OODA Loop

Idea In Short

The OODA loop is just as applicable to business as it is to air combat. In these two environments, you may never have perfect and complete data. OODA is a loop, meaning you can change your course of action as more data becomes available. The OODA loop process was developed by military strategist John Boyd and stands for Observe, Orient, Decide, and Act.

The OODA loop, also known as Boyd's Cycle, is a decision-making tool, originally developed to help fighter pilots win during air combat even though they may possess incomplete data. The philosophy behind OODA loop is that reacting quickly to changing circumstances than your competition puts you at a competitive advantage. Thus, you win. OODA's original goal was to help you make decisions so quickly that you interrupt your enemies' decision cycle. In a nutshell, it's a technique for winning head-to-head contests.

Origins

John Boyd was a military strategist and United States Air Force fighter pilot and Colonel who designed the OODA loop during the Korean War as a way for fighter pilots to win during air-to-air combat. The underlying principle behind the loop was that the pilot who can cycle through the loop the fastest will win because their opposition will still be responding to a situation that has already changed.

The OODA Loop

The aim of using the OODA loop is to filter the available information, putting it in quickly into context and making the most appropriate decision based on what you know about a situation. If you can progress through the OODA loop faster than your competitor, then by the time your competitor has reacted to this data change, you've already moved on and cycled through the OODA loop more times. Thus, they are responding to out-of-date information, which makes their next step a misstep. As your competition begins to realize they are being outmaneuvered at every turn, they will become confused and panic. At this point, it becomes clear to your opponent that they will lose, which in turn breaks their willingness to fight. While you're progressing through the loop, the situation may have changed. Or, you may have access to new (updated) information. For this reason, you need to be prepared to cancel your planned action at any time to interpret the latest information.

Key steps

The key steps of the OODA Loop are:

1. Observe
2. Orient
3. Decide

4. Act

Observe

The observation phase is about gathering information or data. In this step, you're trying to understand what's changing in both in the internal and external environment. In practice, this means understanding your own data, your competitor's strategy and moves, and broader trends within your industry and society as a whole. The critical point to understand is that today's data may be obsolete tomorrow; therefore, you must collect your information as quickly as possible and be prepared to make your decisions based on it. You can gather endless amounts of data, but speed is of the essence, so you are left with using what is available even if it's incomplete. That's okay because you can re-calibrate through the loop should new information come to light.

Orient

The orient step is the most important in the loop. The orient phase is about analyzing and making sense of the data you have collected. At the end of this stage, you should understand what options are available to you. The goal of this phase is to spot errors or gaps in your previous thinking or others' thinking. If you can find these gaps before your competition, then you can use them to your advantage. The sooner you can spot a gap, the sooner you can reorient to take advantage of it. Boyd identified genetic inheritance, cultural traditions, past experiences, analysis, and new information as factors that feed into the orient phase.

Decide

The previous two steps should have generated you lots of ideas for how to proceed. In this step, you choose which option you're going to pursue. The choice you select will be the one that best helps you reach your objective. Another way to look at this phase is that you are forming a hypothesis as to which course of action is best for you. Now it's time to test that hypothesis as quickly as we can.

Act

The final stage of the OODA loop is to act. All previous steps have been leading up to this stage. Only by taking rational action quickly can you beat your competition. Note that it is up to you whether you choose to fully implement an idea or test it as a hypothesis. By considering the action as a test, you can generate quick learnings. This gives you some feedback, and the OODA loop starts over, taking this new data as additional input.

Strategy vs. The OODA Loop

The OODA loop is useful from a military perspective to make rapid decisions during one-on-one battles. In business, it is often said that it's best not to get into a fight in the first place and that you can avoid fighting by using a good strategy. In fact, the OODA loop can be used as part of your strategic toolkit to help you continually scan your environment and make better and faster decisions than your competition. If you make the wrong decision, it isn't a disaster, you can correct it straight away.

Advantages

- The OODA loop allows you to quickly understand dynamic situations and gain an advantage in competitive situations. The process was effectively developed and tested in one of the most dynamic situations, war
- It provides a useful framework for identifying and comparing the critical phases of both your own and your competitor's decision cycles
- Even with fewer resources or information, you can outsmart your opponent if you apply the orienting step
- The OODA loop allows you to take action quickly, even if your dataset is incomplete
- It allows you to respond immediately as soon as new information comes to light

Disadvantages

- Because the OODA loop is focused on moving faster in dynamic situations, it is subject to the general problem of all models – insufficient information can lead to poor results
- You can use the model to disrupt your competitors, but they can also use it against you
- Applying too much faith in the model may lead a team to form a false sense of credibility in its approach
- It raises the risk that you make a big decision too soon
- The model was designed for use as an individual where it is possible to understand some of our biases. Used in an organization, things become more complex

Summary

John Boyd's OODA loop allows you to adapt quickly in highly dynamic environments to beat your competition. It evolved from the work Boyd did as a military strategist during the Korean War. The OODA loop is a continuous and cyclical process. The Observe, Orient, Decide, and Act stages define the core activities of the cycle. The underlying principle behind the loop was that the pilot who can cycle through the loop the fastest will win because their opposition will still be responding to a situation that has already changed.