

Using Game Theory for Strategic Decision Making

Priiva is a leading strategy consulting firm that uses Game Theory to help clients assess and solve their strategic business decisions. Our goal is to help clients evaluate the context of their decision and choose the best possible response for their company.

We guide clients through a structured decision process that examines and organizes the preferences of all players or parties with the power to influence the decision outcome. The gathered information is analyzed using powerful Game Theory software which produces a model of the strategic decision - a model that considers the desires of other players in the market and plots the best possible course of action for the client in their given situation.

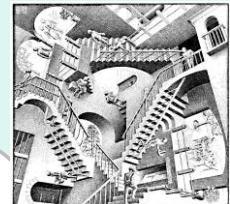
The end result is a strategic action plan that will deliver an optimal outcome for our client and their shareholders.

Your Challenge Today...

"More analysis" \longleftrightarrow "More action"



Endless debate



Increasing Business Complexity and Market Disruption

Strategic Decision Making

Merge, Acquire, Invest, Divest, Partner, Labor Negotiation, Gov't Affairs, IP Protection and Defense, Litigation, ...



Board of Directors Scrutiny



Urgency

Expertise

There are many uncertainties in business - from changing technology, to shifting customer needs, to emerging competition.

>> Making the Best Strategic Move

Business leaders work to continually assess their changing business environment and make strategic choices that deliver the best possible outcome for their company. To maximize the outcome of their strategic decisions, however, executives must carefully consider the expected actions of other players in the market.

>>Considering Player Preferences

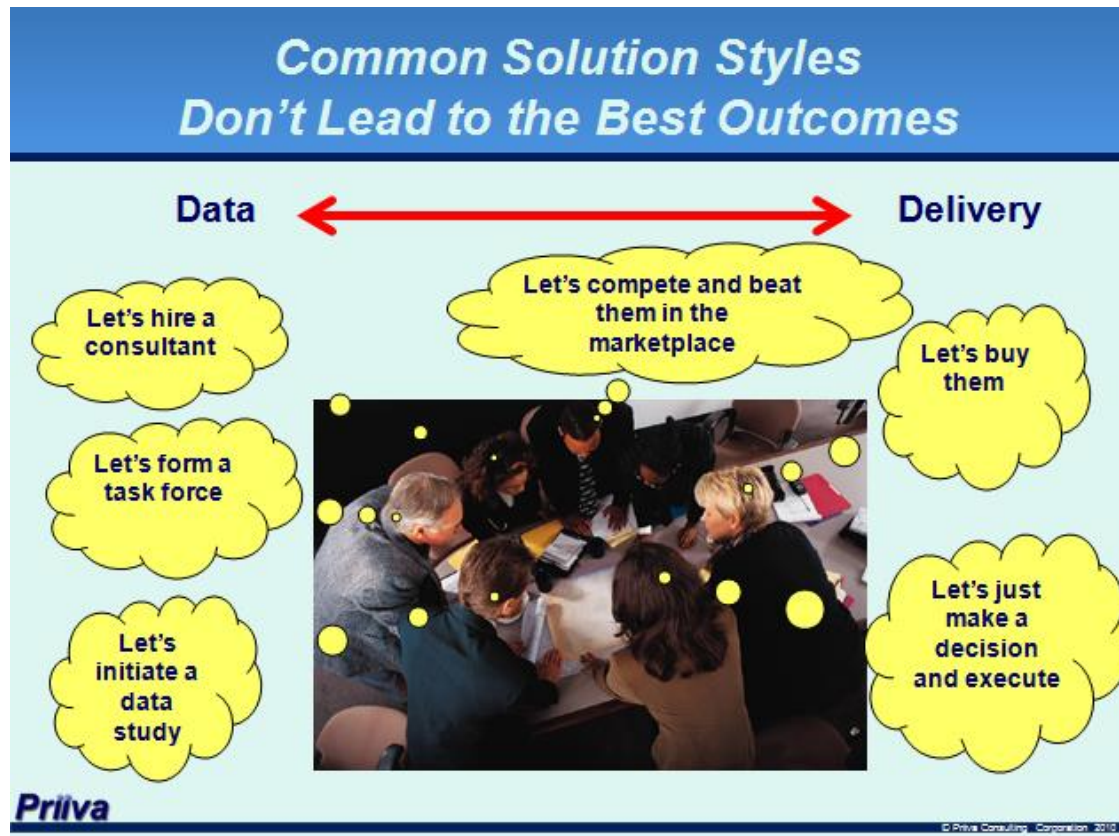
The preferences of other influential players can strongly impact the success of any strategic decision you make. They can render your strategic direction unattainable or make the success of your decision unstable or uncertain. Even the most talented executives have difficulty assessing the strategic business preferences of other influential parties, or the possible sequence of actions they may take.

Common Decision-Making Pitfalls

Anticipating the moves of other influential players is critical to the success of your strategy; however, it is often challenging to do effectively. The complexity that arises during this kind of analysis is often difficult to manage.

Traditional decision making styles often prove unproductive when dealing with complex strategic decisions. Companies may lean heavily on an overly-structured decision making process, relying on the process to ensure all angles are considered. After much time-consuming analysis and assessment, however, executives fall into "analysis paralysis" unable to extract meaningful actions from the mountains of information.

At the opposite end of the spectrum, executives may move down the path toward a quick decision that fails to adequately assess the situation. This unstructured "shoot from the hip" or "Rambo" decision making style often favors the preferences of one or two executives and lacks valuable broad-based input from the executive team - input needed to truly understand the preferences of other influential players.



Game Theory: Understanding Your Decision Context

What is Game Theory? What economists call Game Theory; psychologists call "the theory of social situations". Game Theory predicts how intelligent individuals, or intelligent groups, interact with one another in an effort to best achieve their own goals and objectives.

>> Predicting the Natural Outcome

In any situation where multiple parties are seeking to maximize their own benefits, there is a natural outcome - an inevitable sequence of events that will play out over time. In the end, some parties will gain advantage and others will suffer the consequences.

>> Achieving Your Optimal Outcome

This is where Game Theory gives decision makers an edge. Faced with a complex strategic decision - one that involves a variety of risky alternatives to choose from and a number of influential players - Game Theory can be used proactively for:

- Assessing the desires of other players,
- Predicting the likely actions they will take,
- Predicting the likely sequence in which actions will occur, and
- Taking proactive steps to ensure your company achieves the best outcome possible, given the circumstances.

Based on economic decision theory and mathematical probability theory, Game Theory is a useful tool for modeling decision scenarios and assessing the desired outcomes and likely outcomes of all players. It provides the right amount of decision making support needed to maximize the outcome of your decision scenario.

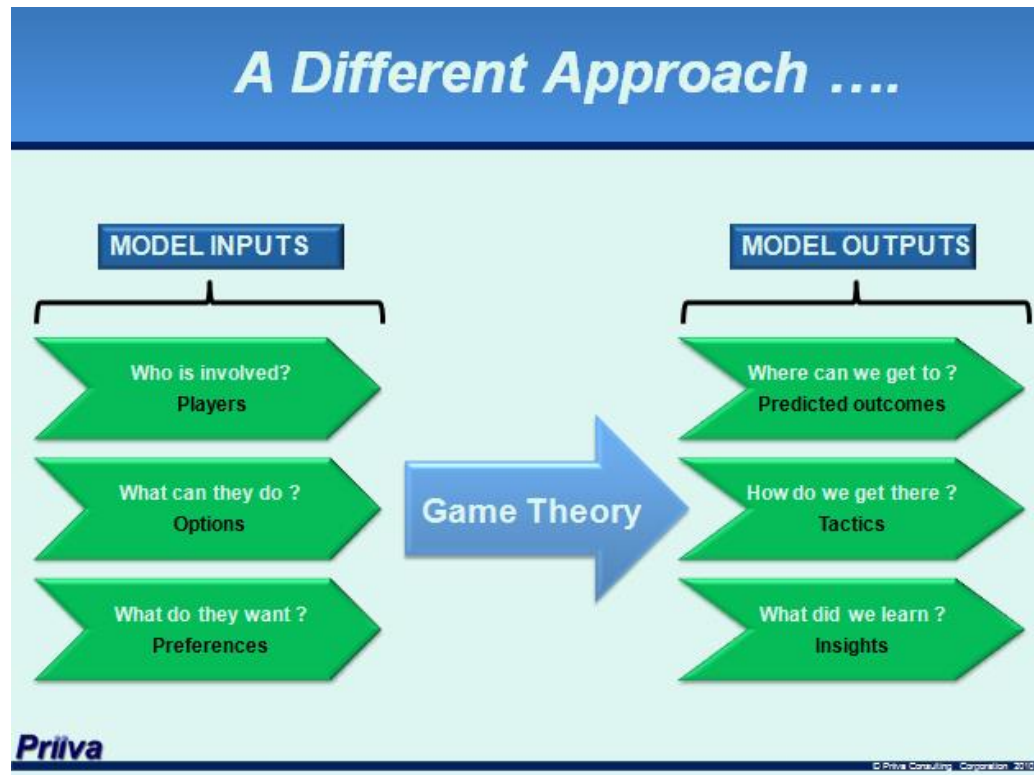
The Priiva Solution: Strategic Decisions That Achieve Your Optimal Outcome

Priiva focuses solely on the application of Game Theory to strategic business decisions. At the core of our solution is Game Theory - a technique for efficiently and effectively managing the complexities typical to strategic business decisions.

To achieve this result, we help clients thoughtfully and efficiently examine the larger context of their decision, project how a decision by themselves or another player will impact their own outcome, and decide in advance how they will respond to gain the best possible advantage.

>> Key Solution Elements

The Priiva solution has three key elements you can depend on for maximum results: the expertise of our consultants, the reliability of our Game Theory software, and the effectiveness of our decision process.



Our consultants use their intimate knowledge of Game Theory and their experience in the business world to guide clients through a structured process for assessing their business environment and making informed, effective decisions. Our proprietary Game Theory software takes executive input and creates a model showing the various decision scenarios for the client and their likely outcomes. Using the Priiva decision process our consultants help the client assesses these alternative scenarios and select the decision that brings maximum results to the client.

>> Key Questions

Using our process and software, we work to we find answers to four key questions regarding your decision:

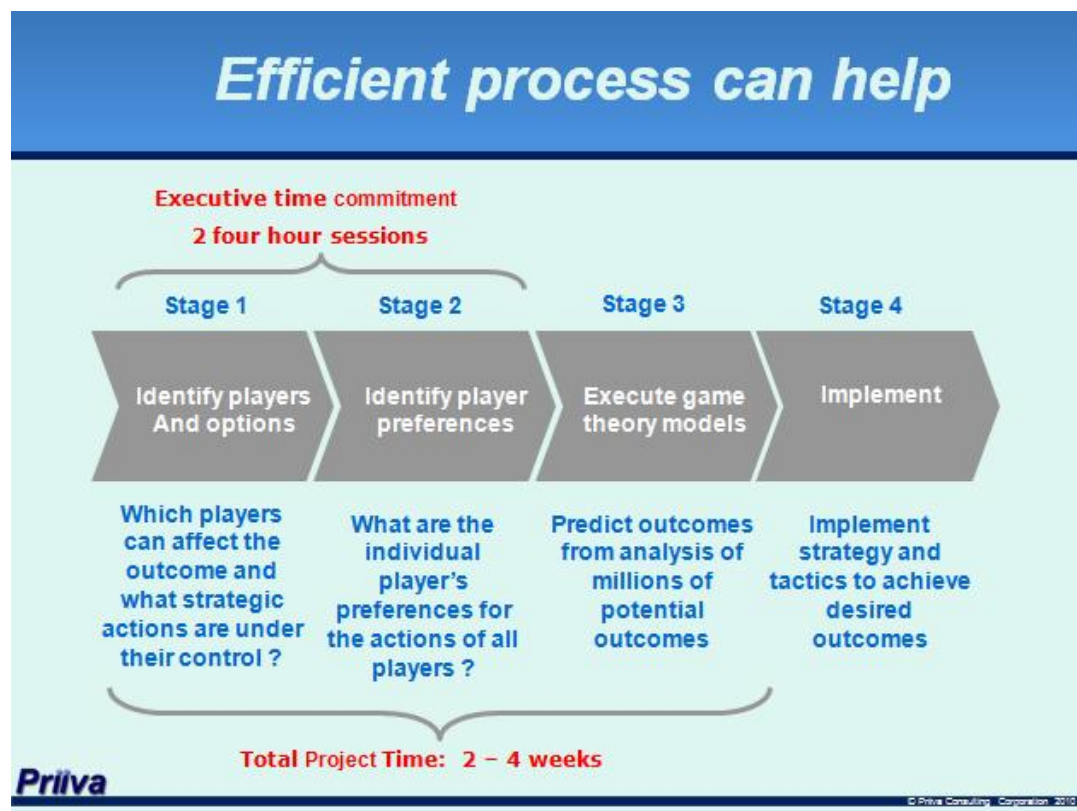
- Who are the players?
- What decision choices are available to them?
- What do they need; what choice do they prefer?
- How should your company respond? What choice will deliver the best outcome for your business?

Our process and technology are proven tools for making business decisions with optimum results. We help our clients make winning decisions that deliver the maximum benefits to their company and shareholders.

Working Together

Our process delivers actionable results in a fast and efficient manner. During our 2-3 week decision process, we guide your executive team through a series of checkpoint meetings during which we gather information, review the output of our modeling software, and ultimately use this information to decide on an appropriate strategic decision for your company.

>> Minimizing Executive Involvement



Understanding the value of executive time, executive involvement is minimized to less than 10 hours. As shown below, much of the time allotted to the process is used by Priiva staff to analyze the information provided to us and to construct your decision model using our software.

>> Our Commitment to Clients

Unlike many consulting firms that work on a billable hourly basis, Priiva commits to a fixed time frame, a fixed fee, and we deliver what we promise - a strategic plan with clear actionable steps and responses.

Applications – Our Solutions Fit

For the past decade, Priiva has focused on the application of Game Theory modeling techniques to strategic decision making. They have experience providing strategic support to companies dealing with diverse issues including stakeholder and partner management, mergers and acquisitions, labor-management contract negotiations, environmental affairs and regulations, competitive positioning, corporate and government affairs, and large-scale litigation. Their experience base to date is over 150 cases: the following represents a selection of typical engagements.

>> New Product Introduction

Priiva worked with the senior management of a large multinational manufacturer who was considering a geographic expansion and product line extension into an adjacent market. Initially, the client considered entering the adjacent market through an alliance with a selected competitor.

The Priiva process was used to determine the likely responses to that market entry strategy by the client's customers, regulators, and competitors. In this case, the analysis showed that market entry with the chosen partner would cause other players to expand capacity unilaterally and would severely damage market profitability. The analysis also showed that a better long-term strategy was for the client to partner with the market leader, rather than with the competitor they had initially targeted.

By implementing the strategy recommended by Priiva, this client was able to accurately predict limited expansionary moves from competitors. This in turn allowed them both to limit market over-capacity and to solidify their competitive position in the market.

>> Mergers and Acquisitions (Industry Consolidation)

Priiva worked with the senior management of a large player in the information technology field. Although the firm was gaining market share, other large firms were entering the market space with potentially disruptive technology.

The Priiva process was used to model the overall industry structure including current competitors, potential new entrants, and customers. Although potential acquisitions were identified, the team was surprised to learn that no immediate

consolidation would occur. They learned the current competitors and potential new entrants were fearful of initiating a cascading auction for several players in the market space.

Having this insight allowed the client time to build value in the market space, as well as time to acquire several smaller players to prepare for the inevitable consolidation.

>> Labor Contract Negotiations

Priiva has worked on a variety of cases in the field of labor contract negotiations. These have included many specific contract negotiations as well as longer time-horizon labour strategies (e.g. 10 years).

For the single contract cases, we typically work with the corporate bargaining team to model all the key aspects of both a settlement scenario and a work stoppage scenario. For the longer-term strategy, we engage the senior executive team to model key labour issues expected and identify key potential crisis periods. In this manner, management can prepare operationally for potential work stoppages in the future.

In each case, clients have reported greater insights as a result of both the process and the specific results. In many cases, the results have been unexpected and the fullness of time has confirmed the excellent predictive properties of the Priiva approach.

>> Regulatory Affairs

Priiva was contracted by a multinational resource company to assist them in developing a negotiation strategy with various levels of government toward the goal of establishing a new Greenfield operation. As a result of the model building exercise and subsequent analysis, the client team was able to quickly determine the key players and lever points in the negotiation and to optimize their negotiation process accordingly. The client team used the process to quickly guide the negotiations to a successful conclusion.

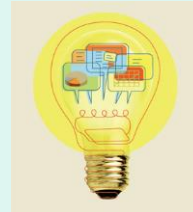
The client was particularly impressed by the process' ability to uncover a hidden enemy - a player they had considered helpful in achieving their goals prior to the analysis. By learning the nature of this player at an early stage in the process, the client was able to develop effective mitigation strategies for diminishing that player's influence over the negotiation process prior to actually undertaking negotiations.

Benefits



*Predictable
Outcomes*

Strategic Action Plan



Deep Insights



Efficient Process



*Confident Board of
Directors*



Aligned Executive Team