

Simplification as a Key Function of Management

Editor's Note

Ilya urges action over waiting for more and more information to confirm a decision. Some decisions must be made with few facts to continue the project. Delaying a decision often does not give more information nor does it change the basic decision. This is Ilya's second article for *asapm*; his first, *Managing Projects Involving Significant External Threats*, stimulated quite a discussion among *asapm* members and readers. We encourage him to do more!

Introduction

The ability to exercise a comprehensive approach to various processes and activities is a crucial quality for managers. While many technical specialists tend to see things from a certain narrow perspective, the manager is frequently required to perform an assessment of the overall situation, taking into account all the pros and cons, and eventually to come up with the best decision that may possibly be taken under the given circumstances.

But does it mean that it is the duty of a manager to carefully weigh all the tiniest aspects related to the activity, leaving no stone unturned, and take only those decisions that would make all the elements of the jigsaw puzzle fit in place, providing guarantees of security? Or, alternatively, is it safe to ignore certain factors and move forward despite a more or less calculated risk that is known to exist?

The answer to this probably lies somewhere between the two options outlined above, and depends on the actual situation being considered. However, it is important to realize that under real-life conditions very few activities and projects may be pre-calculated by 100 percent. Moreover, in many cases the complexity, uncertainty and risk are likely to increase in direct proportion to the project budget and scale.

The threats attributive to the project may be well known to the management, and are sometimes more or less (but rarely fully) measurable in terms of probability of actualization and/or potential impact. In case of actualization of those threats, some of them may lead to manageable financial losses, while others may completely ruin the project or even get the implementing company out of the market. At the same time, many of those threats may be well beyond the control and/or knowledge of the project manager or his/her company.

Nevertheless, the reality of project management is that many projects do have to be implemented despite the valid and existing difficulties and hazards. The purpose of this article is to outline the principles of managing the critical transition from planning to implementation through the application of a "simplified" approach to decision-making.

Ruling by Inspiration Versus Calculation

Let us consider the future launch of a certain product, which is completely new on the market. Prior to finalizing the design and starting mass production, the manufacturer has conducted extensive market research in order to determine the future demand. However, while it is clear that there is no existing market for this type of product, in planning and investing into R&D and production the company has to largely rely on the vision of the marketing department together with the CEO, who, having preserved the entrepreneurial vigor of his earlier days, sees a great future for the new product and is most excited about the sales prospects.

It is well known that the CEO tends to see things from a high-level strategic viewpoint and often ignores certain factors that do not comply with his "gut feeling" (which, however, in many instances helped bring about huge progress in the company's business). At the same time, the Business Manager who is responsible for the operational management of the company, and whose assessments are more "down-to-earth", is very concerned with the possible problems that the new product might bring. He reviewed the results of the comprehensive market research that was conducted by a reputable independent company, and it is obvious to him that only after the product launch it would be possible to finally determine whether the product has been a great success or a total failure.

He also reviewed the budget allocated for the final stages of R&D, as well as the budget estimates for setting up the future production and advertising support to the launch. While the worst-case scenario encompassing the market failure of the product would not result in the company's bankruptcy, it would greatly undermine its current strength. Although the possible success is likely to double or triple its existing market share, probably making the company the absolute leader in the segment, in view of the hazards and the overall uncertainty the Business Manager is reluctant to proceed with the project.

Let us step aside for a while and consider the modern concept of partially or fully switching from the strategy of studying and following your customers' needs to going beyond (and sometimes *against*) those needs, creating absolutely new products and markets never known before, which is a truly brilliant approach for today's dynamic and vibrant marketplace, especially in the high-tech field. It is literally targeted at generating demand with your own hands, and eventually educating consumers, making them not only accept, but also *need* the new product. In the recent years it become a focal point and source of inspiration for senior executives worldwide, as well as an all-time favorite for business school professors giving the basics to their audiences pursuing BBAs, MBAs and similar academic goals.

But we should ask ourselves: is it possible to fully ensure, within the context of the case study outlined above, that this concept would help the top management of the company in question to take a predictably correct course of action? Alas, the honest answer is: *most probably not*. It could be an excellent guideline, and a deadly dangerous modern reality to ignore. But even with an abundance of information to consider and analyze (which has not been provided here), it is quite likely that the dilemma would still be in place, possibly causing a lot of stress and pressure for the concerned decision-makers throughout the entire period of the activity, and at least up to the moment when the results, whether positive or negative, would begin to emerge.

We shall now briefly consider the "good, bad, and ugly" examples of real-life implementation of this concept of strategic management, which, although it became fashionable and popular only recently, is nevertheless based on decades of corporate trial-and-error.

Let us first take a look at a situation where one major company failed to follow this concept and missed the "opportunity of a lifetime", and another small one did act on it, and for years to come turned itself into a live example of the American dream in action. When Chester Carlson, the inventor of Xerography and the father of all copy machines of today, brought his invention to Kodak, they said it could never be commercially implemented and rejected it.

Back then, copying documents was a time-consuming and inconvenient process involving a complicated photographic apparatus. However, apparently the rejection by a key market player such as Kodak did not shake Mr. Chester's belief in the potential of his invention. "Undaunted, he brought it to The Haloid Co., which accepted it and changed its name to Xerox Corporation. The rest is history." [1]

The story is rather old, but the message it communicates is clear: the concept of creating new markets and going against the established thinking patterns of both consumers and manufacturers is sometimes a must, and with the passage of time and acceleration of technology development, it is becoming more and more of an imperative for companies willing to stay competitive.

However, the very same ideology may lead to costly mistakes and failures. To illustrate the disastrous potential of erroneous decision-making based on the same concept, we shall provide two examples, both from the car industry.

The first one is simple. Let us ask ourselves the question: how many Pontiac Aztecs do we see on the roads? The reasoning that drove GM to introduce this vehicle, which, although liked by some consumers, became an established financial failure, was based on a variation of the very same concept: "(1) We shall create a totally new design style (and hopefully trend)", and (2) "We shall not follow the traditions our customers are used to, but would rather create new traditions, and righteously go *against* the current customer habits and preferences (i.e. the customers don't know what's really good for them, but eventually they will)". Well, they did not!

Another automotive example, much more ambiguous than the previous one, but still meeting the purposes of our discussion, is the radical styling and onboard equipment changes recently introduced by a certain revered Bavarian automaker using a three-letter acronym for its name. The changes in question are largely attributed to the policies of the somewhat infamous design strategist Chris Bangle, whom some consider a secret agent effectively doubling for Daimler-Chrysler, and some - a genius bringing a breath of fresh air to BMW. They involve a new bold design for the entire product range, as well as the electronic control system (iDrive) used on many vehicles. Both aspects are subject of an ongoing controversy and confusion among consumers, are not (as of now) either a total failure or a total success, and the company is far from filing for Chapter 11 or any of its European equivalents.

One thing is certain though: BMW has been known to be a "cult" automaker, having an established and large segment of true aficionados (meaning: loyal returning customers accounting for a significant share of total sales, that many companies consider to constitute the core of their business). Now many of those who for decades have been loyal to the brand are cursing the design innovations, the "convenience" of the hi-tech wizardry, and Chris Bangle as the source of all evil. Some of them opt for buying *previous-issue* BMW models, as there are still a lot of used 3-, 5-, and 7-series on the market in excellent condition.

Others with lower tolerance levels temporarily or permanently switch to competing brands for their new car needs. Whether all of this will be compensated for the company by less conservative new customers who are "sophisticated and smart enough" (to new BMW standards) to fall in love with questionable improvements, is yet unclear and remains to be seen, but the facts of the matter are described above.

What are the lessons learned from these examples in terms of whether bold innovation and decision-making is right or wrong? Most probably, given the senselessness of the question, there are none at all, other than the fact that "it's life" and sometimes you do have to take risks, use your intuition and strategic vision (with all the possible safeguards, such as market studies, bringing in experts, careful planning, etc.), and accept the existence of the risk factor. In other words: do as little gambling as you can if that allows your business to prosper and grow, but when you do have to gamble to stay afloat or achieve growth, (1) try to correctly recognize that moment, (2) learn your poker, (3) go, go, go!

Now, we shall return to our initial case study (the one involving a dispute about launching a hypothetical new product between a romantically inspired CEO and pragmatically uninspired Business Manager). What

can be said about it? Considering a very general nature of the description of the situation that does not give us any specifics, it is impossible to say whose point of view really meets the interests of the company in question - that of the CEO or of the Business Manager. The decision on new product development and production does have to be taken on the basis of all available facts, and needs to be as objective as it could possibly be. However, a certain point may be reached where all facts and arguments would have been analyzed, weighed and discussed many times over, and it would be time to take the final decision with a great deal of uncertainty and unpredictability still being there.

This is where a simplified, "optimistic" type of approach must sometimes come into play. This is limited to applicable situations only, with the applicability - sad but true - remaining a highly subjective factor to be defined by the individuals involved. (But those senior executives do get their multiple zeroes after the salary figure to compensate for the acquisition of more gray hair, don't they?). Now therefore, instead of approaching the problem academically and aiming to establish the existence of a 100 percent risk-free environment based on the analysis of all minor and major factors, at a certain point it is the duty of the manager to assume a simplified attitude to the problem and say to himself/herself: "Yes, this thing has a great future, it must be done, and so we'll do it!" (or maybe something to the same effect).

Avoiding the Dangers of Reductio ad Absurdum: Educated Simplification

The concept should not be taken to the extremes of consciously taking uninformed and truly hazardous decisions. Simplification in project management is a good attitude only when all information that may have been collected within reasonable timings and at reasonable cost is already available, and any further search for and analysis of information would bring about delays and expenses, which in themselves would be creating more hazards than benefits for the project in question.

The decision as to when exactly that point is reached should be taken through comprehensive review of the project plans, objectives, and current situation to be conducted by the management. And it is extremely important to realize that there are quite a few examples of failures resulting from the actions of managers guided solely by intuition and inspiration rather than solid facts.

One such example involves a dot.com company, which, like many businesses in the industry, maintained a corporate culture of innovation, flexibility, and lack of formalized structures. Though that brought some benefits as well, the downside was that the company's decision-making and strategic management processes were blurred, and the company maintained rather an "artistic" approach to its strategy of expansion. The decision to expand internationally was based solely on the initial success on the domestic market and the rather unsupported assumption that "what is good for us should be good for the rest of the world".

Worst of all, the new markets entry was not preceded by any market analysis. The decision taken by the head office to enter one of the new markets in Eastern Europe was literally governed by the general feeling of the top management that "the country has a great potential". And so it definitely did, with a rapidly growing Internet penetration rate and large numbers of potential customers.

However, what the company totally missed was the fact that the very same Internet-enabled services that it was successfully offering at home on a paid basis were being offered by many local websites in the host country completely free of charge. The attempts to attract customers through adding more features and posing as sophisticated "professionals" as opposed to free "amateurs" have failed - the other sites were quite convenient, useful, and, on top of everything, completely free!

The results were unfortunate: after spending hefty portions of venture capital investments on local office setup, staff, and strong advertising support, the company had to wind up operations and withdraw from the country with major losses. But the problem may have been avoided in the first place. It would not even have taken extensive market research (which would have been a cheaper option still) to discover the problem with "free" competition - it only took one person spending a day surfing the Web! This example substantially differs from those discussed in the previous section involving General Motors and BMW, as both companies have at least been assumed to have invested certain resources and effort into making an *educated* guess.

Therefore, simplification is a good approach only in those cases where sufficient information base has already been established. Creativity and intuition are only good when they complement solid judgment and analysis. The thing to keep in mind here is that you cannot launch a spaceship without the boosters, but once on the orbit, the boosters must be dropped off in order to continue the free flight of the vehicle, otherwise they would become a useless and dangerous burden for the orbiting craft.

Similarly, information and analysis are an absolute must at the initial stage of planning, but it is also important to realize that at a certain moment excessive reasoning and indecision should be dropped in order to take your activity to the next step of actual implementation.

Excessive Reasoning Can Be a Vice

We can refer to the old story about a centipede, which, in the middle of its life, suddenly thought: "I have some 40 (or maybe even 41) legs. And it must be so difficult to make them all walk in a coordinated manner, especially in the right direction. In fact, I don't even know how could I ever do it in the first place..." And it tried to figure out the exact movements that were required to reach that objective. Predictably enough, it was at this moment that the centipede completely lost its ability to walk, and could not move any further.

With due consideration to the specific facts attributive to a given activity, many managers (for example, those responsible for developing operations of dynamic companies aiming at rapid expansion) should try to avoid the paralyzing action of the "centipede syndrome" and accept the fact that certain difficulties and hazards are likely to exist in ALL projects. And, the bigger the project is, the higher are those hazards and their possible impact on the project and/or the company. Therefore, in certain instances simplification is the best strategy: if something has to be done, but the only option to do it is to accept the inevitable risks that cannot be measured or localized any further, the manager should think of them no more (remember the centipede!) and to just go ahead and do it.

There are many examples showing the validity of this approach. Rather than reviewing more case studies from the business management practice, in order to illustrate the significance and scale of impact that an overly cautious strategy may have, we shall now consider a historical example of military management dating back to the U.S. Civil War.

In July 1861 Major General George B. McClellan was appointed the head of the Division of the Potomac, and later the same year - the general in chief, taking charge of all armies of the Union, a position the importance of which could not be overestimated. General McClellan seemed to have all the qualities required to lead the Union to victory. A West Point graduate and a talented war science theoretician, he was also a popular leader among both officers and soldiers. After taking command, he soon managed to build a well-trained and motivated army capable of confronting the enemy.

However, the weakness of McClellan was his overly cautious approach to the war strategy and tactic. His main reliance was on building up reserves, weighing the risks and gathering information, rather than rapid advances and radical actions that were required to put the war to an end. As one of his contemporaries put it, "...to fight is not his forte" [2]. Probably it was this approach that led him to greatly overestimate the strength of the opposing forces and underestimate his own. In August 1861 he wrote to General Scott, who at that time was the general in chief of the Union: "I am induced to believe that the enemy has at least 100,000 men in our front" [3]. (The actual situation was very much different: at that time his troops numbered 55,000, while those of the opposition had fewer than 45,000 men).

Throughout the period of his command McClellan demonstrated his great reluctance to launch any offensive strokes. In those instances where he did confront the enemy and managed to prevail, McClellan failed to develop the advantages he gained into decisive victories. In May 1862, following the first skirmish with the Confederates who were forced to retreat, he did not pursue the enemy, but merely proceeded with his slow advance. His overall tactic was defensive, and, as such, was greatly disapproved by President Lincoln.

The culmination of McClellan's career as the commander of the Union armies was the battle at Sharpsburg, Maryland, which proved to be the bloodiest battle of the Civil War until that moment. McClellan waited too long before attacking, which allowed the Confederates to bring in reinforcements. When the battle finally began, due to his typical caution he kept some of his troops in reserve instead of using them in combat. The number of dead and wounded in the Union army amounted to 11,000; however, at the end of the battle the defenses of the Confederates, who also sustained heavy losses, were still unbroken.

Instead of taking the opportunity to renew the attack the next morning, McClellan hesitated, which allowed General Lee to safely retreat back to Virginia. Soon afterwards McClellan, who failed to comply with the urges (and even a direct order) of President Lincoln to move his troops toward Richmond, the capital of the Confederation, was relieved of command by the President.

This historical example is an illustration of how the lack of ability to take decisive action under certain circumstances may lead to highly negative results, which, in this case, included the loss of life of thousands of people and the extension of the overall period of hostilities between the North and the South. It should be noted that General McClellan did have to face multiple threats in a highly complex environment, and in many cases he did not have sufficient information available to him (such as accurate data on the number of opposing troops).

It is also obvious that the possible result of any insufficiently considered and overly radical action on the part of the commander-in-chief of the Union forces could be absolutely fatal to the future of the country. However, it has been proven by history that, even with the uncertainty and the valid hazards incremental to this "project", it was the bold and decisive course of action supported by Abraham Lincoln and later implemented by General Ulysses S. Grant that ultimately led the Union to victory and brought the war to an end.

One of the multiple implications of Pareto's 80-20 rule is that in many situations the attempt to pre-calculate everything by 100 percent would probably result in spending something close to 80 percent of resources as time, money, and effort) in order to collect and assess the remaining 20 percent of data. For many projects and industries there could be situations where, even if one could eventually perform a full analysis of mathematical accuracy, the time or the money wasted on this activity would actually devalue the positive sides of such an academic approach. One of the examples could be the dynamics of today's consumer

electronics industry, where products are being replaced so rapidly that a delay of even a few months could leave you well behind the more daring competition.

But what is more important to understand is that, in many real-life situations, even ignoring the rationale of Pareto's rule by aiming at 100 percent certainty is likely to lead you to a dead end. That is because in most projects, and especially in large-scale ones, it is usually the case that you would **never** be able to collect all the data and assess all the difficulties and hazards, no matter how much time or resources you spend on that.

Application to Personnel Management

The simplification approach could also be considered from the perspective of personnel management. Let us imagine a situation where the manager assigns a certain complicated task to his subordinates, at the same time setting tight deadlines for the completion of the activity. Despite the severe pressure, extremely high complicacy of the task in question, and a high level of uncertainty involved, the manager knows from prior experience that, with proper attitude, motivation and expertise, the objective may be achieved.

Starting from day 1 of the activity, the subordinates (who are technical experts as opposed to the manager being a professional administrator) would start coming to the manager with well-justified explanations of why the objective may not be achieved in accordance with the established conditions. In many cases they would refer to technical aspects of the task, in which they are much more proficient than the manager himself, presenting very sound and well-supported reasoning.

In this case the manager would have two choices. One way to go would be to see the situation with the eyes of the employee (as that is what true leaders are sometimes supposed to do) and allow himself to be totally devastated by the problems, making the task impossible to achieve. The second approach would be a "simplified" one, based on the general meaning discussed previously.

Instead of going deeply into all tiniest concerns and problems dumped onto him by the employees, the manager who knows that there is no choice other than to get the job done, may say something to the following effect: "Look, I know it's hard, but it can be done. It's up to you to figure out the technical aspects. If you think you can't handle it alone, let me know, and I'll see if I can get someone to help you. Otherwise, I expect you to finish the job in 5 days (or weeks, or months, etc.) as we discussed before." Again, in the right circumstances this blunt simplified approach may make all the difference between defeat and victory.

This concept was evidently shared by Gordon Bethune, the CEO at Continental Airlines, who almost miraculously turned the company around at a time when, after having two bankruptcies, it was clearly heading for the third one without any hopes of surviving it. One of the measures he has taken was upgrading the image of the airline to appeal to business travelers, and that involved re-painting the whole fleet of airplanes, as well as replacing large portions of interior elements. The mission was by no means easy, as it probably had to be done without interrupting the busy flight schedule.

At the end of 1994 Bethune invited George Mason, the head of technical operations, to come up with a plan for performing this task. According to Mason, the plan he presented, which was for a period of twelve to thirteen months, accounted for every maintenance opportunity. He said: "Gordon, these are all the opportunities we have." [4]

However, Gordon Bethune realized that such timings were not acceptable from the standpoint of his objective to put Continental "back on track", which required prompt actions and results. Instead of looking

into the actually existing problems outlined by his employee, Bethune, who was known for his rather straightforward manner, said: "Then, I guess you better get some more opportunities, because, goddammit, if it's not done by July 1, then I'll get somebody to get it done by July. And so, if those marketing guys aren't going to give you the airplanes, you just tell them I can find another marketing guy, too." [4]

As one might expect, the job was done by July 1. And by 1997, through implementing a number of radical corrective actions, Gordon Bethune turned Continental Airlines into one of the leading air carriers in the U.S.

Simplification is not a universal cure for all problems encountered in project and business management. And it is one of the main duties of a manager to carefully collect and assess all data before taking any radical actions, especially those involving high complexity or major threats. What is really important for managers is to realize that, under certain conditions, upon appropriate assessment it is necessary to accept the incremental problems, risks, and uncertainty, and just go ahead at full throttle. Any further reasoning and search for guarantees of security in this highly unpredictable and sometimes chaotic world sometimes may, paradoxically, be counterproductive, only contributing to the overall insecurity and lack of affirmative results, which might otherwise be achieved by those who truly understand the wisdom of simplification.

References

- [1] Pressman D. Patent It Yourself. Berkeley: Nolo, 2004.
- [2] Commager HS. The Blue and the Gray. New York: The Fairfax Press, 1982.
- [3] Sears SW. The Civil War Papers of George B. McClellan. New York: Ticknor & Fields, 1989.
- [4] Puris M. Comeback. New York: Times Books, 1999.

About the Author

Ilya is a key player in a very small but ambitious Houston-based translations agency. The agency is a subsidiary of a much bigger European group (offices in Germany and Russia) involved in manufacture and sales of airport terminal displays and computer systems, including proprietary software.

The Houston office does B2B translations, mainly in the English/Russian language pair, with plans to launch the parent company's products stateside. If that works out, and I have some plans there, we'd take ourselves to a completely new level.

In the translation business, Ilya considers his company's work to be something similar to, say, hand-assembled Aston Martins (see, he's a modest guy). They provide very high quality compared to competition, but (as opposed to Aston Martin) are able to offer very reasonable rates through cutting costs and organizing work effectively. Part of the secret: outsource to cheap Russian freelancers, BUT in all cases do complete local editing. Which brings up the biggest advantage: great editors with decades of experience, delivering and ensuring quality (many competitors just don't have translation experts of such level).