PARIS' ARROW: AN ATTACK STRATEGY TARGETING THE ACHILLES' HEEL OF A COMPETITOR

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ABSTRACT

Significant developments in military strategy over the past century are almost unheard of in business strategy which continues to be largely based on the outdated theory of Prussian General Carl von Clausewitz. In terms of business, this theory translates to focusing on direct attack on the competitor's front, namely its products and markets, based on quantitative superiority. This article proposes a new offense strategy that avoids the costly head to head attritional battles on product-market. The proposed strategy, called Paris' Arrow, focuses on identifying and attacking the Achilles' Heel of the competitor with a sharp Arrowhead. It integrates new insights from the military domain, specifically from an approach called Operational Theory, with insights from the business domain, specifically from the Theory of Constraints (TOC). Given the sophistication of this indirect approach, Paris' Arrow strategy enables small companies to compete with large corporations. Central principles and guidelines for applying Paris' Arrow strategy are presented, specifying a methodology and attack options, as well as multiple examples from the business domain.

KEYWORDS

Strategy, Offense, Defense, Theory of Constraint, Operational Theory

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The Greek myth describes how when the renowned warrior Achilles was born' his mother, the nymph Thetis, wanted to make him immortal and dipped him in the Styx river. However, his heel, where she held him, remained dry and thus vulnerable. Naturally, as expected of Greek tragedy, his one weakness foreshadows his eventual demise when during the Trojan War, be it by chance or by fate, Paris' Arrow punctures Achilles' Heel. The story of Achilles' Heel highlights the fact that even the most robust of opponents may be toppled if one targets his weak point precisely. This is evident in warfare as well as in the domain of business. In order for a company to obtain its goal it is necessary, in certain competitive situations, to take the initiate and adopt an offensive strategy that targets the competitors' Achilles' Heel.

Despite the fact that such an attack strategy has never been conceptualized, this strategy has been executed by outstanding executives who used their personal insight, business prowess and intuition to pinpoint and attack their competitor's critical weak point. For instance, in the late 1990s, Charles Schwab and eTrade correctly identified Merril Lynch's cumbersome information system as an Achilles' Heel. To take advantage of this situation, they built a very efficient information system that gave them a competitive advantage of quick response time. This move enabled them to push the brokering giant to a defensive position and penetrate the online trade market, thus creating a wide customer base [1].

The existence of an Achilles Heel has been found in the natural sciences as well. For instance, in the world of Physics it has been observed that every object possesses a certain latent frequency resonance, which' if activated, causes vibration and may actually result in the collapse of the object. Even a massive bridge that has a low frequency resonance is vulnerable to winds of only 40 MPH that blow at this same frequency and may bring the bridge down. This is exactly what happened to the Tacoma Narrows bridge which collapsed in 1940 only four months after it was completed. The fate of the London Millennium Bridge, which was opened in 2000 and swayed as people walked on it, was much better: it was closed down for repairs and reopened after 20 months.

The goal of this article is to present a generic and practical methodology for attacking a business competitor where it really counts and to illustrate its application. Using this methodology, small and medium sized companies may deal intelligently with large companies and conglomerates; rather than fall prey to the giants who can leverage their size and financial backing. While a small company cannot attack its competitors using price dumping, mergers and acquisitions, it can take advantage of weaknesses that characterize large companies – such as encumbrance, slow response time, arrogance and over-confidence – and attack them, using only legal and ethical means. This article goes beyond a strict business perspective and offers a socio-economic perspective that seeks to strengthen small and medium sized businesses that are the very base of a strong and sustainable local economy. Examples of executives who followed such a strategy successfully are provided throughout the article.

1. THEORETICAL BACKGROUND

1.1 The Need for a New Attack Strategy

The desire to build on extant knowledge bases in order to develop an offense strategy naturally leads into an inquiry into the military domain, since the "military experience is a veritable goldmine of competitive strategies all well tested under combat positions" [2]. Indeed, the business literature on Competitive Strategy and Marketing is partly based on military theory, though there are of course differences that will be detailed later. Notably, the implications of military theory on business are not strictly theoretical but are evident in the day to day business reality.

Offensive business strategies are for the most part not based on proven modern military theories, but rather on the outdated theory of Prussian General Carl von Clausewitz. In his book *On War* (1832) Clausewitz observed that an asymmetrical relationship existed between attack and defense and concluded that an offense strategy is advantageous. His emphasis on the attack of the opponent's frontline has been blamed for the attrition warfare that characterized frontline battles during the First World Wars, where millions of lives were lost without any gain.

Influenced by Clausewitz, the Competitive Strategy literature is primarily focused on attacking the competitor's front, specifically its markets and products. In business, the application of the military terms maneuvering and fire (moving forces wisely and exploiting their firepower) is restricted to offensive moves against the competitor's products and market shares. Notably, this direct attack strategy requires a massive investment of resources to create a significant quantitative advantage and is associated with a great risk.

Unfortunately, the strategic literature ignores the organizational weak points of competitors (beyond product-market aspects) and neglects the organizational layers behind the competitors' front. This is evident in Porter's four generic strategies that focus on the market (broad or narrow) and on the product (standardized/low cost or differentiated/higher cost). In contrast, in ancient times, when confronting Goliath, King David preferred not to use heavy arms for attacking his enemies' armored front, which is the business equivalent of attacking the competitors' product-market. Instead, he chose to surprise Goliath with his sling and struck his bare forehead, using the strategy of attacking his enemies' Achilles Heel.

Following the lessons of the First World War, military theory was developed in an attempt to reduce the resistance of the enemy and to minimize casualties. This development expressed itself in increasing the mobility of the attacker (Fuller) and in an 'indirect approach' that avoids attacking the enemy's front (Liddle Hart). The crown jewel of this development is known as Operational Theory.

However, the business literature has not yet exhausted the lessons that may be gleaned from military research, and has not adopted the ideas of Operational Theory. Therefore, executives need a new competitive strategy which will broaden their point of view, compliment previous approaches and enable the company to meet its goals. The new offense strategy, Paris' Arrow (PA), is based on Operational Theory. It focuses on leading an offensive campaign against the competitor's Achilles' Heel deep in his organizational system.

1.2 Using Advanced Theories to Develop a New Offense Business Strategy

Paris' Arrow integrates insights from two relatively new theories: Operational Theory from the military domain, and the Theory of Constraints, from the organizational domain.

a. **Operational Theory** focuses on attacking the enemy's weak point (See Exhibit 1). Its application in the business domain requires that the CEO analyze the company's external environment and identify the Achilles' Heel of the dominant competitor. The assumption behind Operational Theory is that a strike at a competitor's Achilles' Heel (unlike other weak points) will create a shock, throw the entire company off balance, and disrupt its operational ability to meet its strategic goals. In contrast to SWOT (Strengths – Weaknesses – Opportunities –

Threats) analysis , analyzing the opportunities and threats in the external environment and the strengths and weaknesses of one's business competitor does not suffice. The competitor is seen as a dynamic system, his Achilles' Heel should be identified, based on its interactions with other parts of the system, and his ability to react to the planned strike must be assessed. A focused application of Operational Theory, as an 'indirect approach' for attacking a competing organization's Achilles' Heel, is a breakthrough given its avoidance of costly clashes and friction that characterize direct attacks on a competitor's product-market.

Exhibit 1: Operational Theory

Operational Theory has been the most significant development in military thinking in the twentieth century. The new approach introduced a new intermediate level of planning and implementation, called operational, which characterizes a front (among the entire war's fronts) that may be engaged in several battles and lies between the strategic level of war and the tactical level of the battle. Developed in the USSR by Marshal Tukhachevsky and his colleagues in the 1920s, Operational Theory involves planning and carrying out an operational strike that drives the enemy off-balance through maneuvering [3].

By thinking of one's enemy as a system, the campaign is deep and not confined to the frontline. The strike is targeted at the weak point in the depth of the system and is intended to harm it and to separate the enemy's central components in order to break their synergy. The strike is also designated to neutralize the enemy's ability to get reinforcement from its operational reserve, thereby thwarting a counter attack on one's own forces. It is based on coordinated cooperation between corps as well as on integration of mobility, firepower and shield. The strike is inflicted simultaneously along the entire depth of the enemy's positions, while rapidly concentrating forces at the appropriate space and time and keeping the momentum of the maneuver going until the enemy collapses.

To shock the enemy, the strike is composed of three echelons: The first is frontal and compels the enemy to concentrate forces in the frontline, thereby weakening its ability to resist in its rear; the second carries out the breakthrough and maneuvers within the enemy lines; the third executes special operations in the enemy rear [3]. Thus, Operational Theory combines attack and defense: Maneuvering is not restricted to the offensive forces but includes the front forces which are supposed to carry out a dynamic defense, harm the enemy and prevent him from attacking and gaining success.

The concept of operational theory was adopted by the American Armed Forces (Training and Doctrine Command – TRADOC) and expanded upon to create an operational war-fighting doctrine named Airland Battle. This doctrine was at the core of "the revolution in military affairs" undertaken after the failure of the Vietnam War. It was successfully applied in the Gulf War, and its implications on the structure of the high command are anchored in legislation (Goldwater-Nichols Act).

[End of Exhibit 1]

b. The Theory of Constraints (TOC) may be used in the organizational analysis of a competitor in order to identify its' Achilles' Heel (See Exhibit 2). TOC explains how system constraints block a company from meeting its goals. TOC provides a methodology and tools for identifying and managing the system constraint, which is the organization's bottle neck, and for relieving it, thus improving organizational performance and enhancing company value. TOC was initially developed to improve the operations in manufacturing. It was later expanded to the fields of logistics, sales, project management and pricing, and eventually it has been the basis for developing the approach of firm value creation [4].

   TOC focuses on building the internal strengths to obtain organizational effectiveness and does not address the strategic dimension of competitors. Building strengths makes the pie bigger and attracts more clients, not necessarily at the expense of competitors, because of the competitive advantage it gives the company. The strategy of Paris' Arrow takes this a step further and applies TOC in order to consolidate an offensive attack theory, while using the constraint identification and management methodology for attacking the competitors Achilles' Heel.

Exhibit 2: TOC

The Theory of Constraints was first introduced by Eliyahu M. Goldratt in his book "The Goal" [5]. It is based on mathematical programming and its premise is that organizational goal achievement is limited by a constraint, not hundreds or dozens of problems. It argues that identifying that one constraint and resolving it enables a company to improve its performance. Notably, the constraint in a company is not necessarily the weakest link in the company since unlike a necklace, where the structure is simple, one bead follows the next, and the organizational structure is complex, consisting of a network of interdependent and interactive elements. Therefore, the relation between the input at a certain point in the system and the system's output is non-linear and it is difficult to predict the organizational result of an initiated change exerted at a certain organizational point. Nevertheless, TOC enables to control the system's output by identifying and managing the organization's constraint thanks to the approximately linear relation between the constraint input and the organization's output. In other words, elevating the constraint will result in gaining more output using the same input resources. To identify this constraint and to manage it, TOC offers a five step methodology [5]. Its focus on the constraint makes the complex nonlinear organizations much less complex to manage than it may appear.

Interestingly, the allegory of the chain and its links is at the core of TQM and also explains the theory's shortcoming, which is having erroneously assumed that all links require improvement. TQM strives for total quality, ignores the non-linear nature of systems, the existence of constraints, and the network-like links between elements inside and outside the organization. For this reason, TQM may actually result in local optimization that undermines company-wide performance, for instance as in the case when surplus production (due to local optimization of manufacturing) gets stuck in inventory.

[End of Exhibit 2]

2. THE CONCEPTS OF PARIS' ARROW STRATEGY

2.1 Integrating Defense and Offense

In order for a strategy to be effective one cannot shoot in all directions. Instead, organizational efforts must be focused. TOC enables the focusing of organizational resources on both defense and offense, whereas Operational Theory explains how to divert resources to an offensive strike and to exploit them. The two establishing concepts of the Paris' Arrow strategy, Achilles' Heel and Arrowhead, inspired respectively by TOC and Operational theory, facilitate doing just that. Achilles Heel is that one weak point that if hurt will result in serious damage to the entire competitor's organization and will require a lengthy and difficult recovery period. Arrowhead (in military terminology) is the prime element in front of an offensive thrust. In business, Arrowhead is the competitive capability that enables a firm to attack its rival's weak points. The idea is to concentrate as much `firepower` as possible at the opponent's Achilles' Heel in order to overwhelm him.

Before continuing, a few words about how a defense strategy and an offense strategy are manifested in the business domain. A business strategy is considered defensive when it seeks to preserve a given situation, such as market share and existing client base. It is considered offense when it seeks to change the status quo by attracting the competitors' clients through creating new products, diversifying and more. As in the military domain, defense and offense are complimentary and executives must always take into consideration that competitors too are familiar with offense as well as defense strategies. For this reason it is most appropriate to use the same term, Achilles' Heel, when describing the target in an offense strategy and when describing the focus of a defense strategy, aimed to protect one's own weak point.

2.2 Defense: Protecting One's Achilles' Heel from Competitors

A company's Achilles' Heel is not necessarily its weakest point and may differ from the organizational constraint. For instance, in a modern military air force the organizational constraint in an offense strategy might be precise intelligence concerning the locations of targets. Without it, even the best air force will not be effective on its operation. On the other hand, the Achilles' Heel of the same air force may be the vulnerability of the air planes on the ground, or the vulnerability of the air plane manufacturing plant, or potential of a petrol shortage. Therefore, the Achilles' Heel is the one fundamental weak point, which endangers the resilience of the company and when hurt causes a sever and long lasting damage to the company's productivity and value. A long term business effect may for example be the demise of a company's reputation, or the inability to enter a critical growing market. For this reason it is very important for a company to be prepared to protect its Achilles' Heel from attack by competitors.

Lawyers are well practiced at identifying the Achilles' Heel in conflicting sides of the same event. They build their case by preparing in advance a line of defense which focuses on protecting their clients Achilles' Heel, and a line of offense which focuses on the oppositions Achilles' Heel. If properly defended or attacked, the Achilles' Heel might actually make or break a case. This example refers to the Achilles' Heel in the narrative's sphere (that led to the lawsuit) not in the organizational sphere.

Another example from the business domain of an Achilles' Heel that is not adequately protected is a large university which, being complacent, bases its reputation on the prestige of a single highly reputed scientist who is also used as a magnet to attract other outstanding researchers. Since such an asset is very visible, as well as mobile, it is easy to identify this university's Achilles' heel and any small university that seeks to improve its standing may approach the aforementioned scientist and, at the right price, entice him/her to transfer to their institution to build a prestigious department.

2.3 Offense: Sharpening the Arrowhead to Attack the Competitor's Achilles' Heel

Competition has an offensive nature. Therefore, a company should seek to leverage its strongest competitive advantage and use it as the Arrowhead in an offense attack. This bring to mind how in ancient times, the outcome of battles was sometimes determined by a contest between the single strongest warrior of each side. Likewise, in World War II the battle over the United Kingdom was determined by the pilots of the Royal Air Force (who were equipped by valuable intelligence data). As Churchill said: Never in the field of human conflict was so much owed by so many to so few. Coca Cola Company's Arrowhead is its marketing ability and for 3M it is its innovation.

In offense' unlike the defense case, the field of battle may be chosen. The maximal effect might be gained by directing the Arrowhead to hit the competitor's Achilles' Heel. In World War II, the Germans identified that the French fortified Maginot Line could be circumvented by a flanking movement through the dense Ardennes forest in the North Eastern region of France. Using this Achilles' Heel they attacked France and within a month conquered Paris. Likewise, the Allied forces identified a German Achille's Heel when they discovered that half of the manufacturing of ball bearings, required for the manufacturing of German tanks, was manufactured in only several plants in Schweinfurt town, Bavaria. By Arrowheading these plants in the autumn of 1943, using its vast bombers fleet, the Allied Air Force significantly stalled the manufacturing of German tanks. In the business domain, if one's company possesses advanced technology that is not in the hands of its competitors, one can influence the consumer's criterion of what kind of technological base and qualifications a service or product supplier must have, so that the competitor will be driven out of the game.

However, possessing the greatest competitive advantage is not always relevant to an attack on a competitor's Achilles' Heel. In order to attack a competitors' Achilles Heel one needs the strengths appropriate to the task. If one does not possess these strengths, these need to be built up and sharpened, so that an attack would be made possible at a later date. In addition, the strengths of one's Arrowhead may also leverage company value as well as protect the company from a possible attack. The first task in sharpening one's Arrowhead involves building the capability to gather information about the Achilles' heel of one's relevant competitors.

For small and medium sized companies the time range for a strategic attack is anywhere between a few months and a year. In the short term, it is possible to attack the logistical capabilities of a competitor. In the medium term, it is possible to build a development capability that exceeds the competitor's capabilities.

Apart from the classic plan of attacking product-market (the organization's output) the competitor may be attacked in several business planes that are detailed in Exhibit 3. The planes are defined, taking into account the competitor's resources and its interfaces with its environment.

Exhibit 3: Three planes of Attacking Competitor's Achilles' Heel

Attacking competitor's business connections:

- Targeting intellectual property.
- Targeting credit channels.
- Targeting distribution channels.
- Targeting supply channels.
- Targeting competitor's work relations with other companies.
- Targeting competitor's relations with principal clients.
- Targeting the interests of the competitor's stock holders.
- Targeting the interests of the competitor's business partners.

Attacking competitor's status and image:

- Challenging competitor legally.
- Challenging competitor in the media.

- Restricting the competitor through the intervention of a government regulator or lawmaker.

Attacking competitor's resources:

- Disrupting competitor's internal processes.
- Pressing competitor's executives (increasing their work load).
- Undermining competitor's human capital (recruiting key personnel from the competitor).
- Undermining competitor's intelligence.
- Challenging competitor's Board of Directors (creating situations of conflict of interest).
- Co-opting embittered competitor's executives and workers.

[End of Exhibit 3]

3. STRATEGIC PLANNING OF PARIS' ARROW

There are several lines of inquiry that must be thoroughly assessed before deciding whether to carry out an offense in line with Paris' Arrow strategy. Specifically, one must consider the following interrelated questions: Is Paris' Arrow the appropriate strategy given the circumstances and would it yield the desired results? What competitor should be targeted and at what risk? What is his Achilles' Heel?

3.1 Should an Attack be Carried Out?

In an offense strategy the goal of enhancing one's company's value is **not** obtained through the interface with the clients (*Alternative A*: Building a power-base) but rather, indirectly, by hurting the dominant competitor (*Alternative B*: Offense). However, since the offense strategy involves diverting resources from the power-base strategy, this is a tough decision. In growing markets, increasing one's market share is not a *zero sum game*, thus one company's growth does not have to come at the expense of the other and there is no need to attack. In contrast, in static markets there is a greater drive to attack one's competitor, though here too, other alternatives should be weighed since hurting a competitor doesn't necessarily add significant value to one's firm.

As a rule of thumb, it is not wise to attack every competitor on every front; instead, resources and efforts must be preserved for the significant battles. For example, when the benefit of an offense is greater than the cost of an attack, or when the damage which the company incurs if it does not attack is much greater than the risk associated with the attack. Interestingly, companies that battle each other are both at risk since it is easy for a third company to take advantage of their lack of attention. Furthermore, in offense strategy one must always prepare in advance for the competitor's counter attack, which can result in unexpected losses even failure. Furthermore, an offense has implications for the long term relations of the two companies, since the companies may hold resentments and avoid even profitable joint ventures. Generally speaking, it must be concluded that an offense strategy should not be the first choice for a company and certainly not its routine approach.

There are a number of possible alternatives to an offense strategy. Sometimes it is possible to have another competitor to attack the competitor, so one may benefit without taking the risk ('divide and conquer' style). Or one may try to persuade a competitor to invest in a direction that is unlikely to prove profitable. Alternately, one can induce a competitor to attack and prepare a trap from which he cannot get out of. Notably, this last device must be taken into consideration when planning an attack: A sophisticated competitor is just as likely to plan a trap. Thereby, one must take measures to surprise the competitor and not be surprised by his devices.

Generally speaking, a company should seek a balance between the power-base strategy and the offensive strategy. The decision to attack is only recommended when it is the only way to accomplish one's goals and when its chances of success are very high. Naturally, the decision whether to adopt an offense strategy is largely determined by identifying a suitable target, which in turn is decided upon by forecasting the target's response and the risk involved.

3.2 Is the Main Competitor a Suitable Target?

An offensive strategy such as Paris' Arrow naturally focuses on the external environment (the main competitor) which is much more complex and much harder to control than the internal one. While leading an organizational change is an internal effort and the CEO must usually cope with internal resistance to change, Paris' Arrow involves many players whose response and capabilities are not always predictable. Beyond breaking through the competitor’s defense line, overcoming his willingness and capability to respond effectively is at the heart of an offense strategy.

In order to forecast the competitors' response to an attack one must assess their motivation and their capabilities relative to one's own company. Capabilities may be assessed in terms of relative market share, financial robustness, technological ability, control of distribution and supply channels, available resources, legal standing, and the critical players in terms of their skill, power and social network. One should also consider what were the reactions of each competitor in similar past situations and whether a future cooperation with him might be needed [6]. For instance, if one has a competitor who has a large market share, strong financial backing, and powerful connections, it would be unadvisable to adopt an offense strategy that aims at his central interest. A more cautious approach would be to attack a legitimate and important (beneficial for us) but non-vital interest of the same competitor, so that the counter attack would be less probable and more manageable.

In addition to determining one's position in relation to the targeted competitor, one must consider the entire market and assess how an attack would influence the standing of all the competitors in the market. For instance, if one's company ranks third in size in a market with a dominant leader who has no apparent Achilles' Heel, attacking the second largest company makes no sense since it will almost certainly play into the hands of the dominant company which will reap the benefits. Furthermore, it must be taken into account that in the competitive business domain battles are more prolonged than in the military domain. Moreover, they may engage many competitors, as well as interest holders (consumers, suppliers, distributors, retailers). Thus, it is important to take steps to avoid possible damages to one's customers or business associates.

Essentially, assessing the competitor's response to attack, the impact on third parties and one's own company's vulnerabilities to counter attack involves risk analysis [6]. To avoid costly mistakes one needs precise and updated information. Thus the central issue is whether one possesses enough information in order to accurately analyze the isk embedded in the business environment. Given the complexity of markets it is recommended to analyze different business scenarios using dynamic tools such as case studies, computerized strategy games and war games, before a strategy is decided upon. Sometimes, especially when forceful retaliation is plausible, it is worthwhile to launch an experiment balloon and study the market reactions.

3.3 Where to Attack? Identifying the Achilles' Heel

In identifying the Achilles' Heel one must first distinguish between constraints that characterize an entire industry and constraints that are specific to a certain competitor.

While a specific constraint characterizes a firm and may point to its Achilles' Heel, an industry constraint characterizes the whole industry and in most cases, is not an Achilles' Heel. Microsoft's long development time, for example, is a specific constraint that derives from their need to make new software compatible with previous software. Two examples for industry-wide constraints are production capability in the semiconductor industry (due to the high cost of building a fabrication plant) and points of sales in the computer games industry (physical or on-line shelf space) due to the multitude of new products.

The nature of the industry has an impact on considerations whether to attack a competitor. In industries characterized by both competition and cooperation (such as hi-tech, electronics, communication) the probability of future cooperation is high and must be taken into consideration. In highly competitive industries (such as steel, automotive, paper, chemicals or oligopoly industries) such considerations are much less relevant. When one aims to change the “rules of the game” in the industry, for example by introducing new technology that makes the old technology obsolete, the orientation is competitive in general and does not target any specific company, hence it is not an offensive strategy.

The success of an offense strategy depends on a focused attack on the competitor's Achilles' Heel, not on a mundane constraint that could be remedied with ease once the competitor recognizes the problem. Therefore, it is useless to attack a dummy constraint (such as a cheap resource) or a policy constraint (such as forbidding overtime work even at the organization's bottleneck). If the competitor's Achilles' Heel is in its market (when market demand is less than the output capacity), one should try to diminish the demand for the competitor's product, or try to encourage him to enlarge his excess capacity. In many cases, the Achilles' Heel is a resource constraint, that is a shortage of resource that is so over loaded that it cannot perform all of its assigned tasks. There are many resources that fall under this definition. To name a few: executive time, project leaders in high-tech, sales and marketing personnel, police investigators, information processing in intelligence organizations, or shelve space in supermarkets are all resource constraints [4].

Several methods may be used to identify the Achilles' Heel, both in one's company and in a competitor. Some of them require a more rigorous knowledge base and are, therefore, more applicable for one's own company. A basic method to check whether the presumed Achilles' Heel within an organization is indeed an Achilles' Heel consists of a test called 'less or more'. This test involves assessing whether *reducing* inputs invested into a presumed Achilles' Heel result in *reduced* profits; and reversely, assessing whether *adding* inputs to the presumed Achilles' Heel result in *increased* profits. In order to identify an Achilles' Heel in the organizational interfaces with its environment, one may use an Arena Model [4]. This Model describes the value chain of the company, the relative placement of the competitors, the distribution channels, the customers and the regulating bodies in the industry. Other Techniques for identifying an organization's Achilles' Heel are specified in Exhibit 4 [4].

<u>Exhibit 4: Techniques for Indentifying an Organization's Achilles' Heel</u>

An Achilles' Heel can be identified in a number of ways. Below are listed five techniques [4]:

1. Process analysis: Use two dimensional process flow diagram (indicating time span & organizational unit) to analyze each of the core processes of the organization. The Achilles' Heel may be identified in the activity where the duration delays a core process.
2. Functional analysis: Review the main functions in the organization bottom-up and look for undesirable symptoms or problems. To identify the Achilles' Heel, use the graphic tool called current reality tree [5], which indicates the relations between the symptoms. The Achilles' Heel is the core problem that lead to the symptoms and eventually to the system disruption.
3. Performance analysis: Use global measures that express the performance of the organization as a whole: throughput, operating expenses, inventory, lead time, quality, due-date performance.
4. Fiscal analysis: Examine balanced sheet and profit and loss statements.
5. Load analysis: find the most heavily utilized resource in the organization, using a table which describes the labor hours that each resource is required to invest in each mission.
6. SWOT analysis: Review the main weaknesses and threats.

   [End of Exhibit 4]

A more sophisticated approach involves maneuvering the competitor in order **to create** an Achilles' Heel that is vulnerable to an attack. This approach involves action prior to the attack to induce a more desirable situation, according to the following three strategic questions that must be examined:

a) Where is the competitor's Achilles' Heel?

b) Where would we like the competitor's Achilles' Heel to be?

c) How is it possible to move the competitor's Achilles' Heel to where we would like it to be?

In military history there are many examples where strategists leverage existing weak points and create an Achilles' Heel that is more convenient for attack. For instance, in Desert Storm (1991) US led Coalition forces manipulated the Iraqi intelligence to create the situation they desired, namely, an Achilles' Heel in the highway connecting Kuwait to Bagdad. To do so, they mislead Iraqi intelligence to believe that they were planning an attack on Kuwait, among other things by launching a diversion attack on Kuwait City. The Iraqi command moved huge forces to Kuwait, enabling the coalition forces to block the outlet from Kuwait to Bagdad by aerial attacks and terrestrial outflanking, thereby trapping the Iraqi army in a kind of suffocating grip. The allied forces also took advantage of an existing Achilles' Heel – the highly centralized decision making of the Iraqi Military forces. Thus, once the Iraqi communication, command and control system was attacked, the Iraqi resistance was undermined since orders from the center were not forthcoming. Likewise, in the business domain, it is possible to use deception to set the stage for an attack in order to create an Achilles' Heel in the competitor, or to move it to a more vulnerable location, or to expose it, as we demonstrate later.

A competitor's root problem is not necessarily an Achilles' Heel to be targeted; instead it is often advantageous to attack a practical derivative of the root problem. For instance, if a leading public hospital's root problem is the lack of service consciousness, a competing hospital might seek to focus on the practical outcome of this problem in customer perspective. The Achilles' Heel is client dissatisfaction due to long waiting lines, delayed medical treatment, prolonged and unjustified hospitalization and lack of personal treatment. Thus a straightforward way to attack the competitor is to bring these shortfalls to the customers' attention.

According to Operational Theory, potential targets are very diverse. Exhibit 5 details different kinds of Achilles' Heels across three company domains; the competitor's executive level, its rear line units and its front line units. The various potential competitor's Achilles' Heels provide opportunities for many different offense options.

Exhibit 5: Alternative Options for Attacking the Competitor's Achilles' Heels – at its Executive, Front and Rear Echelons

Company Domain	Focus of Attack	Opportunities for attacking the competitor's Achilles Heel
Executive	**Management**	Exploit personal weaknesses of the top management
		Exploit deficient communication between owners, board of directors, management and workers (using “internal agents”)
		Exploit deficient relations with regulators, media, politicians (using “external agents”)
	CEO	Creating high stress situations to overload the CEO
		Influencing CEO to make decisions based on short term benefits that are hazardous in the long run
		Influencing an egotistical CEO to make decisions in his own interest at the expense of the company
		Creating a challenge a conservative CEO cannot meet
Back office units	**Dividing into units**	Using the poor inter-organizational cooperation by a Challenge that requires tight coordination (e.g. by launching a complex product)
		Undermining managements' authority by approaching units directly (e.g. for a purchase)
		Attacking when the competitor is unstable due to a strategic change
	The back office and resource dependence	Taking advantage of the competitor's dependency on the environment (e.g. relevant resources and public support)
		Changing extant rules when the adoption of new rules undermines the competitor's powerbase
		Exploit a shortage in critical resources, which make the competitor vulnerable to attack and unable to respond to the threat
		Exploit a shortage in critical inventory
		Exploit a competitor's deficient relations with his suppliers

		and service providers
		Create a shortage in competitor's raw material (e.g. sign an exclusive agreement with a central supplier)
	Critical element	Exploit a lack of surplus in a critical element
		Hurt a core capability
		Neutralize a key player or recruit him/her
		Create an overload on competitor's bottleneck
		Hurt a major product, project or acquisition of the competitor
	Flawed organizational processes, structures and culture	Exploit a deficient organizational ownership structure (e.g. too many owners or too many directors with conflict of interests)
		Exploit a lack of structured processes
		Exploit an organizational structure that is unsuitable for the business environment
		Exploit an organizational culture that is resistant to change
		Hurt the moral and motivation of the competitor's workers
Front units	**Flawed assessment of the Environment**	Exploit competitors lack of business intelligence, creating a strategic surprise
		Exploit the competitor's lack of direct contact with the end customers by responding to a new market demand
	Strategic Mistakes	Exploit distorting goals and measures by focusing on the neglected areas
		Make the competitor lose a central client
		Exploit the competitor's dependence on a sole supplier (even if the supplier only provides one critical component)
		Exploit a competitor's exaggerated focus on a single competitive advantage
		Exploit a competitor's lack of strategic filters (which distinguish between profitable and non-profitable opportunities)

		Exploit a competitor's outsourcing of a strategic capability
		Exploit the competitor's manufacturing of a commodity without earning a relevant competitive advantage
		Exploit the lack of synergy between the competitor's newly acquired and merged units
		Exploit the dependence of the competitor on a certain company by purchasing it
	Cracks in market preparedness	Attack the competitors reputation by exposing the faults in the competitor's products or service
		Attack a competitor's symbol or specialty by marketing an advanced product/service in the competitor's unique market
		Penetrate the periphery of a competitor's market by using a low profile move and unexpected means
		Exploit the disinterest and lack of backing the competitor affords a sister company by attacking it
		Attack a market where the competitor fails to invest properly even though he possess a dominant position
		Infiltrate a product-market upon which the competitor's entire strategy is built upon and where a competitive advantage may be gained

4. GUIDLINES FOR IMPLEMENTING PARIS' ARROW

4.1 How to attack?

An offensive strategy that is based on appropriate planning regarding the *location, operational moves and timing* of the attack may throw the targeted competitor off balance, thereby increasing the impact of the attack and reducing the competitor’s resistance power. While the choice of location (target) has already been discussed, once the decision has been made to adopt Paris' Arrow strategy one must turn to more detailed considerations of operational moves and timing [6].

4.1.1 *Operational Moves*

An offensive strategy includes several operational moves carried out on different planes of the competitor's organization (executive, front, rear) and along different time frames (short, medium and long). The most important consideration here is what operational moves would result in the least resistance from the targeted competitor. It is worth while to choose a difficult way of attacking if it guarantees an ineffective response. Based on insights from Operational Theory, it is suggested here that an offensive business strategy should adopt the following guidelines:

a. Attack Achilles' Heel, as a joint system target that creates cohesion of the attacking units.
b. Use element of surprise, in choice of target, offense manner, or timing, in order to drive the competitor off-balance.
c. Maintain speed and momentum to prevent the competitor from recovering.
d. Integrated offense: Synchronize the actions of the attacking units and target the competitor's front and rear simultaneously in order to create a shock.
e. Divide and disrupt coordination & communication of target units and block support to the Achilles' Heel.
f. Prepare a defense strategy against the competitor's or other parties reactions to the attack.

As stated earlier, Paris' Arrow is also influenced by insights from the Theory of Constraints. Based on the TOC techniques for managing the system constraint, three techniques for an offensive of the Achilles' Heel are suggested:

a. Overloading: Overload the Achilles' Heel with futile tasks.
b. Isolating: Prevent subordination of the competitor's organization to its Achilles' Heel; attack the connections of the Achilles' Heel to other units that may assist it.
c. Neutralizing: Attack the Achilles' Heel and neutralize it, so it cannot recover or gather strength. The isolation gained in the previous step will prevent the Achilles' Heel from getting support from other units and from transferring (off loading) tasks to them.

The planning of an offensive strategy is not generic but rather depends on the specific circumstances. The strategists must seek to understand the culture and logic of the target company so that they may manipulate this knowledge to exploit the attack and forecast how the competitor may react to it. To do so, it is necessary to gather exact intelligence and to take into consideration the following factors about the target's organization: the competitor culture, the ability to deceive and achieve surprise, the psychological impact of an attack, the competitor's response time and the possibility of a trap. Some elements describe the target before an attack, some are relevant during the attack and some are relevant for forecasting the competitor's response. Notably, larger more complex organizations are more vulnerable to surprise because of their slow decision making and cumbersome internal communication.

The flip side of the coin is considering one's own company, and its ability to execute an attack. The factors that should be considered include the ease/difficulty of execution, ability to flexibly respond to resistance, previous relevant experience and fiscal cost of execution.

Given the fact that Achilles' Heel strategy involves several units operating in coordination, it is recommended that the planning stage involve management at different levels and allow for adjustments and improvements in light of ideas generated from lower organizational levels.

4.1.2 *Timing*

Generally speaking, once one has decided to attack, the best timing is when the targeted competitor is in a situation where it is weaker than one's own company. When one identifies a competitor who is vulnerable, it is best to 'hit him when he is down' and not wait in the hope that the target's situation might deteriorate even further, since this might give the competitor time to recover. Of course, if one's own company is not ready (for instance, due to lack of resources) then it is best to 'buy time' in order to prepare for a better attack and hope that the competitor's situations does not improve.

There are certain circumstances which naturally make a company vulnerable, such as mergers, acquisitions and other encompassing organizational changes. Data shows that most of mergers and acquisitions fail and those that do succeed create instability and are very demanding on the executives' time and company's resources, especially during their first stages. Likewise, dramatic events that are stressful and time consuming to the executive (such as worker strikes, legal lawsuits, financial crisis, or threat from a third party) create an opportunity for attacking. Many instances show that even powerful corporations find it very difficult to cope effectively with two threats at a time.

The guidelines derived from TOC and Operational Theory have been translated into a methodology encompassing ten chronological stages, which are specified in Exhibit 6.

Exhibit 6: The Ten **stages of the Paris' Arrow Methodology**

1. Consider whether an attack is relevant and desirable.
2. Decide whom to attack and when.
3. Determine the goal of the attack.
4. Define measures of success for the attack.
5. Identify the competitor's Achilles' Heel.
6. Prepare for attack: Defend your Achilles' Heel and sharpen your Arrowhead.
7. Deceive the Competitor and Overload his Achilles' Heel.
8. Isolate the competitor's Achilles' Heel and Prevent it from getting support.
9. Attack the Achilles' Heel of the Competitor and Neutralize it.
10. Reinforce your defense against counter-attack and identify the next Achilles' Heel.

[End Exhibit 6]

5. PARIS' ARROW METHODOLOGY

As an offensive strategy Paris' Arrow targets the competitors Achilles' Heel and should be headed by the CEO. The methodology is based on the seven stages outlined in TOC [4] (an expansion of the original five steps) to which three more stages (a, b, f) are added. The stages were modified from managing constraints to attacking an Achilles' Heel, and at every stage there are several techniques that may be used. In contrast to TOC where added value is created by more **effective management** of one's own constraints, Paris' Arrow does the reverse and seeks to reduce the competitor's value by **harming** its Achilles' Heel in order to enhance the attacker's firm value. The ten stages of the Paris' Arrow methodology are detailed below.

5.1 Consider whether an attack is relevant and desirable for one’s firm

Is the constraint that blocks value enhancement of one’s firm a market constraint? If so, will an attack on one of the competitors decrease the constraint? If so, is one’s firm strong enough to carry on an attack? (If not, even a successful attack might turn into a Pyrrhic victory).

5.2 Decide whether to Attack, Whom to Attack and When

Analyze each of the competitors that are relevant for attack, compare your relative capabilities and estimate the chances and risks involved in an attack. Decide who is the preferable candidate for attack, weather it is worthwhile to attack him and when is the right timing.

5.3 Determine the Goal of the Attack

In principle, the goal is to earn a **relative** competitive advantage by reducing the competitor's value and enhancing one's own. Since markets are complex, the outcome of an attack is rarely a simple zero-sum game. Thus, it is important to confirm that reducing the competitor's value will indeed add value to our company.

In contrast to the military goal of an attack which is to defeat the rival, the business goal of an attack is much less aggressive and business organizations usually make do with weakening the position of the competitor. The extent of the damage from an attack may vary. An attack may cause one-time losses to the competitor or ongoing losses by attacking exclusive capabilities, such as a principal product or a key technology. A more aggressive attack may be to block strategic alternatives (as is the case if the competitor builds on a new technology, a hostage market, or strives to sign an agreement with a major client), or even make a competitor obsolete in a certain market.

5.4 Define Measures of Success for the Attack

In order to determine the success of the attack the company must predetermine specific measures of company value in relation to the competitor and in its own right. For instance, the goal of the attack was achieved if it led to an improvement in the following measures:

- An increase in one’s own company value measured by Discounted Cash Flow (DCF).
- An increase in the gap between one's own company value and that of the competitor (if one's value is higher), or a decrease in the gap (if one's value is lower). Note that one's own company's DCF includes the expenses of financing the attack and the competitor's DCF includes short term and long term expenses incurred as a consequence of being attacked.
- An increase in the annual Economic Value Added (EVA) [4] of the firm.
- Increase in the firm's profits.

5.5 Identify the Competitor's Achilles' Heel and One's Own

In order to identify the Achilles' Heel (as detailed in Exhibit 4) one needs to collect updated information about the competitor. Though the abundance of data available on the Internet and the press may be distorted at times, there are also some true gems. While companies are discrete about their assets, there is also a need to publish technical information, including detailed information about patented assets. Also there are many blogs and chats where clients and other interest holders share information concerning a company's products and services. At times, this information can be very precise: complaints of unsatisfied customers, discussion that expose wrong doings and more.

As CEOs have become more visible in the media, they too may, with a quick slip of the tongue, reveal in an interview information they shouldn't have. The Achilles' Heel of a company may also be revealed in professional industry conferences, where colleagues exchange information and conduct small talks. Another source of information is governmental and regulatory agencies as well as academic research institutes, which by their nature are likely to focus on specific shortcomings that should be improved. In fact, any person who may have contact with a certain company, even if he/she is satisfied with this relationship, may be a source of inside information. Obviously, frustrated suppliers, embittered employees and dismissed managers may be a very good source.

Once one have learned as much as possible about the competitor, one needs to try and get “into their head”, so to speak, in order to identify their Achilles' Heel. Assuming that they too are rational, it might be done by analyzing former moves that indicate their way of thinking and acting. If the competitor is aware of its Achilles' Heel, it might be identified by the very measures he takes to remedy the matter. For instance, one may inquire where financial resources are being invested and what kind of personnel is the Human Resources department trying to recruit. On the other hand, group thinking and blind spots may prevent the competitor from being aware of its own Achilles' Heel, in which case one must use a critical external gaze in an attempt to decipher the competitor's weak point.

In addition to collecting information with the aim of identifying the Achilles' Heel, one's company also needs information that will help to build a psychological profile of the competitor's major decision makers, focusing on their weaknesses. In the process of collecting information it is important to encourage the people involved to be creative, however, clarify to them what are the boundaries that should not be crossed.

Lastly, the use of information must be proactive rather than passive. Instead of sufficing with collecting information that will shelter one's own company from surprises, one also needs to use information in order to surprise the competitor. Instead of just preventing information leaks concerning one's own company, one must also provide misinformation (deception and denial) in order to hide one's intention of attacking and divert the competitor's attention to false directions. Leaking false rumors may serve as a smoke screen and aid in both defense and offense. Since the information concerning one's own Achilles' Heel is available, its identification is of course a much easier task, but it should not be overlooked.

5.6 Prepare for the Attack: Defend Your Achilles' Heel and Sharpen Your Arrowhead

First and foremost, one must take care of defense and protect his own Achilles' Heel in case of a counter attack. Before launching an attack, one must also establish a plan of action and build the company's organizational capability so that the Arrowhead will be sharp. Given the dynamic nature of many business environments, it is very likely that an Achilles' Heel is only temporary, thus one must be ready to act quickly and take the offense when the opportunity arises. To built an appropriate Arrowhead and attack capability, one's company must subordinate its resources to preparing and executing the offense operational move successfully. It is recommended to use TQM to improve the process that is identified as central to building these capabilities. This task should be led by an elected manager, who may also use tools such as the JIT (LEAN) method and the Complete Kit technique [4].

The Merril Lynch example in the banking field is applicable in the insurance field as well. When a competitor of an insurance company suffers from an inferior information system they cannot respond in time. Thus, improving the information system of the insurance company and releasing new insurance products relatively quickly will earn the company new customers, while the Achilles' Heel of the competitor will be overloaded and unable to meet the challenge.

5.7 Deceive the Competitor and Overload his Achilles' Heel

This stage is the logical opposite of the TOC stage ‘exploit the constraint’ [5]. While TOC advises a company on how to use its constraint to its utmost benefit by ensuring that it works both effectively and efficiently, Paris' Arrow advises a company on how to cause the competitor to use his Achilles' Heel in the most ineffective way. The idea is to through the competitor’s attention from the upcoming attack by initiating a preliminary deceit action that will necessitate the employment of his Achilles' Heel and will overload it with dummy tasks. Assuming that the information on an Achilles' Heel is accurate, the two most important elements in overloading it are surprise and speed, which prevent the competitor from recognizing the trap.

In many cases the competitor's Achilles' Heel may be a lack of updated business information. This calls for overloading his intelligence function with dummy information. For instance, the attacker may supply his competitor with a lot of detailed information about a line of action that was actually forsaken. Another prominent Achilles' Heel is the competitor's CEO: Even a huge company has one CEO with limited capacity to handle two overlapping crises. As in military confrontations, there is great significance to the abilities of the CEOs (from the attacking company and the company being attacked) to deal with the situation. The duel between the CEO's has an important role since the CEO is usually central in the decision making process, and disrupting his/her performance can greatly injure the competitive advantage of the company. Several possibilities of attacking this Achilles' Heel are herein described, preferably after collecting information about the CEO's behavioral characteristics and using them to one's own advantage.

When the CEO is identified as the Achilles' Heel, it is possible to initiate a crisis that will demand a great deal of his time and energy and will hamper is ability to deal with a major business challenge that one may initiate in quick succession. For instance, in April 1993, R. J. Reynolds started a local price war with Philip Morris in order to secure business opportunities in the newly opened Eastern European markets [7]. Philip Morris missed these opportunities because it was too concerned with preserving existing markets. Alternately, instead of manipulating the situation by creating a crisis, a company can make a competitor divert its attention and resources to an attractive business opportunity in order to attack them in a different field. Following this logic, in 1983, Gillette abandoned the market of cheap disposable lighters where its major competitor was Bic. As expected, in response Bic invested aggressively in this field in order to secure its domination of the market. In the meantime Gillette focused on improving its market share in the 'premium' quality razors and within only two years managed to secure 50% of this market [7].

Another possibility is diverting the CEO's attention by creating a crisis, for example in the company's public image. This can be done by leaking to the press information concerning unethical behavior towards employees, consumers, or the environment. To distract the CEO, the crisis needn't be real. For instance, misinformation about a potential threat, such as false rumors concerning a new technology or product to be released in the foreseeable future may be just as effective. Even if it's baseless, such information about a vaporware product influences the decisions and behavior of the market players: The competitor's CEO may be forced to prepare an appropriate response and some of the consumers might decide not to purchase the competitor's current model and wait for the new technology.

An alternative way to hurt the CEO’s functioning, even temporarily, is to mislead the CEO’s colleagues by shading doubt regarding his or hers leadership and exposing alleged failures or alleged private interests that influenced his decision making. The rumors might be spread among the CEO’s subordinates, especially the top executive team, among owners, or among the board of directors.

5.8 Isolate the competitor's Achilles' Heel and Prevent it from getting support

Whereas in TOC a company must subordinate all its units to the constraint in order to strengthen it [5], in Paris' Arrow the attacking company wants to make sure that if and when the competitor realizes that its Achilles' Heel is the focus of an attack, he does not succeed in diverting resources from other units or from his business associates to assist the Achilles' Heel. Therefore, it is vital to prevent a situation where the Achilles' Heel gets all the competitor’s available resources including execution of tasks that support it and purchasing means that it misses. To ensure this, one must target the interfaces between the Achilles' Heel and other units that may assist it and carry on an integrated and simultaneous attack that will split the units and prevent any attempt to strengthen the Achilles' Heel. In statesmanship and warfare this operational move is associated with the “divide and conquer” approach and involves isolating enemy units and preventing them from getting reinforcements, as well as disrupting their internal communication. Attacking the ties between units also prevents diverting some of the responsibilities of the Achilles' Heel to other units (offload), thereby thwarting attempts to reduce its work load and alleviate its burden.

In business, the operational move of keeping away units critical to the Achilles' Heel may be executed in several ways. The attacker may convince the competitor to sell a unit that has long run strategic importance by giving tendentious information to convince analysts that this spin-off is a recommended means of creating value immediately. Alternatively, the attacker may encourage a competitor to outsource services or products supplied by this unit (under the rational of cutting costs) and close it down. In reality, due to strategic importance of the unit, the advantages gained in the short run, will be minor relative to the losses incurred to the competitor in the medium and long run.

Another way for fragmenting the competitor's organization is to aggravate the so called silo phenomenon and to inflict disruptions and disconnections to vital relations between its units. This phenomenon is evident in the poor communication among units and the absence of common goals. For instance, when the competitor uses inappropriately high transfer prices between his profit centers [4], the products become more expensive and the attacker may encourage profit centers of the competitor to purchase the necessary products (or services) in the open market instead. Thereby, apart from the direct economic damage, disturbing important links between the competitor's Achilles' Heel and other profit centers.

Another interface that may be disrupted involves creating or emphasizing conflict of interests among potential partnerships. For example, based on a forecast of a new technology or service that the competitor's Achilles Heel will need, the attacker may preempt its competitor and close exclusive partnerships with the supplier of this need, thus making the services and products inaccessible to the competitor at a time of need.

5.9 Attack the Achilles' Heel of the Competitor and Neutralize it

This stage is the logical opposite of the TOC stage ‘elevate and break the constraint’ [5]. Instead of increasing the capacity of the constraint in TOC, by upgrading its operation and investing in it, Paris' Arrow recommends to decrease the capacity of the Achilles' Heel by attacking it directly and neutralizing it. This is the climax of the attack, and now, after ensuring surprise, there is no longer need for a veil of secrecy and it is recommended to seek assistance from other companies that are interested in attacking the competitor.

Let's take an example from hi-tech and assume that a certain competitor's Achilles' Heel is its R&D unit. Predicting that there will soon be a critical demand for a unique obsolete component upon which a competitor’s popular system is based, and knowing that the competitor has not purchased enough stock of this component and has not adapted his system to a new component, an Achilles' Heel is recognized. Therefore, one makes sure to purchase all the remaining stock of this component from the manufacturers and from distributors that sell obsolete components. When the forecast is realized, the competitor will not be able to find the component on the market and the R&D unit will be under great pressure to quickly develop an alternative solution based on available components. This will take considerable time to develop and meanwhile harm the competitor's revenues. This scenario is reminiscent of the biblical story of Joseph who forecasted seven year of drought coming after seven years of plenty. He advised Pharaoh, the king of Egypt, to buy all stocks of grain and store them, and thus be prepared to supply grain when the drought comes. Thereby he managed to acquire an enormous economic power for Pharaoh.

Another recent example is taken from the statesmanship arena and demonstrates how tilting the opponent's balance can be achieved without using any military force. When President Ronald Reagan came into office in 1981, the détente period (French for “release of tensions”) in the relations between the U.S and the former USSR had already come to a close. The two superpowers were increasingly in conflict with each other, while the USA position was very poor. At this time Reagan identified the USSR's Achilles' Heel, namely, a long lasting economic crisis which restricted the country's ability to continue financing its high military expenses.

To press the shaky soviet economy and defeat the USSR, in 1983, President Reagan presented the Strategic Defense Initiative (dubbed “Star Wars”), an ambitious project that would construct a ground and space-based system to protect the United States from attack by strategic nuclear ballistic missiles. Thereby, using the economical and technological strength of the USA as an Arrowhead for attacking the soviet Achilles' Heel. Understanding that this technology would tip the nuclear balance in the US's favor, the USSR knew that in order to stay in the race it should invest an enormous and unrealistic amount of money. It was also apparent that directing other resources to the conflict, like supporting revolutionary movements around the world, can not solve the problem. Compounded by other factors (such as exposing a technological espionage network in the USA that saved the soviet huge investments in research and development), the Star Wars Initiative is credited by many observers for ending the Cold War and causing the collapse of the USSR.

5.10 Reinforce your Defense against Counter-Attack and **Identify the next Achilles' Heel**

After the offense, one must take into account that the attacked competitor will retaliate. Therefore, it is important to sharpen the intelligence collection efforts regarding his moves and to be prepared for a counter attack. Since a competitor's Achilles' Heel might be temporary, and might be irrelevant due to your strike, one must beware of inertia and be alert to changing circumstances. Thus, one must go back to stage 1, scan for information, examine whether the next constraint that blocks value enhancement of his firm lies in the market, and if so decide who is the dominant competitor that is suitable for attack and where lies his Achilles' Heel.

To better understand the stages of the methodology and how they transpire in real life, below is a case study of a Chinese telecommunications company called Huawei, which (unconsciously) uses the methodology of Paris' Arrow effectively (See Exhibit 7).

6 EXAMPLES OF APPLYING PARIS' ARROW

Specific examples of a business offense are given below. These include the use of Paris' Arrow strategy in various ways in order to attack the Achilles' Heel of the competitor in several organizational domains: its executives, its rear and its frontline.

A. Attacking Executives:

- *Achilles' Heel: slow decision making*
  Example: Jenny Craig, a family owned company with a hierarchical structure, attacked the chain store Nutrisystem which included hundreds of franchises and therefore was unable to make quick decisions and respond adequately to the attack [1].

B. Attacking the rear:

- *Achilles' Heel: an expensive infrastructure*
  A competitor's investment in expensive infrastructure can become an Achilles heel if new technologies can provide a cheaper alternative.

Examples: In the early 1980s MCI took advantage of the fact that its competitor, AT&T was dependent on an expensive infrastructure (copper wiring) and by using cheap alternative, microwave technology, became a major player in the field at the expense of AT&T [1].

Similarly, by eliminating the need for book outlets, Amazon successfully reduced costs, attacked the big bookstores chains (like Barnes & Noble, Borders) and in the long run, created a whole new market in the Internet.

- *Achilles' Heel: inefficient quality*

  Example: A company specializing in plastic irrigation hoses challenged its competitor that dominated the market by improving its manufacturing quality. Since the competitor's manufacturing suffered from a high variance they were forced to manufacture plastic hoses that were 10 mm thick instead of the required 6mm thickness. By improving the manufacturing process the company was able to manufacture hoses that were 7 mm thick, which were cheaper and better suited client needs.

C. Attacking the frontline:

- *Achilles' Heel: absence of strategic filter to eliminate unprofitable opportunities*

  Example: A cellular phone company identified the eagerness of their competitor's CEO to win every tender. To take advantage of this, they created an impression in the media that winning a governmental big tender was critical for them. This pushed the competitor to submit a low bid subsequently winning the tender at loss prices, while the company made sure to lose the bid by submitting a high bid.

Closing Words

Given the fact that military thinking has evolved over thousands of years, it is clear that management thinking which has only come about in the last century, may benefit a lot from military experience and insights. Basic principles of war, such as “For by wise counsel thou shalt make thy war” or “The first rule in the art of war is that all is a deception”, highlight the age old role of ploys in war. Still the indirect approach and “the art of the ruse” have not been developed in business domain. As a consequence, shallow and futile attack strategies, such as price wars, which are destructive to all companies involved, are still in evidence, even though their military equivalent (attritional warfare or trench warfare) is considered archaic and obsolete.

2500 years ago, the wise Chinese Sun Tzu claimed that “one can advance without any obstacles if one's steps target the enemy's weak points”. While no strategic approach can guarantee for certain that its goal will be obtained, the likelihood of success with Paris' Arrow is relatively high if the circumstances in the external and internal environment of the company are suitable. In fact, proper application of Paris' Arrow, according to the specified guidelines and methodology, will usually result in a significant improvement in the attacking company's competitive advantage relative to the attacked competitor.

Exhibit 7: Huawei Case Study

Founded in 1988 by Ren Zhengfei, a retired General from the Chinese Army, the Chinese Huawei company has become a leader in global telecommunications in only 20 years. Serving 35 out of the 50 top telecom operators, the company has enjoyed an average sales-growth rate of 47% in the past 5 consecutive years. It employs 96,000 employees, 44% of whom work in R&D. This emphasis on R&D is also evident in a long standing policy of investing 10% of revenues on R&D and the founding of a university at the site of its central offices located in Shenzhen. As a private company, Huawei reports its revenues, however its operations are far from transparent and even the ownership structure of the company is not clear to the public.

While recognizing the contribution of internal efficiency processes, much of the success of the company may be attributed to a competitive offensive strategy. Enabling and supporting these offensive operational moves is a close relationship with the highly centralized Chinese government. According to 2005 report by Rand Corp., Huawei maintains deep ties with the Chinese military. In all likelihood, this is what stood behind the objection of the American Defense Ministry to Huawei’s intention of purchasing 3Com. The Chinese government uses all the means at its disposal to beat the west in the capitalist marketplace and become the dominant economic super power. To propel Chinese businesses, the government gives significant financial incentives, offers low interest credit, maintains tight control of imports and seems to ignore the infringement of international patent laws and non-disclosure agreements in the use of proprietary knowledge owned by western companies.

As an outstanding CEO, Ren Zhengfei uses his military experience, personal insight and intuition to lead Huawei's offensive attacks upon her competitors. On the basis of Paris' Arrow nine stages we analyze the Huawei's strategy below.

1. Considering whether an attack is relevant: Attack is an integral and vital element in Huawei's strategy to take a leading role in its market, while governmental backing grants her enough resources to succeed.
2. Taking decision: To systematically draw from western competitors the very capabilities that give them a competitive advantage.
3. Defining the goal: To be number one in the telecommunication field, leaving only two other major competitors within 10 years.
4. Determining the leading measure of success: Market share, even at the expense of low operational profit due to low prices and huge investments.
5. Identifying competitors' Achilles' Heel: Short term goals of western CEOs. Willingness to risk losing intellectual propriety for the promise of entering the Chinese market (to sell the current generation of their product) and gaining short term results.
6. Preparing for attack:
   - Global restructuring to meet the demands of the global market. This was done with the aid of western consulting firms such as IBM and KPMG.
   - Collecting intelligence by setting up R&D centers located in western innovation clusters and establishing joint ventures with leading telecommunication companies. Huawei collected technological and marketing information at the very forefront of the industry, created relations with major clients, used local (western) employees and reinforced its own capabilities for future independent work.
   - Building global marketing infrastructure. Huawei established marketing centers adjacent to its R&D centers and an advanced global service across 130 branches with 31 training centers.
7. Deceiving the Competitor and overloading its Achilles' Heel:
   - Intelligence gathering was not always ethical and at times entailed violations of non discloser agreements and patent rights, as well as theft of designs of advanced products. A case in point is the 2003 lawsuit submitted by Cisco against Huawei for what was verified as using Cisco's source code illegally. Another case under the investigation of the FBI

occurred in 2004 during a SuperComm Show where a Huawei employee is suspected of industrial espionage at the Fujitsu booth.

– The next generation products, launched as Huawei products, were offered in cut throat prices, using the western information gathered and of course the low cost labor force.

8. Isolating the competitor's Achilles' Heel and Preventing it from getting support: Since the Achilles' Heel were CEOs’ and senior managements’ short sighted strategy and risky decisions, and not a specific unit, it is impossible for the Achilles' Heel to release the pressure of the attack by getting assistance from the organization's units .
9. Attacking the Achilles' Heel: A swift entry into new products and services, before the competitors' CEOs come to their senses and are able to respond appropriately. Attempts to respond in the legal domain to improper use of knowledge may be met with intense pressure from the Chinese government and a threat of losing access to the Chinese market.
10. Reinforcing defense against counter-attack and identifying the next Achilles' Heel: Due to its current size and strength, it seems that nowadays Huawei is less dependent upon aggressive gathering of intelligence. Thereby, and in order to defend its status, Huawei is more inclined to keep the global business norms. The next Achilles' Heel Huawei may use is the current weakness of the US economy (with $11 trillion in debts) relative to the growing strength of the Chinese economy (with $2 trillion in reserves). While Huawei does not waste time and money on mergers and acquisitions, one of the consequences of the economical difficulties in the West is a trend towards increased consolidation. This trend has created several weak points in huge companies which make them vulnerable to attack: cumbersome decision making, slow development of new products, lack of focus, internal competition between business units, and moral problems due to layoffs. Thus, the next Achilles ' heel might be slow response time of the big western companies. Another option is lack of customer focus: contrary to the big telecommunication companies, each of which is identified with concrete approaches to solutions, Huawei is more open to seeing and solving problems from a consumer perspective.

The successful Implementation of a Paris' Arrow strategy assisted Huawei to grow rapidly and gain a leading role in telecommunications. In 2009 its audited revenues amounted to 21.8 billion dollars (75% from abroad) and its net profit had risen to 2.68 billion dollars. According to its revenues, Huawei is the fifth biggest telecommunication company in the world and is still gathering strength.

Breaking down Huawei's offense strategy to stages shows the extent to which their strategy was systematic and deliberate. It also suggests the utility of applying Paris' Arrow methodology in conceptualizing and planning a concrete course of action.

[End of Exhibit 7]

Notes

1. E.K. Clemons and JA Santamaria, *Maneuver Warfare: Can Modern Military Strategy Lead You to Victory?* Harvard Business Review 80/4 (April 2002): 56-65.
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