

Paper 186-2012

## After Analytics, What's Next?

Koo Ping Shung, Singapore Management University, Singapore

Murphy Choy, Singapore Management University, Singapore

### ABSTRACT

After gathering great insights from our data, the next steps would be devising and executing the strategy based on these insights. Strategy planning and execution can be seen as both an art and a science. Without proper planning and execution, these insights that we gathered would be meaningless. Many frameworks have been devised to help businesses in their strategy planning and execution. But most of them have generally been used at corporate level; for instance Balanced Scorecards.

Here we introduce a framework, adapted from an ancient treatise of war, "Sun Zi Art of War," that can provide a strong framework at the strategy planning and execution stage so that analysts can assess the feasibility of their devised strategy.

### INTRODUCTION

After spending much effort and time to clean up the data, follow by many painstaking days to come up with many great insights that the business managers can use, we have to say that that is probably seventy percent of the job done. The next thirty percent would be critical on the strategy that is planned to take advantage of these insights and also the strategy execution. But before we can proceed to execute the strategy, we would need a framework to assess if the strategy can be executed successfully or not. If during the planning stage, we are able to determine if the strategy can be executed successfully or not, we could save much company resources.

In this paper, we would like to introduce a framework that is adapted from Sun Zi Art of War. Sun Zi Art of War is a well-known Chinese ancient treatise of war. Its popularity can be seen by the fact that it is translated into many languages even though it is an ancient text that is written more than three thousand years ago. The book has also gained much traction in business strategic planning due to the close nature between war and business, providing inspirations for business managers on how to succeed in the competitive business situations.

### FRAMEWORK

*"Which Ruler has a higher Political Intelligence? Which general is more capable? Which side has the advantages created by the weather and terrain? Which side is capable of executing orders effectively and efficiently? Which army is better equipped, stronger and larger in numbers? Which side has better training? Which side is more enlightened in the administration of rewards and punishment?"*

- Sun Zi Art of War,  
Chapter 1

The above quote from Sun Zi Art of War provides the framework to assess if the strategy that has been planned would be successful.

## **POLITICAL INTELLIGENCE**

In Sun Zi Art of War, political intelligence is referred to whether the ruler is able to rally and unite the whole population behind the war. With the strong support from the population, the population would be willing to commit resources and effort to win the war.

In the context of strategy planning, it is to assess whether we have gotten the buy-in of all stakeholders related to the strategy. Without the buy-in from the relevant stakeholders, it is difficult to rally enough resources and support. Thus a strategy is doomed if relevant stakeholders buy-in is not gotten.

## **GENERALS**

Generals are those that lead the troops in the battles. They make decision on the fields based on the changing circumstances. As such, their capabilities have a direct impact on whether the objectives would be reached. Generals who are knowledgeable, resourceful and skillful do have an advantage in ensuring that objectives are met given the progress of the war.

In terms of strategy planning, it is to assess the capabilities of the managers that are carrying out the strategy. The managers would need to have strong domain knowledge and experience in carrying out the plans. The reason for the strong domain knowledge and experience is that given the dynamic business conditions that we worked in, strength in both would allow managers to make quick decision and make changes to the strategies accordingly so as still achieve the objectives.

## **WEATHER AND TERRAIN**

In Sun Zi Art of War, there is a great need to understand the weather and terrain. Reason being these are uncontrollable factors that have large effect to determine if the war can be won or not. The need to understand the different seasons and terrain, and the associated strategies that works well in them is of great importance. For instance, using fire against the enemy can only be deployed during dry season.

When brought over to the context of strategy planning, weather would be actually the economic situation that the market or industry that the company is operating in. Like weather changes that would affect everybody, economic conditions would affect every party that operates in a particular market or industry. As such, during the planning stage of strategy, one needs to check the economic situation, understand the economic trends and determine firstly, if a strategy should be devised, given the data that the insights was derived from. Secondly, can the strategy that is devised, allows the company to reach its objectives given the economic conditions. For instance, given the data that the credit scorecard is built on, is it appropriate to be used in the current economic conditions and should there be remedial actions taken if the scorecard is implemented.

Terrain would refer to the market or industry that the company is operating in. Similar to how the terrains define the movement of the troops, the market conditions for instance, demographics, rules & regulations, competitive landscape would affect how a strategy should be planned and

executed. Demographics can determine which marketing channels should be used, rules and regulations would define what the tools that are available to the company for execution of their strategy are and the competitive landscape would define how the other parties in the industry would react when the strategy is executed.

### **EXECUTING ORDER EFFECTIVELY AND EFFICIENTLY**

In war, if orders are not executed effectively and efficiently, that could amount to large losses in resources and significant reduction in the number of troops, which could tantamount to losing the war. So in war, how should we ensure that orders are executed effectively and efficiently? The answer is communications. With proper communications, orders with clear instructions can reach all the troops quickly so that they can be executed effectively.

How is this applicable in strategy planning and execution? The communications of the objectives of the strategy becomes very important. Instructions would need to be clear and goals set would need to be precise so as to reduce ambiguity. If the strategy is aligned with the mission, vision and values of the company, it would help in the communication of the strategy. Thus during the planning stage of the strategy, clear objectives and instructions should be set and properly communicated to the relevant stakeholders so that the strategy can be executed effectively.

### **BETTER EQUIPPED, BETTER TRAINING**

But with proper communications is not enough. That only guarantees half of the equation. What else is needed for stakeholders to execute orders efficiently? The answer is resources and skills which brings us to the next two points in the framework and that is if the stakeholders of the strategy are firstly, better equipped or given the necessary resources and secondly, these stakeholders have the skill set to accomplish the objectives of the strategy.

If the resources are not given on time or the strategy does not take into consideration the time lag given that it needs time to train personnel, it is very unlikely that the strategy would be executed efficiently. As such, an assessment of the available resources, time of availability, skill set of the stakeholders and the time lag, if any training are to be given, needs to be taken into consideration if a strategy is to be executed efficiently.

### **ADMINISTRATION OF REWARDS AND PUNISHMENT**

In war, it is very important that rewards and punishment are aligned with the objectives. The structure of rewards and punishment usually has an overarching effect as compared to the clear communication of objectives. Troops will fight where there are rewards and avoid where there is punishment.

Human behavior has not changed much with regards to rewards and punishment. As such, during the planning and execution of the strategy, managers have to check if the rewards and punishment (if any) is aligned with the objectives of the strategy. The mere aligned structure of rewards and punishment does not ensure that the objectives will be achieved but it is the first step to making sure that the strategy can be well executed.

## CONCLUSION

Many a times, companies have great analysts working for them to generate lots of insights from their massive amount of data, but neglected the need to have a strong planning and execution of the strategy so as to take advantage of the insights that are derived from the data. As such, a framework is needed for analytic companies to ensure that the strategy is not doomed to fail before and during execution. Only with a well-executed strategy would the data value chain gives companies the largest benefits.

Following are a list of areas, as discussed above, that managers should look at in ensuring a well-executed strategy.

- 1) Having the buy-ins of stakeholders (Political Intelligence)
- 2) Capabilities of Managers (Generals)
- 3) Economic Situation (Weather)
- 4) Competitive Landscape and Market Conditions i.e. Demographics, Rules & Regulations (Terrain)
- 5) Communications of Clear Objectives and Instructions (Executing Effectively)
- 6) Available Resources and Skill sets (Executing Efficiently)
- 7) Alignment of Rewards and Punishment (Administration of Rewards and Punishment)

With this framework, it can help business managers to pay attention to the important areas during the strategy planning and execution stage so as to ensure they get the best benefits out of the valuable insights they derived.

## REFERENCES

- Sun Tzu Art of War, [http://www.chinese-wiki.com/Sun\\_Tzu\\_Art\\_of\\_War](http://www.chinese-wiki.com/Sun_Tzu_Art_of_War), Accessed on 25 August 2011.

## CONTACT INFORMATION

Your comments and questions are valued and encouraged. Contact the author at:

Koo Ping Shung  
Singapore Management University  
School of Information System  
80 Stamford Road  
Singapore 179802  
pskoo@smu.edu.sg/ efmkoo@yahoo.com.sg

Murphy Choy  
Singapore Management University  
School of Information System  
80 Stamford Road  
Singapore 179802  
murphychoy@smu.edu.sg/ goladin@gmail.com

SAS and all other SAS Institute Inc. product or service names are registered trademarks or trademarks of SAS Institute Inc. in the USA and other countries. ® indicates USA registration.

Other brand and product names are trademarks of their respective companies.