

Applying the Principles of Co-opetition With System Dynamics Tools

Presented by: Hal Rabbino

SDSG, LLC (The Strategic Decision Simulation Group)

halr@sdsd.com <http://www.sdsd.com/>

Introduction

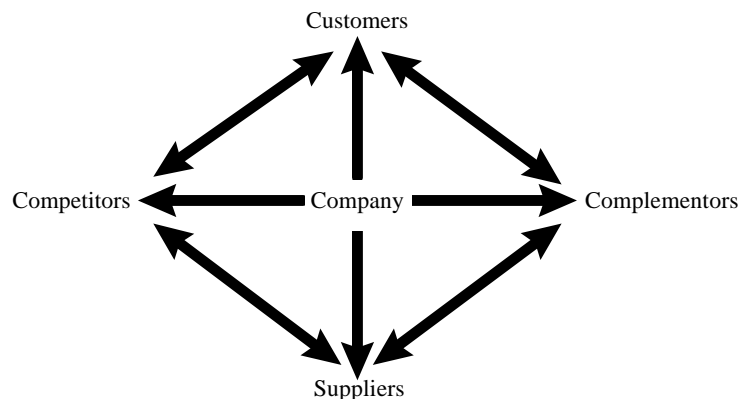
Business, like war, is a win-lose proposition. This is the traditional training and mindset that has shaped management's view of their role and responsibilities towards their shareholders, clients, customers and suppliers. This approach focuses on gaining a bigger piece of the existing pie, which forces leaders to consider every transaction as a battle, and is by necessity, confrontational. This approach is now being challenged.

In their book, *Co-opetition*, Brandenburger and Nalebluff (1996) introduce a framework for applying game theory principles into management practice. The message is that competition and cooperation can, and should, co-exist. Their concern is with growing the pie itself rather than gaining a bigger share of what is already there. However, they do not provide a means for managers to test their understanding of these ideas without committing the company resources.

With the help of system dynamics modeling tools, managers can approach the concepts of co-opetition more richly and more effectively. Through an in-house example from a consulting firm, this paper explains how to consider co-opetition alternatives for running a business in a dynamic framework.

Co-opetition

Co-opetition provides a framework, based in game theory, from which to reassess the uncertainties of your strategic position and alternatives in any given situation. It amplifies the field of vision to include customers, competitors, suppliers and, a new one, complementors. In addition, co-opetition links these players in what they call the Value Net (Brandenburger and Nalebluff, 1996).



The Value Net is a high level view of the key relationships that drive any company's ability to succeed sustainably. Interestingly, sustainability is more critical than economic profit.

In order to succeed in this framework, the principles of adding value over time, understanding and creating the rules of engagement, awareness of different perspective all come into play. It is a refreshing and powerful departure from the zero sum approach of “business is war.”

The vocabulary for co-opetition is straightforward - it is called P.A.R.T.S. **P**layers were described above in the Value Net. Though we are familiar with competitors, suppliers and customers as players, a “player is a complementor if customers value you product more when they have the other player’s product than when they have yours alone.” Serving popcorn at the movies certainly helps the experience! **A**dded value is the measure that each player brings to the game by joining it. It is the lever by which power is determined in the Value Net. **R**ules set the parameters by which the game of business is played. Some rules are legal, some are unwritten. Both are extremely important and there are often hidden opportunities to create them. **T**actics are the action we take to alter, create and shape perception among the players. Often subtle, often straightforward, role playing and timing are critical in managing the tactics of the game. **S**cope discusses the boundaries of the game (Brandenburger and Nalebluff, 1996, 65-66).

Though an excellent framework for enriching the possibilities of strategic management with game theory, the authors only offer a prescriptive list of do’s and don’ts in applying these principles to real situations. The language of asset stock accumulation and sustainable competitiveness provides a language for discussing the management of key resources (Dierickx and Cool, 1989).

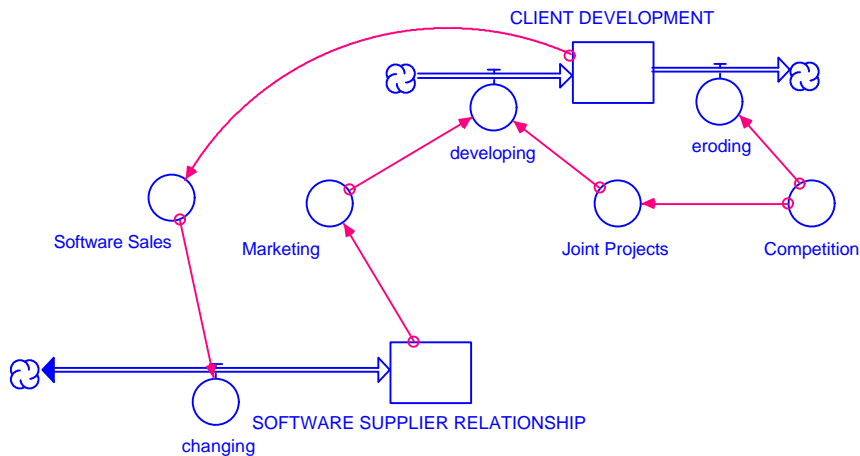
Dierickx and Cool argue effectively for management to consider the strategic elements of their business as asset stocks, or resources. These resources are increased by inflows and decay over time through outflows. For example, training may increase the overall skill level of the company’s staff (a key strategic resource) yet obsolescence of this very same training will decay this resource over time. The issue of whether these resources are tradeable (can competitors use other assets equally well or better?) or imitable (how fast can competitors accumulate this same asset) is also critical to their sustainability.

Policies around these key resources are critical in determining the net flow through these key resources. As such, management’s role is to effectively create and implement the appropriate policies around these key resources. In terms of co-opetition, the key strategic resources that must be managed fall along four vertices: customer, competitor, supplier and complementor. This sounds simple. However, the company may fall into each of these roles depending upon the situation and that greatly complicates, and often confuses, strategic management of the company.

While the concept of asset management provides a clearer way to understand why these resources are important, System Dynamics offers a methodology for exploring how these resources are linked and what impact this linkage has on the company’s ability to develop and sustain appropriate levels of key resources over time.

Using dynamic simulation provides leaders with a framework and a tool to rigorously integrate the concepts of co-opetition and asset stock accumulation. For a consulting firm in the SD industry, the principles of co-opetition are very important. This market potential is tremendous whereas overall demand is small. As such, the principle of “growing the pie” is critical. In such an environment, it is often the case that competitors are complementors as well.

For example, the high level graphic below describes how competition can wear both a competitor and complementor hat. If the competition offers a better solution to your client’s needs, than you can alone, the client will use them and will decay the level of your Client Development. If, together with your competitor, a joint project will solve the client’s need better than either could alone, then the level of your Client Relationship will increase. As the Client Development increases, dynamic simulation software sales will increase as the client needs these tools to manage key issues systemically. Increasing software sales improves the company’s relationship with the software supplier who, in turn, helps the company’s marketing efforts, indirectly through courses or through additional lead generation from prior software sales.



Co-opetition, driven in part by principles from game theory, enriches the traditional framework for the management of strategic issues. Considering companies as customers, competitors, suppliers and complementors, permits leaders to look at strategic concerns and uncertainty from multiple perspectives.

Asset stock accumulation offers a language to clarify the linkages among these multiple perspectives. Management’s role is to manage the inflows and outflows through key resources through effective policy decisions.

System Dynamics’ tools and methodologies provide a powerful mechanism to integrate the concepts of co-opetition and asset stock accumulation in handling complex strategic issues. Simulation focuses on deepening leaders’ understanding of the linkages that co-

opetition supports as well as a safe environment to develop and test multiple policies for managing key company resources.

References

Brandenburger A. and Nalebluff, B. 1996. *Co-opetition: 1)A revolutionary mindset that combines competition and cooperation 2) The Game Theory strategy that's changing the game of business*. Doubleday, New York.

Dierickx, I. and Cool, K. 1989. "Asset Stock Accumulation and Sustainability of Competitive Advantage", *Management Science*. 35: 1504-1511.

Warren, K. 1997. "System Dynamics and Strategic Management - a Call to Arms", *15th International System Dynamics Conference (Istanbul)*, 587-590.

Morecroft, J. 1997. "The Rise and Fall of People Express: A Dynamic Resource-Based View", *15th International System Dynamics Conference (Istanbul)*, 579-586.