PROJECT MANAGEMENT AND TEAM SPORTS
COMMON GROUND AND LESSONS LEARNED

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1. INTORDUCTION

March, when I wrote this article, is an exciting time in the sports world. The NFL Super Bowl is a still-fresh memory, Major League baseball teams are in spring training, NBA basketball and NHL hockey are in full gear, the NCAA basketball tournament (March Madness) is in progress, and in some years discussions about the Soccer World Cup and the Olympics are rampant. While Project Management relates to work and sports to play, there are many commonalities between them, and some lessons learned about Project Management can be derived from how sports teams are built, coached and managed. Professional sports especially have become big business, and the desire to win has caused professional teams to adopt some leading management approaches that are similar to Project Management techniques. This article is intended to highlight some typical Project Management issues and how to deal with them, through this analogy.

Some projects succeed and others fail, with all shades of gray in between. While there are many reasons for project failures, my experience shows that the reasons are less often a result of technical execution, and more often a failure to execute some of the Project Management basics. Further, many of the basics that are overlooked or under-executed are those that may not appear on the project plan, and that are primarily the role of the Project Manager (PM) to execute. By no means should the Project Manager be a scapegoat for project issues, but the PM does have a key role to play, and must execute that role for the project to succeed.

To help examine this, I will use the analogy to a sports team. Most of us have some interest in team sports, at either the professional or the amateur level, somewhere on the scale from mild interest to fanatic. Sports teams demand teamwork from a group of people, there are clear leaders on and off the field, the games require strategies and tactics, and there are clear obstacles to overcome. More to the point, sports require attention to what you are doing (call this offense), what your opponents are doing (call this defense), and sometimes help from specialists (call this special teams).

For example, in soccer, the offense is moving the ball toward the opponent's goal and scoring goals. Defense is intercepting the opponent's passes or stopping their movement toward your goal, and then gaining control of the ball to start an attack. Special teams are the specialists who substitute to add offense or defense, and the players who may enter the game for a shootout in the event of a tie.

In baseball, offense is getting hits and scoring runs, and defense is pitching and fielding. Special teams could include pinch runners, pinch hitters, and relief pitchers.

In US football, there are typically full sets of players for offense (scoring touchdowns), defense (stopping the opponents from scoring), and special teams (field goals, kickoffs, punts). Football is unique among the team sports, because these teams are usually totally separate, while in most sports the same players are on the field for both offense and defense at most times.

The reason I like this analogy, and will use it in this article, is that it is fairly universal to team sports, and very helpful in illustrating what are typically strengths and weaknesses of project teams, and successes and failures of Project Management. Specifically, I will make the case that the Project Manager needs to
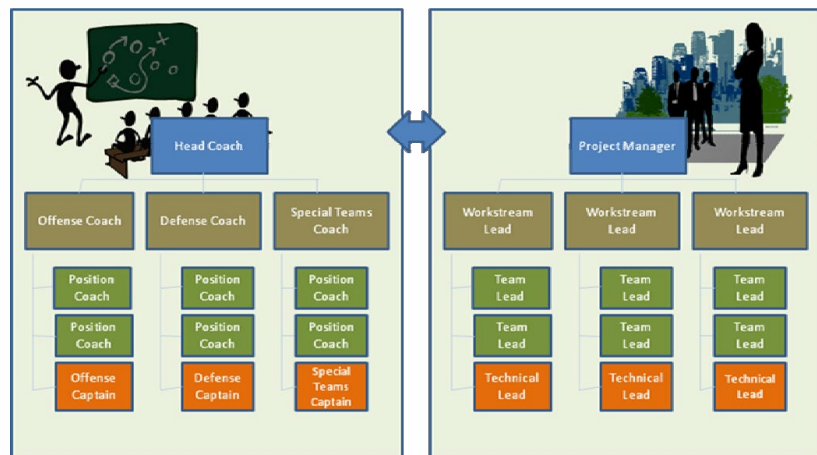
spend most of his/her time defending the team against risks and issues and ensuring that the stakeholders play their designated roles and stay informed.

2. STRUCTURE

The structure of a large project can closely resemble the structure of a sports team's coaching staff. Think of the Head Coach as the Project Manager. Many sports teams also have a coach to guide the offense (hitting coach in baseball, offensive coordinator in American football, offensive coach in soccer), as well as players who specialize in the skills needed for the offense, and sometimes additional coaches for specific positions within the offense (quarterbacks, strikers, batters). There is a similar structure for defense, with a defense coach, players with specialty skills, and coaches for specific skill positions (goalkeepers, linebackers, pitchers). Finally, the special teams (kicking/receiving in football, bench coaches in soccer and basketball, relief pitchers coach in baseball) have a set of players and often a coach. Large project teams, similarly, may have additional levels of Workstream Leaders, and Team Leads, who manage specific project components.

Most sports teams also have team captains on Offense and Defense, who are players with the experience and ability to lead the team on the field and make some decisions for those teams, under guidance and direction from the coaches. This is similar to the Technical Leads on projects, who make technical decisions and guide the less experienced staff in their work.

Some team sports use a playbook that describes the various plays the team can run, dependencies (e.g. what game situation or alignment might suggest using that play), and the role of each player in these plays. The Project Plan is analogous to the playbook, and drives the team toward its goals, laying out the tasks to be completed, the deliverables to be produced, the task timing and dependencies, and the roles of each player. Additionally, the communication plan defines the interactions of the team members and how they will be sure that all are moving in the right direction at the right time. These PM tools are critical to ensuring that the team is working effectively, just as team players need to know their roles in specific game situations, and to know the roles of other team members, so that there are no gaps or overlaps, and so that the players' actions are working toward the same goal.

The discussion below presents the premise that many project failures are a result not of technical execution issues, but improper priorities and attention from the Project Manager. With a competent management team and team leaders in place, the PM can focus on knocking down the barriers to the execution team, and enhance the chances of success.

3. OFFENSE

Offense in soccer, basketball and American football means to move the ball toward the opponent's territory, and to score points. The primary goal of the Offense is to score points (goals, baskets, runs, touchdowns).

The part of project activity that parallels Offense is the creation of deliverables, moving the project toward on-time, on-budget completion. In an IT build project, this would include the tasks associated with requirements, design, build, test, and implement (and the equivalent phases in a buy project).

The Project Manager plays a critical role in selecting the technical team to conduct the Offense tasks, in collaborating with the team to assemble the project plan, and in creating the communication mechanisms for a successful team. Frequently there are also Team Leads who help to direct the groups as needed in different specialties, parallels to the assistant coaches on a team. In addition, there are captains on the field, similar to the Technical Leads, who are doers but also leaders.

The coaches (Project Manager, Workstream Leads and Team Leads) are important in establishing the frameworks, processes and expectations for each group; however, it is the players who actually do the work of the Offense and the on-field captains (Technical Leads) who lead them in action while executing the strategies and tactics defined by the coaches. They must perform their roles as defined, and use their expertise gained from their careers and education to get the work done. The Offense, then, is guided by the managers (coaches) at a high level, but performed by the team and often managed at a micro level by the Technical Leads (team captains). In IT projects, this approach has gained additional traction with self-managed teams, especially in Agile methodologies.

In my experience, the tasks that I have grouped under Offense are not usually the ones that impact project lateness or functionality negatively, at least not on their own. If the team is properly formed and staffed, it usually moves forward with the deliverable work acceptably. This is one of the dangers of Project Management – the work seems to be getting done, but some of the "hidden" dangers are impacting the project and may be undetected until it is too late. While there are certainly failures on the technical side in some projects, my experience says these issues are usually overshadowed by other failures that I will classify below as Defense or Special Teams.

Remember that on Offense, the Project Manager and Team Leads must work with the team to set the expectations, the plans and the processes, but then must let the team execute (with, of course, sensible progress and compliance checks).

4. DEFENSE

If Offense is creating the deliverables of the project, then what is left to be considered Defense? Defense is essentially knocking down barriers to success. It entails stopping the people and events that could keep the project from achieving its goals. In most projects, events occur (e.g. staffing changes, business direction changes, priority changes, company finance changes) that have an impact on the project scope, funding, or direction. In some cases, there are also people who intentionally or unconsciously subvert the project for various reasons.

In sports, Defense is anticipating the strengths, tendencies and plays of the other team, designing defensive strategies and tactics to combat the threats, and then executing to prevent the other team from scoring points. Like the Offense, there are multiple positions involved that must be coordinated and standard strategies, formations and plays for specific game situations. In an IT project it is the responsibility of the Project Manager and Workstream Leads to protect the team, the sponsor and the project from problems that will interfere with achievement of the project goals. This is the role of Defense. It is also, unfortunately, one of the least understood and most under-executed aspects of Project Management, and therefore the reason that many projects go off track. While the project sponsor can also be a strong ally in guiding the Defense, the sponsor is usually not devoted full time to the effort, so the PM should take ownership of the tasks that constitute Defense. Examples of Defense tasks in IT Project Management include:

1. Acceptance Management
2. Risk Management
3. Documenting Assumptions
4. Change Management
5. Issue Management
6. Quality Management
7. Stakeholder Management
8. Team Management

4.1 Acceptance Management

There must be agreement with clients, and this agreement must be clearly documented. Agreement should be reached on expectations, commitments, requirements, actions and completion of work items. Anyone with a long history of project work can cite cases where midway through a project there was a re-organization, or a management change, and a new sponsor or key client was introduced to the effort. Such occurrences can always be trouble spots for a project. If prior agreements are not documented, the new client or sponsor will form and use his/her own opinions about what is the scope, what work products are complete, and what needs rework. Businesses often

write mission statements promising to "meet or exceed customer expectations and requirements" but fail to understand their customers' expectations or even their requirements.

4.2   Risk Management

Senior management commitment is the main driving force behind an organization's success. This commitment sets the objectives and vision of that organization. Therefore, senior management must establish a unity of purpose, believe in the benefits of Business Transformation, set the direction for the successful implementation of Business Transformation, and create an environment that encourages people to achieve this objective with their imagination and innovative ideas. Anticipating future trends and challenges can save a company in hard times and keep them ahead of the competition in good times.

The major key factors that senior management focuses on are:

1.   Customers and their environment
2.   Creating value for consumers and stakeholders
3.   Focusing on managing strategic partnerships
4.   Positioning the firm to optimize value creation
5.   Viewing profit as a measure of success, not as an end in itself

Risk Management at the project level is a classic Defense activity. To be successful, this activity must not only identify risks that could impact the project, but implement strong mitigation to control these risks. Too often, the risks identified at the start of the project are the ones that derail it later, due to ineffective mitigation. During every game, sports coaches evaluate their opponent's tendencies, plays and personnel, and modify their own strategies and player selections accordingly. Project Managers must also constantly evaluate risks in a changing business environment, and react.

4.3   Documenting Assumptions

It is a best practice to convert assumptions into risks, to control the uncertainty inherent in them. However, in all cases, every risk should also state the estimating assumption being used with it. For example, if a risk is high turnover that has been experienced in an offshore development team, then the risk should state what turnover is built into the project estimates that were provided (and estimating 0% turnover would be a case of poor defense), what positions are the biggest risks for turnover, and what actions will be taken to minimize the turnover, as well as to react when it occurs.

4.4   Change Management

Mastering Change is inevitable, and most projects have change processes. However, change is often incremental, and may not be treated according to the process if small. Also, change is sometimes painful to bring up. For example, if your client contact is not performing or is overburdened with other responsibilities and therefore not responsive, your schedule will be impacted, but bringing it up could negatively affect a key relationship. Managing change also means constantly evaluating if the existing project plan still makes sense or needs to be adjusted. Coaches in all sports must make player and assistant coach selection decisions all the time, and changes due to injury, personal issues, age, etc. must always be taken into account in these decisions. Failure to manage change aggressively will certainly cause project issues, just as it can cause good teams to have losing streaks.

4.5   Issue Management

Think of Issue Management as Risk Management at lightning speed. Issues are essentially risks (not always anticipated) that have occurred, so the time to react is usually very short, and the peril of not reacting or over-reacting is often very high. Many PMs are measured by their skill in Issue Management as much as they are by project results. It is what cements the confidence of the client and team, and keeps everyone focused on the end goals, not the short-term problems. Sports teams that get behind and come back, or that overcome injuries, penalties and bad breaks to win, are masters of issue management.

4.6   Quality Management

In most sports, performance statistics are used to track the success of offenses and defenses, as well as individual players. In your projects, you need to set objectives as well, for the quality of the project deliverables and the project progress. Project planning tools offer much for this purpose related to task completion timeliness. Product quality can be measured by defects, amount of change, compliance with requirements, and client satisfaction ratings. You should establish these measures early, gain agreement with customers and team, and be sure that there are accurate measurement processes and technology in place to make them easily available. Be sure that exceptions are highlighted and treated quickly for continuous improvement. Short-term failures in productivity or task completion can cause long-term lateness and overruns, if not caught and addressed quickly.

4.7 Stakeholder Management

It is critical in a project to identify all stakeholders, who is likely to be in favor of or opposed to the project, what are the expectations of each, who are the decision makers, and who might play an obstructionist role. In all cases, there is a need for ongoing communications with the stakeholders to monitor their ongoing sense of the project and changing needs, and to react to their actions and comments relative to the project. This is similar to a sports team reaching out to their paying customers, fans, community leaders and investors. Success can be very difficult without gaining the involvement and support of those impacted by the effort.

4.8 Team Management

Team management is a complex set of tasks that are critical to keeping a team functioning smoothly. It includes performance evaluation for employees, tracking performance of contractors and taking action when needed, building and monitoring team morale, ensuring that tools are available and working effectively, arranging training, coordinating with support groups (HR, Audit, Recruiting, Contracting, etc.), identifying and treating weak spots on the team, and more. Failure in this area can lead to employee morale issues or turnover that can be devastating to the team. How many sports teams have had poor seasons, resulting from a coach who was just not in tune with his players, or who did not react to a significant team weakness?

A Project Manager should be focused on these defensive activities throughout the life cycle, as a primary role. Let the Team Leads and Technical Leads control the Offense (with selected controls on the results), but don't ever let go of the Defense. Too often the PM becomes too involved in the day-to-day work (the Offense) and loses track of the Defense, only to have the risks and issues disrupt the effort of the team.

In addition, most of the Defense tasks should be added to the Project Plan, so they are tracked and not forgotten in the heat of the battle. Risk mitigation actions should be in the plan, risk reviews should be in the plan, deliverable acceptance should be a task for each deliverable, and quality reviews and quality audits should be tasks in the plan at appropriate spots. While Issue and Change Management are more difficult to build into a plan, there are techniques to build these in as contingency tasks that can shift in time or location as needed.

5. SPECIAL TEAMS

In sports, special teams are used for situations that require players with unique skills, such as late-game scoring specialists in soccer, relief pitchers in baseball, or kickers in American football. These are tasks done at various points in a game, but not on most plays. The specialized function calls for specialized personnel, alignments, and plays. Similarly, IT projects have specialized needs that occur at various stages of a project. In most cases, experts are called in who may not be full time team members, and who may be borrowed or hired for short periods, and come to the project with very strong domain knowledge but little project knowledge. Examples are: architecture design, some types of product testing, project compliance audits, deployment, and training. Often, these functions require specialized knowledge and/or time commitments that the project team does not possess. It is critical while planning the project that the Project Manager takes these into account, makes arrangements to acquire the staffing needed, tracks the dependencies for these, and coordinates the availability of the staff to match dynamic project scheduling. It is also important to maintain a dialogue with these people, who can not only add value for the designated role, but can give an outsider's view of the project issues and risks at various points. Getting an outside view of the project from other teams helps to keep the team from missing some signs of trouble, and inserts best practices into the mix.

This is another area where PMs often lose the game. Failure to plan for the needed resources in advance and to involve them in the critical facets of the project can result in completing the deliverables, then finding that they cannot be implemented because a control point was missed or a critical technical requirement was not met. As per the comments under Defense, make sure that the tasks to acquire and orient specialized resources are in the Project Plan, as well as the tasks executed by these resources.

6. GAME MANAGEMENT

The Project Manager's role is a difficult one. There are so many components of a project effort to plan, track, and monitor that the effort can seem overwhelming. Given 40 hours in a week, or even the 60+ worked by many PMs, it is difficult to stay on top of everything that needs to be done. My advice for success is to be involved heavily at the start in selecting and establishing your management team, including Technical Leads. Involve them all in the planning process, and establish accountability for each. Depend on your Team Leads and Technical Leads to direct the Offense – it is their specialty. Establish clear control points and short-term goals that you can track to ensure they are still on target. But focus more of your time on Defense, and on Special Teams. You may lose a little of the "glamour" of direct involvement in completing technical deliverables, but you will gain much more in the roars of success at completing on time, within budget and with great client satisfaction.
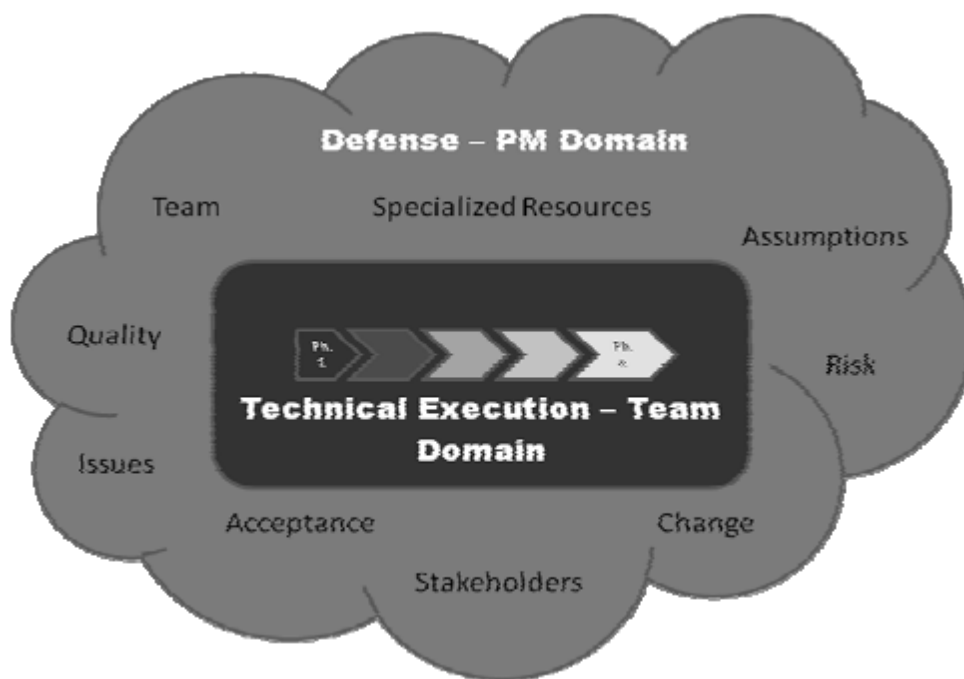
7. ABOUT MICROAGILITY:

MicroAgility, Inc. is an award winning boutique business and IT consultancy. To learn more about MicroAgility, please visit us at www.microagility.com. Marshall Checket is a Senior Project Manager with MicroAgility and is responsible for spearheading large projects and programs.