towards hiring professionally diverse employees is emerging within many companies (McColl, 2003). An interdisciplinary approach to this would feature a description fitting the job; however, perhaps also interviewing candidates that may qualify by professional experience and not directly an academic background. Perhaps the academic degree for a respective position may necessitate business, but a particular candidate may possess an engineering degree with relevant job experience. The respective human resource department in a company should consider asking themselves the following questions in an attempt to analyze their staff and strive for building an interdisciplinary team:

- 1. What are the departmental associates' current academic and professional backgrounds? This would enable HR to focus on specific skills/individuals necessary for departmentalized services.
- 2. How ethnically diverse is the company? With diversity brings problem solving skills representing different sociological backgrounds, which potentially may result in business problems viewed from a different lens.
- 3. How can we (HR) solicit department management and identify diverse professional needs beneficial for the entire organization? By HR being apart of the departmental meetings would provide insight into hiring needs. Furthermore, this process would benefit each department by HR sharing knowledge distributions by way of other respective departments.

- 4. Where and how can we recruit a diverse professional workforce? Conduct a needs-assessment to see how many associates with what particular background(s) are needed (i.e., sociology, history, etc.). Next, consider advertising and/or contacting universities if positions are entry to middle-management levels. Please note that majors outside of business may be critical in strategy development process given candidate qualifications and interests. Simply restricting within the boundaries of business majors may result in not viewing a particular valid vantage point representing society, best captured by a sociologist, for example. Utilizing head-hunters can assist with a more skilled caliber of talent
- 5. What type of training/in-service program do we need to design and deliver for new hires, especially if they are new to the industry? If recruitment efforts are from interdisciplinary collegiate programs will require additional training on corporate business, etc. However, recruited associates having little to no conceptualization of interdisciplinary thinking, etc. will require a series of in-services detailing the concept of interdisciplinary thinking and how it is/will be implemented.

Key questions HR should consider are endless; however, the questions are critical in formulating an interdisciplinary team. Furthermore, recruiting from universities offering interdisciplinary majors is a key advantage. Such programs offer potential candidates that possess specific training and exposure to diverse fields of study, which supports broad problem solving skills as a result of the program of study. However, HR should study the university programs to see which program(s) better match company needs.

An important step to building interdisciplinary organizations is to provide leadership. The type of leadership required to successfully incorporate the concept of Interdisciplinary Thinking somewhat differs from traditional support from leadership. Leadership associates should develop query skills, with a focus on soliciting all members of the organization for knowledge.

This juncture does not complete the process as it is then required to expose and synthesize the thoughts gathered. This process enables all the stakeholders responsible for strategy formulation to some degree to see the yielding results and provides a reflection opportunity. It is as this time where the executive team can prioritize from the list of strategies solicited and develop meaningful corporate strategies. These strategies should be few in number and specifically focused on some general aspect of the corporation's mission/vision statement(s).

Strategy Questioning Phase

A critical component to any strategy development process is the questioning phase, where a list of questions should be considered focusing on key strategic considerations for the respective corporation. More importantly, the strategic management tools implemented should begin the questioning phase. The presented questions should take into consideration the weaknesses of the company and follow with a detailed plan of action to remedy the challenge. Alternatively, the questions can be viewed from a

standpoint of company growth or diversification, etc. Regardless of the direction, questioning strategies within the formulation process are critical in allowing for contributors to reflect and exchange thoughts from one another.

Organizations should consider themselves as life-long learning organizations, where continuous developmental efforts are implemented to increase intellectual contributions from one of the most important assets of any organization-its associates. Enhancing associates' levels of understanding concerning their respective roles and the overall business will potentially increase the quality of input. One such method of transferring associate knowledge to organizational strategies is by way of innovating the questioning phase.

The strategy formulation process requires an organization to prioritize its objectives by way of intellectual contributions of knowledge (thinking), in order to best determine how to achieve the desired results. More specifically, this process requires thoughts about any possible issues affecting the business, such as marketing, accounting, production, etc. The design process requires first, the implementation of strategic management tools, such as the SWOT analysis to be conducted. At that point, a look at the external/internal environment (SWOT) is the starting point for a corporation to begin the strategy formulation process. When a department or group of associates has finalized the SWOT analysis, the following such questions should be considered next:

- 1. What is/are our weaknesses as a corporation?
- 2. What is the most optimal recovery/growth opportunity?
- 3. How can this be accomplished?
- 4. Who will be involved and to what extent, exactly?
- 5. How will the strategies be subsidized?
- 6. How will implementation of strategies be assessed?

The key above questions are required to better conceptualize the strategic functions ahead. They are derived at the conclusion of a SWOT analysis. This process does not limit the input from internal associates, but also the external community, too.

The formulation stage requests the inclusion of interdisciplinary teams throughout the process. While the formulation process is traditional in nature, the intellectual input from stakeholders, internally and externally, is a suggestion to further strengthen the process. More important, organizations soliciting knowledge from associates provides a better understanding of what is taking place from a different lens, environmentally, both on an external context and internal context from within the organization (Epstein, 2003). This process can support the notion that managers have and may continue not to be exact in their decision-making (Mezias and Starbuck, 2003).

The inclusion of stakeholders' contributions benefits both the corporation and the associates. It provides "buy-in" with respect to selected strategies and ensures

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stakeholders are continuously updated and professionally developed as to the organization's strategic progress.

Interdisciplinary Formula

The concept of bringing associates from within and outside of the corporation to disclose thoughts, feelings, and general knowledge about the organization will require a building of trust. Once trust is established, ideas will begin to surface, organizationally, allowing the minds to come together (Barker, 2002). A socially-balanced organization is supportive of trust building where associates can feel safe expressing their ideologies without being criticized.

As an example, Company "X" is looking to conduct an internal/external audit to measure their stance within the industry and to pinpoint what options for advancement may be viable for the company. The process begins with the gathering of data from respective departments, by a multitude of options, such as departmentalized meetings, survey, etc. When conducting this process (SWOT), it will require departments, such as accounting, marketing, engineering, research & development, etc. to input strategies directly relating to the company. What one department may consider a company strength may be considered a weakness by another respective department. It is for this reason that a process must be created to ensure trust and responsibility, company-wide. Associates' intuitive thinking is a critical strategy often overlooked in the strategy formulation processes (Boyd, et al. 2001).

A recommended method is to gather input and have a meeting with department managers to list the data where others (from other departments) can see and contribute input. Interdisciplinary thinking can be challenged if respect and acceptance/openness is not provided to participating interdisciplinary team members (Giri, 2002). A list of meaningful SWOT results can then be compiled by way of departmentalized input. This process can then be furthered to include what the executive cabinet has considered either by way of lists and/or their SWOT analysis. Ultimately, it is the recommendation of the executive team/CEO that selects strategies; however, it would be of interest to compare commonalities and/or insights generated as a result of soliciting associates (bottom-up approach).

Thinking Process

Leadership and management roles have become ever so complex in business on a global scale. While the discussions thus far have alluded to increased leadership and involvement of stakeholders in strategy formulation, many challenges require immediate attention for a seamless transition into innovative practices. A major task of leaders is to synthesize thoughts (interdisciplinary thinking) representing an entire corporation and vertically integrate it as one and to ensure that thinkers (associates) are effectively and efficiently thinking (like managers) (Gosling and Mintzberg, 2003). Thinking is indeed an intricate process and can be defined differently by many.

Is thinking an art or a science? Arguably, if you consider the actual process that occurs in one's brain, it can be considered a science; however, if you view what thoughts are triggered through the thinking process in the brain, it can be considered an art. Complex enough, the art and science of thinking is an integral component of strategy formulation and requires a thorough conceptualization and support from leadership. A classical example from the technical world is "GIGO: garbage in garbage out." To this end, certainly warrants lean thinking strategies to be modeled by administration. It should be made a routine of by associates within the corporation.

A brief, yet concise discussion on interpersonal relationships within departments is necessary. More specifically, managing intellect representative of different personality/ characteristic styles within a department can be challenging and potentially skewing momentum towards common goals and objectives to be integrated in the data gathering process (SWOT). Here again, there may be multiple fashions to addressing this interdepartmental challenge, but a recommendation is to incorporate a "agree to disagree" statement; however, considering and rationalizing each solicited statement representing each individual associate by leadership/management. The underlying point is that stakeholder participation leads to increased effectiveness within the organization (Yuan, 2003). While the hope is that common thinking as a result of the organizational mission/ vision takes place, one can certainly expect to encounter differences of opinion. It is critical for leaders to manage this and treat as it sensitive as it can destroy any trust building that may be in existence. Once trust is inhibited, social disengagement may occur coupled with lack of intellectual contributions.

In sum, there is really no one correct method of modeling thinking; it simply should be fostered around the mission/vision of the corporation. What exists helps in driving what occurs; meaning the strategies and methods of conducting business is a form of a mind-set. The practice of associates is a result of that mind-set modeled/supported by leadership. As a result, it is indeed inherent in all associates regarding the methods, mission and vision of the respective company. If this process is to change/modify in any manner, it is as a result of the thinking process aimed at formulating business strategies from the stakeholders (internally/externally).

Supporting Organizational Assets

The discussions thus far have surfaced a valuable organizational asset that can certainly be considered as a prime characteristic of effective and efficient organizations. The critical asset to the success of any corporation is its stakeholders and their state of commitment to the corporation coupled with their emotional/social well-being. After all, it is the intellectual contributions stemming from such stakeholders that contributes to the strategy formulation process and potentially yields desired organizational outcomes.

The environment in which we live and work in today has changed; family values, job commitments, career goals, etc. all play a critical role in the daily situations an average worker encounters. To this end, such issues can tend to sometimes cause stress and

anxiety in the lives of people, which certainly has a direct impact on performance at work and at home. This is one phenomenon that executives must learn to foster. Furthermore, a lower level of tolerance for any organization may be the lack of commitment offered by the stakeholder(s). This can be true and relational to management and even executives within an organization, too. According to Ghoshal (2003), the lack of energy and focus is one cause limiting the performance of managers, where only "10%" of manages possess both high levels of energy and focus by effectively leading their company. This may certainly reflect onto associates and executives of an organization as well.

In order for corporations to strive for higher performance and success in their respective industry will require strategies aimed at assisting stakeholders manage their personal and professional lives. A sample of organizational strategies to assist associates has ranged from providing breakfast in the morning to day care for children. Since life and managing the different roles individuals confront has become increasingly challenging, perhaps a recommendation to house a psychologies (confidential) many prove to be effective in assisting individuals with their personal and professional challenges. All too often mangers have been assumed to serve as support structures for associates; however, the service may be limited as they serve as direct supervisors, where many associates may not wish to disclose personal happenings with them. A company psychologist serves as a neutral party within the organization.

Is there any one way an organization can manage commitment from its stakeholders? How can this process be accomplished without associates feeling cornered and micromanaged, whereby disenfranchising them from the company? This is a sensitive topic where one simple rationale to this may not exist, other than continuous support structures, creating an organization that solicits and encourages feedback, and respects each individual alike. A family-like ambiance needs to be created where each individual is welcomed, collaborates socially and professional with others, and is encouraged/recognized for doing so. Moreover, associates need to trust one another and feel autonomous, too (Gratton, 2003). A simple success factor is when employees feel wanted, empowered to contribute thoughts, and recognized for their intellectual efforts as a result of contributing to an organization's strategy formulation process.

Synthesizing Discussions

The concept of "Systems Thinking" suggests that no one decision yields a desirable outcome (Maani, 2003). How can an organization and/or the Chief Executive Officer be assured the concept of systems thinking can yield fruitful outcomes? There is no objective response to this question other than collaboration among the stakeholders with respect to decision-making/strategy formulation processes is likely to result strategies that have been contributed to as an organization. Moreover, those contributions stem from experience at all levels, such as top executives, middle managers, and departmental associates; stockholders, customers and suppliers certainly can offer a significant contribution, also.

The underlying notion is to gain insight from all respective stakeholders and synthesize the findings. At that point is where one or more organizational strategies can be selected and approved for implementation. Bringing all the pieces involved with underlying interdisciplinary thinking into the strategy formulation process requires precise planning and training in itself. This process can best be utilized by either outsourcing and/or an internal task force assigned to implementing such a professional development function.

The support of human resources is critical in developing interdisciplinary thinking organizations. Once the strategy formulation process is fine-tuned, an organization should then apply strategic management tools, such as SWOT and proceed to implementing the previously discussed questions. The focal point should be to build and increase trust, organizationally.

The discussions thus far have alluded to the significance of intellectual knowledge across the entire organization and the external community. It is advised that corporations consider revisiting their strategy formulation process to ensure it is cognizant of the theoretical stance of incorporating interdisciplinary thinking into the paradigm. To better compete in the 21st century will require organizations to continuously innovate their practices; the foundation for any successful corporation is its people and business strategies, which are the underpinnings of this article.

Further Research

To better understand the global economy and its stakeholders necessitates innovative practices and research methodologies in business today. While the derivative may be in product and/or service, the underlying premise is that new methods of thinking about tangible and intangible segments of business should be considered primal. While the undertakings may be new, a recommendation is to begin by a step-by-step in-servicing of the stakeholders. It is not common to encounter any resistance from associates as a sense of gratitude can be expected by them as a result of the company soliciting their input in the corporation's future.

The discussions are intended for the audience of practitioners, professors and researchers of strategic management. Moreover, it is such audiences that can further the discussions as a result of implementation, further scientific inquiries, and general discussions. A suggestion is for researchers to micro-examine the effects of interdisciplinary thinking paradigm within a corporation and measure its effects against conventional top-executive, etc. strategy formulation. Furthermore, feedback towards such an action from corporate practitioners at all levels would further support the concept, especially with respect to implementation modifications, etc. Lastly, research employee assistance programs aimed at assisting associates with their professional and/or personal lives, effectively.

Professors of management may certainly consider incorporating the discussions with their teaching of strategy at the undergraduate and graduate levels, especially applied to the conventional strategy formulation processes. Additionally, further research on designing training paradigms to successfully build and maintain trust within the

organization while soliciting for and incorporating stakeholder knowledge, simultaneously, would provide insight into the systematic processes and their effectiveness

Lastly, professors of management/business administration programs of study should consider reviewing their graduate curriculum to notice alignments with the concept of interdisciplinary. A growing concern regarding graduate management study is the limitation of integration across business fields to prepare graduates to become better leaders (Greiner, et al. 2003). Perhaps integrating fields outside of business, also, in graduate education may be one solution to better preparing future business leaders become more diversified with respect to their analytical thinking skills, ultimately contributing to the business strategy formulation process.

References

Barker, R. (2002) The Art of Brainstorming; Hiring Diverse, Even Eccentric People, Mixing Them up in Unexpected Ways, and Asking Them to do Something Unusual can Prompt Surprising Ideas, **Business Week**, 3796, 168.

Boyd, L., Gupta, M. and Sussman, L. (2001) A New Approach to Strategy Formulation: Opening the Black Box, **Journal of Educational for Business**, 76, 338.

Clark, M. A., Amundson, S. D. and Cardy, R. L. (2002) Cross-functional Team Decision-making and Learning Outcomes: A Qualitative Illustration, **Journal of Business and Management**, 8, 217.

Epstein, E. M. (2003) How to Learn from the Environment—A Prerequisite for Organizational Well-being, **Journal of General Management**, 29, 68.

Ghoshal, S. (2003, December 26). Sumantra Ghoshal's CNN Clip. Featured in London Business School's webpage. Retrieved from http://www.london.edu/cnn_ads/

Giri, A. K. (2002) The Calling of a Creative Transdisciplinarity, Futures, 34, 103.

Gosling, J. and Mintzberg, H. (2003) The Five Minds of a Manager, **Harvard Business Review**, 81.

Gratton, L. (2003, December 26). Lynda Gratton's CNN Clip. Featured in London Business School's webpage. Retrieved from http://www.london.edu/cnn_ads/

Greiner, L. E., Bhambri, A., and Cummings, T. G. (2003). Searching for a Strategy to Teach Strategy, **Academy of Management Learning and Education**, 2, 402.

Maani, K. (2003) Beware Unexpected Outcomes, New Zealand Management, 50.

McColl, G. (2003) Good All-rounders Wanted, BRW, 25, 62.

Meisinger, S. (2003) Strategic HR Means Translating Plans into Action, **HR Magazine**, 48.

Mezias, J. M. and Starbuck, W. H. (2003) What do Managers Know, Anyway? **Harvard Business Review**, 81, 16.

Mockler, R. J. (2003) Prescription for Disaster: Failure to Balance Structured and Unstructured Thinking, Business Strategy Review, 14, 17.

O'Shannassy, T. (2003) Modern Strategic Management: Balancing Strategic Thinking and Strategic Planning for Internal and External Stakeholders. Singapore Management Review, 25.

Panagiotou, G. (2003) Bringing SWOT into Focus, Business Strategy Review, 14, 8.

Parnell, J. A. (2003) Five Critical Challenges in Strategy Making, SAM Advanced Management Journal, 68, 15.

Yuan, W. (2003) Trust and Decision-making Styles in Chinese Township-village Enterprises, Journal of Managerial Psychology, 18, 541.

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