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Beer - The Key Ingredient to Team Development

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Beer – The Key Ingredient to Team Development

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Abstract

This paper will discuss the importance of building a social connection with your team members to effectively communicate, problem-solve, and ultimately work together as a team. When putting together a new team, they typically must go through five stages of development including: Forming, Storming, Norming, Performing, and Adjourning. These stages represent piecing together the team, having them test each other's strengths and weaknesses, conforming to rules and behaviors of the team, functioning as a unit while working interdependently, and finally transitioning onto other teams. The goal of any project manager is to get his or her team into the Performing stage to ensure they are meeting project objectives while minimizing conflicts or disagreements. The goal of this paper is to demonstrate how the social aspect of team building helps to remove the constraints of the work environment, allows the team to bond and empathize with each other, and ultimately inspires team members to motivate each other.

1. Introduction

Vacuums are an excellent tool to clean the carpet, but are not a realistic description of the area most of us work in. Other than a self-employed entrepreneur, the majority of employees of any company must interact with multiple people and teams on a daily basis. While it is unlikely that a person will be able to choose every individual that he will have to work with, a manager has the capability to choose his own team. Having a team that works effectively and is able to deliver their projects on time will not only benefit the company and its bottom line but will make the job of everyone on the team that much easier and enjoyable. A manager cannot successfully lead his team, inspire them to achieve, and reward them for their accomplishments if his time is monopolized with putting out fires and resolving intra-team conflicts. The goal of any successful leader is to support his team, lead by example, encourage creativity, reward good behavior, and focus on the future.

Having a team of technically proficient or qualified individuals is an important component of the team development process, but by no means should this be the only ingredient. A team's chemistry also has a lot of influence over how the team will work together, how weaknesses will be supported, and how the team's project will ultimately come together. In the office, team members are required to work together but it is that choice of team members wanting to get together outside the confines of work that brings a team truly together. This social bonding usually takes place after work and on the weekends with a few beers and informal discussions about business or personal life. On the surface these gatherings may not seem all that important to a business, but this is actually the foundation or mortar that strengthens a team, imparts trust upon each other, builds bonds, provides empathy, and motivates each other to help the team and not just themselves. What distinguishes the composition of a "good" team from a "great" team is identifying those individuals that "have" to work together as opposed to a team of those that "want" to work together.

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2. Scope

This paper will review the multiple stages of team development and identify how the social aspect of the team can influence the team's strength and ability to perform. It will align with Bruce Tuckman's model of group development¹ and demonstrate some key management techniques for transitioning through each stage. Along with discussing effective management strategies, the topic of beer itself will be addressed and how it plays a key role in team development. It will be important for managers not only to understand how to build a great team, but to continue to manage and inspire them to achieve as well. While this paper may not build your team for you, it will provide a foundation for identifying what constitutes a great team, and the directional means of managing them effectively.

3. Introduction to the Team Development Stages

Team development is a process of putting together various members, having them integrate with each other, focusing on a team objective, working together to resolve conflicts, and ultimately working towards a common goal. *“The most distinguishing characteristic of a team is that its members have, as their highest priority, the accomplishment of team goals. They may be strong personalities, possess highly developed specialized skills, and commit themselves to a variety of personal objectives they hope to achieve through their activity; but, to them, the most important business at hand is the success of the group in reaching the goal that its members, collectively and with one voice, have set.”* (Quick, 1992) The team is there to support one another, openly communicate, and develop collaboration.

Research by Bruce Tuckman has shown that there are multiple stages a team will go through from inception to disbandment which include: Forming, Storming, Norming, and Performing. The final stage, which was added later, is Adjourning which describes the team splitting up. A manager is typically focused on getting his team into the Performing stage relatively quickly so the team can begin providing value back to the business. Having the team get comfortable with each other socially, i.e. having a beer

¹ Bruce Wayne Tuckman (born 1938) is an American Psychologist, who has carried out research into the theory of group dynamics. In 1965, he published one of his theories called "Tuckman's Stages".

after work, helps break down preconceptions, forms relationships, and begins building trust. The initial stages of team development center on the team feeling-out each other's strengths and weaknesses and finding one's own place amongst the group. Employees feel more comfortable discussing issues or working out problems with people they see as friends, not just coworkers. Getting together outside of work will enable the team to learn each other's likes and dislikes, personality traits, background skills, and how they can help each other. Knowledge sharing is also enhanced by these social gatherings and tends to make team members more open to communicate with each other and to become familiar with each other's current work-related tasks.

3.1. Forming Stage

The initial stage of team development is the Forming stage and is characterized by the gathering of individuals and bringing them together as a team. This is one of the most important stages of team development and relies heavily on the manager's ability to choose the right people and the right dynamic for the job. A manager has to have an idea of what that dynamic is going to be prior to recruiting so that he can "weed-out" any candidates that do not fit that model. While each candidate will have their own unique strengths and weaknesses, it will be important to find those that are capable of socially interacting at the same level. Studies have shown that *"social cohesion offered the best prediction of individual performance, suggesting that improved individual success may be due to the greater effort invested by individuals in the context of a socially cohesive team. ... there is considerable anecdotal and research evidence that teams in high cohesion perform better than do teams low in cohesion"*(Coutts, Gruman, and Schneider, 2005) Therefore, having a team that takes it upon themselves to get together for a beer after work, meaning they are inclined to socially bond, will translate to a better performing team.

Building a team from scratch means finding well-rounded individuals that are capable of doing the job but also flexible enough to work with others. While no two teams are entirely alike, a manager must be cautious to find individuals that are like-minded and do not throw off the balance of the team's dynamic. Motivated individuals inspire others to be motivated and similarly if one member has a low morale or

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disinterest, it may bring down the morale of the team. Similar to the old saying, “all it takes is one rotten apple to spoil the bunch.”

After the right members are chosen, the Forming stage begins with team members being introduced to one another and to some of their initial tasks and objectives. Members tend to be more reserved at this stage and are focused on information gathering. Senior members of the team tend to be a bit more relaxed and are comfortable exhibiting acceptable behavior. For a manager, this is a good opportunity to take the team out to lunch to have the team get familiar with each other. Conversations usually loosely discuss people’s previous work history, where they grew up, and where they went to school. Team members begin to find commonalities with one another and associate with similar experiences or places they have been. This begins to build the groundwork for leading into the other stages of team development.

3.2. Storming Stage

Teams will quickly move from the Forming stage and into the Storming stage when they begin testing ideas with each other. There is usually a fair amount of discussion around these ideas and healthy opposition to test the idea’s strength and validity. Initially the team should be allowed to interact independent of management’s influence to help strengthen their ability to resolve conflict amongst themselves. This will force the team to trust their own decisions and to enhance their working relationships. There will be times when a manager will need to intervene or help make the final decisions and this will help reinforce the manager’s role.

3.2.1. Conflict Resolution

Ensuring that the team does not get stuck indefinitely in the Storming stage, the manager will need to keep a close watch of the team and their interaction with each other. Should an issue arise that the team cannot resolve by themselves, the manager should help them come to a decision. A good manager should be able to take an unbiased approach, evaluate all sides of the issue, and provide resolution. Hopefully the resolution addresses the root of the problem and leads to a favorable outcome for opposing parties. There will be times when this is not always the case, and studies by Kenneth W. Thomas

and Ralph H. Kilmann have been done to break conflict resolution into five different styles, known as the Thomas-Kilmann Conflict Mode Instrument.

The five styles were categorized based on the level of assertiveness one has to satisfying their own needs and how cooperative they are to addressing the other person's needs. *“If you are assertive without being concerned about the other person's concerns you are being “confrontational” or “competitive,” where you seek to get what you want in a forceful way. If you are assertive but take the other person's concerns into account, you are working together towards a “collaborative” resolution. If you are not assertive and focused on satisfying the other person, you are being “accommodating.” If you are neither assertive nor dealing with the other person's concerns, you are “avoiding” the issue. And finally, if you are each giving and taking a little you are “compromising.”* (Scott, 2007) All team members should be aware of these different styles and should help each other to confront the underlying issues where possible. Personality tests such as Myers Briggs Type Indicator (MBTI)² or Birkman Method³ are very useful team development activities that can assist in conflict resolution and leadership development. Having the team work together to resolve conflicts will also help in identifying their role amongst the team.

3.2.2. Role Assignment

The Storming stage is also where team members begin to test their roles within the group and identify leaders or stronger personalities. The manager can allow the team to interact independently but must still provide direction and leadership to keep the team focused on positive development and communication. One of the more important aspects of the Storming stage is to ensure that appropriate roles are being assigned and accepted by the team members. This is supported by studies that show *“research on how role clarity, acceptance, and performance affect social cohesion and task cohesion has yielded significant conclusions... the major finding with respect to member roles and cohesion is that, of the three aspects of member roles, role acceptance has the most*

² The Myers-Briggs Type Indicator (MBTI) assessment is a psychometric questionnaire designed to measure psychological preferences in how people perceive the world and make decisions.

³ The Birkman Method® consists of a 298-question personality assessment and a series of related report sets that facilitate team building, executive coaching leadership development, career counseling and interpersonal conflict resolution.

influence on team cohesion (Dawe & Carron, 1990). Thus, although it is important for roles to be clear and to be filled by competent people, with respect to team cohesion, the greatest benefit will accrue when team members accept the role they are asked to fill.” (Coutts, Gruman, and Schneider, 2005) In order to progress beyond the Storming stage, the team must be comfortable in their assumed role. This is usually supported by the team’s tolerance and patience for each other and willingness to compromise.

3.3. Norming Stage

Commotion amongst the team begins to calm down in the Norming stage where they begin agreeing on ideas, rules, and values. Roles are starting to fit, commonalities are being identified, and relationships are beginning to strengthen. The team is quite comfortable in their surroundings and a certain level of trust has been developed amongst the group. Knowing each other’s strengths and weaknesses the team begins to rely upon each other for help and members are much less hesitant to seek the advice of their team. This level of comfort begins to turn coworkers into friends and social bonds begin to develop. The manager should encourage social gatherings by continually seeking the company of the entire team for lunch. The manager should not feel the need to pay for the entire bill but instead it should be treated as a group of friends going out to eat. This bonding experience is enhanced when conducted offsite or someplace other than the cafeteria at work. When offsite, team members begin to feel more open to speak freely about work which includes the good or sometimes bad times they are having. A fair amount of discussions about troubling things is alright but the manager should encourage discussions about the positive aspects of work and the future. This friendship and team cohesion is enhanced by after-hours social gatherings where the team feels they can “loosen the tie”, have a few beers, and tell stories. Whether the stories are about work or personal life, members begin to empathize with each other, and find enjoyment in each other’s company.

One of the components of team development that really helps members throughout the Norming stage is beer. Beer is looked upon as a social element, often associated with having fun, and usually being outside the confines of work. This mental separation between the office and time of relaxation is further emphasized when enjoying

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a beer with your team. Beer is brewed in a variety of styles, has unique aromas, incredible flavors, and varying strengths making it enjoyable by almost anyone. In fact, *“A recent survey has revealed that the world's most popular beverage is beer. AC Nielson, a company that does international marketing analysis, recently carried out the survey. The second and third most favorite beverages in the world come as no surprise. In second were soft drinks and in third came wine.”* (Griff, 2007) While beer may not be the drink of choice for everyone, it does have some important qualities that make it a useful team development tool. Typically beer is easy to drink and when consumed in moderation, it helps inspire conversation. Beer is also depicted in the media and advertising as having fun or enjoying time with family and friends. Therefore encouraging a fun team building atmosphere is easily accomplished by heading to the pub to have a beer after work.

Beer is also a useful tool to indirectly improve a team’s performance at work. While many may not be aware of it, a team’s cohesiveness has been found to have a direct relationship to the team’s performance. In fact, studies have shown that *“low cohesion among team members seemed to be connected not only to poor performance but also to low levels of satisfaction and confidence in the team. Research has shown that cohesion is related to a variety of nonperformance outcomes for both the individual and the team. At the individual level, members of a cohesive team tend to be more satisfied and committed to the team. At the team level, cohesive teams tend to be more confident and interact with each other better (e.g., with respect to communication).”* (Coutts, Gruman, and Schneider, 2005) This does not mean a manager should have his team consume beer while working, but rather the social aspect of consuming beer together after work helps build the team’s cohesion, and hence its performance.

While it would be great to assume that beer is everyone’s drink of choice, it is possible that some team members choose not to consume alcohol. In these situations a manager should be sensitive to the needs of the team and identify other social outlets like spending an afternoon at the beach, hosting a barbeque, or involving the team in a sport like bowling or softball. Another aspect managers may have to contend with is a team member’s commitments to family or life outside of work. If social gatherings after hours can not be accommodated due to external commitments, managers should attempt to

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allocate time for team building events over lunches or afternoons at the end of the work week. An occasional Friday spent at the park with the team, on the golf course, or the batting cages can go a long way toward social development. Managers should have an understanding of the team's interests and attempt to find those activities that fit their unique style.

3.4. Performing Stage

Getting to this stage is the ultimate milestone in the team development process because it is here that the team really begins to function as a unit. Work is conducted in an efficient manner, the team is motivated, and they are communicating with one another to resolve issues and identify solutions. A good manager will have some direction and oversight of the team but his required involvement will be much less resource intensive.

Teams in the Performing stage are much more focused on achieving goals now that all other aspects have been sorted out. It will be the manager's responsibility to keep the team focused, motivated, and inspired to achieve. *“Research has revealed several important aspects of effective goal setting. Goals should be specific, realistic, and challenging. The time-frame should not be ignored when setting goals, and both short-term and long-term goals should be used. Evaluation and feedback based on these goals should be carried out in a consistent and timely fashion. (Weinberg & Gould, 1999)”*

(Coutts, Gruman, and Schneider, 2005)

Along with setting goals, there needs to be a time to recognize achievements and reward the team members for their accomplishments. Rewards should be consistent with the efforts contributed by the team. Larger projects that take six months to several years of effort should have greater rewards than those projects that took a couple weeks to accomplish. Keeping the reward structure aligned to performance keeps the team motivated and inspired to achieve. Studies have shown that *“people will strive to achieve 'hygiene' needs (policy, work conditions, salary, security, status) because they are unhappy without them, but once satisfied the effect soon wears off - satisfaction is temporary. Then as now, poorly managed organizations fail to understand that people are not 'motivated' by addressing 'hygiene' needs. People are only truly motivated by*

enabling them to reach for and satisfy the factors that Frederick Herzberg⁴ identified as real motivators, such as achievement, advancement, development, etc., which represent a far deeper level of meaning and fulfillment.” (Chapman, 2008) Keeping the team motivated and focused on the future is that which will foster the team’s continual success.

3.5. Adjourning Stage

The final phase of the team development process is the Adjourning stage which is ultimately the disbandment of the team. Eventually all great things must come to an end and even the greatest teams will eventually meet their goal and find other conquests to focus on. As a manager this is a time to recap the successes and achievements of the team and to distribute future contact information. In today’s age of technology it is much easier for team members to stay in contact with each other as opposed to times of the past. Reflecting on the accomplishments of the team it is important to recognize the key elements that attributed to the team’s success such as cohesiveness, cooperation, trust, collaborative competency, and the willingness to engage socially. Noting these success factors should also be coupled with the ability to identify weaknesses or hindrances in team development.

4. Factors that Effect on Team Performance

A great manager is one that not only leads by example and spends plenty of time nurturing the team but also has the forethought to identify issues before they become a major problem. Managers should facilitate conversation amongst the team members and encourage them to interact socially as well. Teams that work well socially have been proven to outperform those that do not. If a manager notices that his team’s performance is beginning to slip, it is possible that they are not socially engaging to the level needed. In fact there have been various studies conducted to validate the effects of social interaction on a team’s performance.

⁴ Frederick Irving Herzberg (1923 - 2000) was a noted psychologist who became one of the most influential names in business management. He is most famous for introducing job enrichment and the Motivator-Hygiene theory.

4.1. Social Interaction

A team's ability to perform is not only limited by its team members' proficiency in the subject matter but also by how well they work together. Teams of individuals that operate independently may identify some initial gains in output, but will eventually fall behind when it comes time to integrate the pieces of each member. This efficiency issue is even more apparent when discussing virtual teams. Virtual teams are typically situated in multiple locations and therefore lack social and nonverbal cues which can hinder the formation of deeper interpersonal relations among team members. *“Virtual teams must create the “gel” or sense of belonging that provides the basis for synergy and optimum exchange of information among diverse members (Handy, 1995; Melymuka, 1997). Some evidence already indicates that teams that interact virtually report their members have less attraction to each other, or less of a gel that holds them together (Kimball & Eunice, 1999).”* Virtual teams tend to communicate more about logistics and task requirements rather than relationship building. *“Over time, a lack of attention to building the interpersonal process associated with effective team development may lead to less efficient interactions and exchanges of information (Warkentin, Sayeed, & Hightower, 1997). ... without an adequate exchange of information a virtual team has little chance of building trust and being successful with either its most basic or more challenging tasks (Townsend et al., 1996).”* (London, 2001)

4.2. Communication

One of the biggest, if not the most important, components of team performance is how well they communicate together. By the very definition of a team, it requires multiple people and hence, interaction of these people. This interaction is facilitated by the exchange of information either via the phone, email, face-to-face conversation, or even instant messaging. When these communication lines break down, efficiency begins to slip, mistakes begin to increase, trust starts to deteriorate, and ultimately the project begins to suffer. It is ultimately the manager's responsibility to ensure his team is working like a “well-oiled machine” and without issues. Should communication issues begin to surface, it is the manager's duty to identify this and implement corrective action. One means of doing this is to incorporate more social interaction with the team members

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outside of usual work. The manager should initiate team lunches on a regular occurrence and consider “happy-hour get togethers” every once in a while. If the team is not inclined to interact at this social level, perhaps the manager needs to re-evaluate the existing team members. While this is not always the solution, it has been proven that enhancing cohesiveness can lead to performance improvement.

4.3. Trust

Another one of the core building blocks of team development is trust. This is typically something that is earned over time that is strengthened by working together to achieve the same goals. Teams develop trust in their teammates as they struggle to get their projects done, and cope with the same frustrations. Team members must rely on the ability to openly communicate with each other, otherwise the team’s performance will begin to suffer. It has been shown that, *“if team members are unable to freely exchange information in a virtual team context, then they will be less capable of developing interpersonal perceptions that provide the basis for trust formation. Thus, how information about the team, its membership’s capabilities, and the work is exchanged can affect the conditions for trust formation, which in turn, can affect subsequent interactions and ultimately team performance.”* (London, 2001)

Working through the same troubling issues and celebrating mutual accomplishments will enhance a team’s trust of its members. This “leveling of the playing field” allows team members to feel they are equally committed to the project and share the same risks as well as rewards. Although a manager cannot impart trust from one team member to another, he can help to build that relationship by fostering the appropriate team building activities amongst its members. Again this falls back to ensuring the team is comfortable socially interacting with each other and each member has the personal desire to do so.

4.4. Effective Delegation

Teams perform at their best when each member contributes to the success of the team. While it is important to have a great manager or leader, empowering the team to succeed on their own gives the team a sense of personal achievement. Referring back to Herzberg’s studies, he identified that achievement, recognition, the work itself,

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responsibility, and advancement were the true motivators of an employee. As a manager, being able to delegate responsibility to the team will enhance their motivation and sense of contribution to the success of the company. This will ultimately inspire the team members to achieve their goals and enhance their cohesiveness or desire to succeed as a team.

5. Conclusion

A team's ability to effectively work together can be indirectly tied to their ability to socially interact with each other. While a manager is responsible for putting together the team, and providing direction, the members themselves are ultimately responsible for communicating, adapting, conforming, and ultimately performing as a team. Studies have shown that team performance can be indirectly linked to social interaction and therefore teams that drink beer together tend to outperform ones that don't. Regardless of whether a team consumes beer together or not, if they are interacting socially on a regular basis their cohesiveness will be strengthened as well as their overall output.

6. References

- London, Manuel (2001), *How People Evaluate Others in Organizations*. Philadelphia, PA: Lawrence Erlbaum Associates.
- Chapman, Alan (2008). Frederick Herzberg, Motivational Theory. Retrieved April 26, 2009, from Business Balls Web site: <http://www.businessballs.com/herzberg.htm>
- Coutts, Larry M., Gruman, Jamie A., Schneider, Frank W. (2005), *Applied Social Psychology*. Thousand Oaks, CA: SAGE Publishing
- Griff, (2007, March). It's Official: Beer is the World's Most Popular Beverage. Retrieved April 26, 2009, from Associated Content Web site: http://www.associatedcontent.com/article/195692/its_official_beer_is_the_worlds_most_pg1.html?cat=22
- Quick, Thomas L. (1992), *Successful Team Building*. New York, NY: AMACOM Div American Management Association.

Scott, Gini Graham (2007), *Disagreements, Disputes, and All-out War*. New York, NY:
AMACOM Div American Management Association



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