The Nine Unwritten Rules of Project Management

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opening

project management or project magic?

Webster's defines ***management*** as "the act, manner or practice of managing; handling, supervision or control." It also defines ***magic*** as "the art that purports to control or forecast natural events, effects or forces by invoking the supernatural; the practice of using charms, spells or rituals to attempt to produce supernatural effects or control events in nature."

Those of us who have managed complex projects have likely wished for a little magic from time to time; or we may have been accused of using slight of hand in meeting project milestones.

introduction

IT project risk

Information Technology projects are disasters all too often! Research has shown that 53 percent of projects are in "recovery" and 31 percent end up being canceled, leaving only 16 percent completed on time.[1] According to Cobb's Paradox, ***"We know why projects fail; we know how to prevent their failure; so why do they still fail?"*** **[SGRP1]**

In 1986, Alfred Spector, president of Transarc Corporation, co-authored a paper comparing bridge building to software development. The premise: Bridges are normally built on-time, on-budget, and do not fall down. On the other hand, software never comes in on-time or on-budget. In addition, it always breaks down. (Nevertheless, bridge building did not always have such a stellar record. Many bridge building projects overshot their estimates, time frames and some even fell down.)

[1] Research by The Standish Group in 1994 focused on software project failures. Subsequent data in 1999 showed the success rate had improved to 26%.

Aside from 3000 years of experience, there is another difference between software failures and bridge failures. When a bridge fails, it is investigated and a report is written on the cause. This is not so in the computer industry where failures are covered up, ignored and/or rationalized. As a result, we keep making the same mistakes over and over again.

IT projects are heavily dependent on the abilities of the technical team but, just as important, depend also on the skills of the assigned project/program manager and the environment in which the team operates. In today's development model, delivery of IT projects often involves on-site/off-site/offshore models with members working as virtual teams.

Corporate America spends more than $275 billion each year on approximately 200,000 application software development projects. Many of these projects will fail, but not for lack of money or technology; most will fail for **lack of skilled project management**. **[SGRP2]**

project management

accidental profession

There's a lot of truth in the statement that ***"project management is the accidental profession."*** Most project managers were educated in a particular field, applying that knowledge to the tactical requirements of their work, but likely, using techniques or methods of their own choosing to plan and manage their work and to communicate information about it.

Project management is a process that spans the full lifecycle of a project, from inception to completion. Its cornerstones are planning, execution and control of all resources, tasks and activities necessary to complete a project. Project management is not an isolated activity; it is a team effort. In the end, project management is about people and process—how work is being performed. The Standish Group states the four "P"s of project management as ***People Performing Perfect Process***.

the unwritten rules

This paper explores a philosophy of project management that goes beyond training, tools and processes to reveal ***the nine unwritten rules of project management***.

1 - Projects are unique. Enjoy them.

"It's like changing jobs without changing jobs." Even though you may be doing the same type of project work for the same company/client, something is different—deliverables, team, timeframe, location?

With the advent of today's mobile professional, the focus moves more to the project than the job. Mobile workspaces are now temporary homes for many Hewlett-Packard professionals. Technology tools provide the engines, but people still do the planning and execution of IT projects.

Shelby Carter, UT McCombs School professor, stresses to students these key points to a successful career:[2]

- Enjoy your work
- Work hard
- Expect failure…learn from it
- Be flexible

The key question for the new as well as experienced project manager is, ***"do you feel the excitement of a new assignment with all its unknowns?"***

2 – Expect challenges.

Management theory says that people are motivated by the importance of their work. Douglas McGregor advocated that most workers can be categorized according to two theories, Theory X and Theory Y. The first, often referred to as Theory X, assumes that the average worker is inherently lazy and requires supervision. Theory X further assumes that:

- The average worker dislikes work and avoids work whenever possible.
- To induce adequate effort, the supervisor must threaten punishment and exercise careful supervision.
- The average worker avoids increased responsibility and seeks to be directed.

[2] Distinguished Adjunct Professor, Graduate School of Business, The University of Texas at Austin, and former senior corporate executive with Xerox and Bay Networks, in his keynote address at McCombs School of Business Parents' Day 2002.

The manager who accepts Theory X normally exercises authoritarian-type control over workers and allows little participation during decision-making. Theory X employees generally favor lack of responsibility, especially in decision-making.

According to Theory Y, employees are willing to get the job done without constant supervision. Theory Y further assumes that:

- The average worker wants to be active and finds the physical and mental effort on the job satisfying.

- Greatest results come from willing participation, which will tend to produce self-direction toward goals without coercion and control.

- The average worker seeks opportunity for personal improvement and self-respect.

The manager who accepts Theory Y normally advocates participation and a management-employee relationship. However, in working with professionals, special care must be exercised because these individuals often pride themselves on their ability to find a better way to achieve the end result regardless of cost. Project management has the right to insist that an individual who is given free rein to accomplish an objective will also fully understand the necessity of time, cost, and performance constraints.

Many psychologists have established the existence of a prioritized hierarchy of needs that motivate individuals toward satisfactory performance. Maslow was the first to identify these needs. The first level is that of the basic or physiological needs, namely, food, water, shelter, etc. Once a person's need is satisfied, it is the next level need that motivates him, i.e., safety, social, esteem and self-actualization.

Professionals' needs often focus on esteem or self-actualization. The self-actualization need includes doing what one can do best, desiring to utilize one's potential, full realization of one's potential, constant self-development, and a desire to be truly creative. Many good project managers find this level to be the most important and consider each new project as a challenge by which they can achieve self-actualization. **[KERZ]**

3 – Respect the unknown; don't fear it.

Don't expect to have all the answers up front or even know all the questions. Experience says that you can find your way even when no path is apparent. Project managers are risk takers…but not blindly. They understand that risks can be managed.

Risk is a measure of the probability and consequence of not achieving a defined project goal. While formal risk analysis procedures deal with the ***"known unknowns,"*** there is also the issue of the ***"unknown unknowns."*** Risk management is an organized means of identifying and measuring risk and

developing, selecting, and managing options for handling these risks. Proper risk management will reduce not only the likelihood of an event occurring, but also the magnitude of its impact. **[KERZ]**

4 – Apply proven project management methodologies.

It *is* project **management**, not project **magic**, although a little apparent magic every now and then is helpful. OK, it's true that quite a lot has been written about this rule. Formal training with well-defined processes helps in the planning and managing of complex projects. Increasingly, organizations are advocating formal methodologies for project life cycles, such as FocusPM (HP), QPM (Compaq), Method1 (Accenture), SDP-21 (GM), SDM (MBNA), PMBOK (PMI), etc. Most of these proprietary methodologies are compliant with the Project Management Body of Knowledge (PMBOK) published by the Project Management Institute (PMI). **[PMI1]**

While many large companies are quick to point out their development and adoption of formal methodologies, project success depends largely on the application of these project management tools and techniques. Companies must monitor adherence to their processes. By the same token, the project manager should have the freedom to apply those templates or tools that best fit the project. The important thing is to understand that methodologies keep us from making stupid mistakes by reminding us of the basics that must be taken care of to ensure a successful project (e.g., clear scope definitions and effective change management processes).

5 – Recognize that you learn from every project.

Apply that knowledge to the next. Failure to apply learnings means that the project team may be doomed to repeat the mistakes of others. ***"If you haven't managed a 'bad' project, you haven't managed enough projects."*** Lessons learned are best captured by applying a formal retrospective process to uncover what went right and what could have been done differently. ***"Every good project manager has been refined to excellence in the crucible of a troubled project."***

6 – Do what feels right!

Before this project manager had any formal project management training, the "seat of the pants" approach guided decisions. As an NBA franchise owner summed up what makes for a successful sports franchise**—*"a foundation of trust between owner, coach, and players fed by having the* right *people in the* right *place doing the* right *thing at the* right *time."*** Does this not also apply to customer, project manager, and project team?

A project team must be satisfied that the project can be completed at all, before it will begin to worry about whether it will be completed within plus or minus ten percent of its schedule and budget targets. A struggling project threatens each party's survival needs. The customer worries whether the project will be delivered too late to serve its intended purpose, delivered at prohibitive cost, or delivered at all. The manager worries whether the customer will cancel the project and make him look like a failure, or whether the developers are even capable of completing the project. The developer worries whether he will lose his job or be forced to sacrifice hundreds of hours of leisure time to show he is committed to the project.

As Thomas Hobbes observed in the 17th century, life under mob rule is solitary, poor, nasty, brutish, and short. Life on a poorly run software project is solitary, poor, nasty, brutish, and hardly ever short enough. The first step toward surviving a software project is for all parties to agree to treat one another in a civilized way. Steve McConnell in his Software Project Survival Guide advocates a Customer's Bill of Rights as well as a Project Team's Bill of Rights. **[McCON]**

Customer's Bill of Rights

I have the right:

1. To set objectives for the project and have them followed.
2. To know how long the software project will take and how much it will cost.
3. To decide which features are in and which are out of the software.
4. To make reasonable changes to requirements throughout the course of the project and to know the costs of making those changes.
5. To know the project's status clearly and confidently.
6. To be apprised regularly of risks that could affect cost, schedule, or quality, and to be provided with options for addressing potential problems.
7. To have ready access to project deliverables throughout the project.

Project Team's Bill of Rights

I have the right:

1. To know the project objectives and to clarify priorities.

2. To know in detail what product I'm supposed to build and to clarify the product definition if it is unclear.

3. To have ready access to the customer, manager, marketer, or other person responsible for making decisions about the software's functionality.

4. To work each phase of the project in a technically responsible way, especially to not be forced to start coding too early in the project.

5. To approve effort and schedule estimates for any work that I will be asked to perform. This includes the right to provide only the kinds of cost and schedule estimates that are theoretically possible at each stage of the project; to take the time needed to create meaningful estimates; and to revise estimates whenever the project's requirements change.

6. To have my project's status reported accurately to customers and upper management.

7. To work in a productive environment free from frequent interruptions and distractions, especially during critical parts of the project.

Know when to say NO! Be able to say it and mean it! It may be the right thing to do for project success. This could be noted as a corollary to Rule 6.

One of the early life experiences for this project manager can also be stated as a corollary to Rule 6: ***"Ask forgiveness, not permission."*** Sometimes it is necessary for the project manager to make decisions and take action, even if it may not be popular with the team or management. The results can be reviewed later with alternative action taken or admission that another choice could have been better.

7 – Have fun!

Read Dilbert faithfully—if you can't identify, you're missing something. In The Dilbert Principle, Scott Adams devotes a chapter to projects, illustrating many aspects as indicated here:

Department Manager: "Let's go around the table and give an update on each of our projects."

Project Manager: "My project is a pathetic series of poorly planned, near-random acts. My life is a tragedy of emotional desperation."

Department Manager: "It's more or less customary to say things are going fine."

Project Manager: "I think I need a hug." **[ADAM]**

Exercise team building—do lunch, dinner, coffee, sporting events, cultural activities…and do them away from the workplace where so much time is spent anyway. The most successful projects tend to be those where the focus is on the project and its objectives, not the organizations—ignore as much as practically possible the functional walls between departments, companies.

8 – Celebrate success!

It's important to celebrate success achieved by a project team, at the project conclusion as well as along the way. These are guidelines learned through experience:

- Give recognition to all
- Give mementos…they don't have to be of significant monetary value to be significant!
- Involve management

9 – Be flexible.

Remember that even though your ideas may be good, someone else may have a better one. The effective project manager encourages ideas from the team and acknowledges ideas publicly, whether adopted or not.

"They keep moving the cheese." Change is inevitable. Our acceptance and response determines our attitude as well as success for our selves, our team, and the project.

The principles that Spencer Johnson sets forth in his book "Who Moved My Cheese?" are presented in a simple and entertaining parable revealing truths about change. "Cheese" is a metaphor for what you want to have in life—whether it is a good job, a loving relationship, money, a possession, health, or spiritual peace of mind.

Johnson's principles are summarized as "The Handwriting on the Wall":

- Change Happens

- Anticipate Change
- Monitor Change
- Adapt to Change Quickly
- Change
- Enjoy Change!
- Be Ready to Quickly Change Again and Again ("They keep moving the cheese.") **[JOHN]**

(Bonus) 10 – Expect conflict.

The list continues to grow…

Conflict happens in everyday life, so why would it not happen with projects. It can be constructive if dealt with effectively.

The use of advanced technology to accomplish a complex task almost automatically increases the level of uncertainty inherent in the work effort, since the fact that it is a new technology implies that its findings have not been tested and proved as have the more stable technologies.

Conflict over schedules seems to be the major cause of conflict when dealing with functional departments, assigned personnel, between team members, superiors, and subordinates. This conflict can extend beyond the internal organization to the customer and any third party suppliers involved with the project.

Conflict is inevitable in all organizations, primarily due to the ever-increasing complexity of our modern society, the innate nature of human beings, and the interaction of the two. As the complexity of society increases, the classical, traditional organization has declined in importance. The newer projectized and matrix organization styles are becoming more relevant to today's business and government environments. Inherent in these newer organization styles are the high incidences of rapid change and incongruent human goals that lead to high levels of conflict. Even more important, these conditions are made extremely clear and obvious to project participants by the nature of project work.

The project manager has no choice but to deal with this high level of conflict. **Project management is in fact managing in a highly conflictive situation, and in many ways can be considered almost synonymous with conflict management.** By understanding the sources of conflict, the power available to deal with it, the methods through which that power can be applied, and the likely results when two methods meet each other, the project manager is armed with the tools necessary to deal with the conflict-prone situation called project management. **[KIRCH]**

From a management perspective, there are five distinct methods for dealing with conflict:

1. Withdrawal
2. Smoothing
3. Compromising
4. Forcing
5. Confrontation

The project manager must carefully select the appropriate mode for handling conflict within his organization so that an atmosphere conducive to constructive results is developed. ***Withdrawal*** can be defined as "retreating from actual or potential disagreements and conflict situations." This method is appropriate only in certain situations, for example, when a "cooling off" period is needed to gain perspective on the conflict situation. ***Smoothing*** is defined as "deemphasizing differences and emphasizing commonalities over conflicting issues." Smoothing keeps the atmosphere friendly; but if used too frequently or as the main or only method of dealing with conflict, the conflicts will never be faced. Both smoothing and withdrawal are delaying, ignoring tactics, which will not resolve the conflict but will temporarily slow the situation down. If the conflict is not dealt with and resolved, future conflict will be more severe and intense. ***Compromising***, "considering various issues, bargaining, and searching for solutions which attempt to bring some degree of satisfaction to the conflicting parties," is a situation whether neither party can win, but each may get some degree of satisfaction, given that both parties must give up something that is important to them. ***Forcing*** is "exerting one's viewpoint at the potential expense of another party, characterized by a win-lose situation. Forcing can increase conflicts later as antagonisms build up among the parties involved. ***Confrontation*** is a mode where the disagreement is addressed directly. It is a process where conflict is treated as a problem. That is, the problem is defined, information is collected, alternatives are developed and analyzed, and the most appropriate alternative is selected. Confrontation is considered theoretically to be the best way of dealing with conflict because both parties can be fully satisfied if they can work together to find a solution that meets both of their needs. It is a time-consuming process, however, and requires that both parties desire to solve the problem and are willing to work together toward a mutually agreeable solution.

conclusion

Is project management an ***art*** or ***science***? Although this paper suggests that there are unwritten rules that are key to the successful practice of project management, there has been much written about the subject including PMI's Project Management Body of Knowledge (PMBOK). In fact, the "nine" rules presented here do reference material and concepts of project management that have been documented. This would

suggest that project management is a science with definite principles to be applied. In reality, the successful project manager practices the profession as an art as well as a science.

Effective project managers (PMs) are made on the job…they can't learn it from a book. These unwritten rules are particularly intended to help new PMs along the way, but as they make their journeys via their own projects, they'll travel different roads (different parts of the maze) and write their own rules on the wall. Hopefully, these can help!

summary

The Nine Unwritten Rules of Project Management
1- Projects are unique. Enjoy them.
2- Expect challenges.
3- Respect the unknown; don't fear it.
4- Apply proven project management methodologies.
5- Recognize that you learn from every project.
6- Do what feels right!
7- Have fun!
8- Celebrate success!
9- Be flexible.
(Bonus)10- Expect conflict.

recommendations

Additional research by the reader is recommended for the organizations referenced here. Independently they are focused on excellence in project management (for any type project) and in software development.

Project Management Institute

Much has been written about the field of project management. The Project Management Institute (PMI) is one of the fastest growing professional societies in the world. Membership now totals more than 92,000 dispersed over 45 countries. **[PMI2]** Local chapters provide membership meetings with interesting program presentations on the many aspects of managing projects, networking opportunities to share experiences and outside education in the field of project management. The international organization provides education through seminars and its annual conference and Project Management Professional (PMP) certification based on experience, education and a rigorous examination of project management knowledge.

Software Engineering Institute

The Software Engineering Institute's (SEI) Capability Maturity Model (CMM) provides a reference standard and measure for the level at which an organization performs software development. This approach with defined process categories provides a roadmap for achieving quality in the development of software applications. SEI's CMM Level 5 is the standard to which all software entities aspire. **[SEI]**

appendix

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