

IMPROVING TEAM RESULTS BY UNDERSTANDING SOCIAL STYLE AND PROBLEM SOLVING DIVERSITY

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Diversity has become a greatly overused and abused term within industry. It started out as an effort to correct past abuses in the treatment and advancement of women and minorities. As a past member of a Fortune 50 chemical company's women's diversity team (and the father of 4 daughters!) memories of some of the original meetings focusing on statistics, who had what kind of job, distribution of performance evaluations, promotion actions, etc. are still present. Some mistakes were made in these efforts, creating credibility for the entire diversification effort. Eventually the focus turned in an improved direction--- advancement opportunities, the use of talents and skills, and the elimination of barriers to those opportunities. We began to look at positive and different contributions from varied backgrounds and perspectives, moving away from a negative to a positive focus on diversity efforts. This paper and presentation argues that we need to move a step beyond this and begin to look at diversity in a different light—its ability to pro-actively affect the bottom line results of engineering teams. Diversity in this case is not gender or racially measured, but the style in which individuals interact and problem solve, which is exactly what is exactly what happens within a team. There is an overlap to some degree with gender and racial diversity issues, but the overwhelming emphasis is on the focus toward style of relationships and problem solving.

Why do we form teams? There must be a good reason as there are thousands of them being created every minute in every type of organization around the world. This wasn't true 25 years ago. The reason is that we have discovered that teams can accomplish things that an individual cannot. Teams are formed for any number of reasons, including project execution, planning, and decision

making. Frequently these tasks overlap with each other due to the complexity of the problem at hand. The most frequently used method of deciding who is on any given team is a combination of:

- (1) Skill match with the objective of the team's objective
- (2) Time availability within the constraints of the project's goals and deadlines
- (3) Consideration of growth experience for the team and/or the individual

Very seldom do we consider the psychological or problem solving profiles of the individuals that make up the team. We may occasionally do some post team formation "exercises" to emphasize the concept of a "team" vs. an individual, but seldom is this taken to a serious practical level which can significantly affect team performance in a significant way. It is not unusual for any particular individual to know some kind of psychological profile information about themselves (MBTI™, HBDI™, etc.) as a result of individual coaching or a general organizational training program. What is very unusual is the proactive use of this information within a team setting. There are some pros and cons to doing this (both will be discussed), but overall there have not been enough trials or experiences reported to begin to worry about the cons.

Social Style Assessment

Let's start with one of the more familiar psychological testing instruments, the Myers Briggs MBTI™ or one of its cousins such as 16Types™ and Insights™. Each of these specific instruments has their pros and cons and debating these is not the point of this paper. The use of one of these is important in measuring individual, and indirectly team, approaches to other people and problems. All of these assessment instruments measure various aspects of how people relate to each other as well as how they assimilate information and process it. They also measure an individual's desire or need for closure.

These assessment instruments are available both in hard copy and on-line format through a number of vendors. They generate information relating to the individual's styles in the following four areas:

(E) Extroverted vs. (I) Introverted

The primary way a person is "energized"—interaction with others or solitary activities? 75% of the population are "E's".

(S) Sensing vs. (N) iNtuiting (Note: N is used here to distinguish from the use of "I" in "introverted").

The primary way a person assimilates and gathers information—concrete and experiential or abstract and symbolic? 75% of the population are "S's".

(T) Thinking vs. (F) Feeling

The primary way a person assesses information or a situation—by criteria or worth and values? The population overall is equally distributed, but 2/3 of men test as "thinkers" and 2/3 of women test as "feelers".

(J) Judging vs. (P) Perceiving

The primary way a person orients to the outside world and makes closure—following a plan or keep options open. This split is again 50/50 with the population.

It is important to recognize that there is a continuum along each of these preferences and an individual does not necessarily act or orient in a particular way at all times. The feedback information from any of the commercially available assessment tools provides this kind of preference strength information. The stronger the

preference toward one or the other extreme, the more predictable someone's behaviour will generally be, but it is important that individuals, managers, and team associates not overly "pigeon hole" or start to label an individual in a negative way. It is also important to recognize that research has shown that these attributes are not evenly divided in the population.

Within organizations, distributions can be widely skewed from the general population as hiring people like ourselves is a normal process. Research has also shown wide variability in the Myers Briggs distribution among certain professions as well as "levels" of management within organization (for example, 80% of corporate managers are ESTJ's (extroverted, want hard data, judge on facts, want deadlines and closure). Less than 12% of the population is similarly disposed. Health care professionals, especially nurses, are almost all SFP's (focused on data, patient feelings, possibilities and options).

There will be a mixture of these attributes within any team. Since these are personal psychological tests whose results are known only to individuals, only they can grant permission to use this information in a group setting. It is important that any group leader obtain this permission prior to the pro-active use of this information during group activities. Assuming this is the case, consider these thoughts on the pro-active use of this assessment information:

E vs. I. As team problem solving and analysis progresses, make sure that all the "I's" (the more introverted individuals) are participating and that input is coming from all group members. This is important during problem definition, idea generation, and concept prioritization. Making sure that all participate in the discussion, especially in the framing of the problem, is critical.

S vs. iN. Sensors will contribute naturally to the data input aspects of problem definition. However, there may be “soft”, non-factual information that is needed as well (for example, input from people involved in a problem, not just the data from the instruments). Make sure that you have both prior to problem solving. It is frequently the case that the root cause of a problem is on the people side and not the technical side. Since women are more likely to have a higher tendency toward being “N’s”, their input on the people and organizational impact of projects and changes can be extremely valuable. If a woman is also an “I”, their input may not surface readily.

T vs. F. When ideas are assessed and options being chosen, the “T’s” will want to decide based on all the hard data or will suggest that additional hard data be collected. “F’s” will want to consider the people impact of idea implementation. Both are important and needed. A person within the group with a combination of I and F profiles will have difficulty expressing concerns about people issues—make sure that you get that input.

“J”vs “P”. When a team session or effort is complete, there will be a list of ideas and options that need to be prioritized for action and/or further study. The “J’s” will want to make an immediate action plan for the short term, immediate impacting ideas, while the “P’s” will want to hold off making decisions, especially on ideas that may require additional information to be proved valid and may, after that effort, be better ideas than those chosen for immediate implementation. Again, both are probably needed, so use the different styles to rank and prioritize the ideas separately. Again a reminder that if the group has “IFP’s” within it, getting longer range people related aspects discussed may be an issue. Using this information can assist the team leader in maximizing value for their organization.

One can imagine a team, especially in the product development area, whose characterization might be the total antithesis of what would be desired in a team. For example, a team formed primarily of “STJ’s”, assigned to analyze the affects of a new product on family life or in the patient setting of a hospital may truly struggle with the assignment. In this case it would be imperative to identify some “NF” voices to get an alternative perspective.

There has been no significant scientific study that this author is aware pertaining to differences between minorities and whites in terms of Myers Briggs assessments in large populations, but there are some significant differences that have been measured between men and women, as mentioned previously.

Another point worth mentioning in this short summary is that a given Myers Briggs profile also carries with it an “auxiliary” profile that describes a person’s behaviour in a stressful situation. This information can also be used pro-actively by the team leader in a positive way.

Problem Solving Style Assessment

In addition to these aspects of social style interaction and expression, there is another important dynamic to consider and that is how an individual approaches problem solving. This type of measurement is not as well known or used, in part due to the nature of the training and distribution of the test instrument, but nonetheless provides another important aspect of assessing the character of a team.

The Kirton KAI™ and a similar instrument, the BCPI™, measure the style (not the capability) of an individual’s problem solving. It is possible to have a group of people with very similar Myers Briggs profiles who may relate very well in a social situation, but who will have a great deal of difficulty relating in a problem solving situation

and not understand why. The KAI™ is a one page questionnaire with 32 questions (range of answer 1-5) that sums into a total KAI™ score, ranging from 32-160. The mean and two sigma deviations are in the range of 90 +/- 20. This assessment instrument, similar to the MBTI™, has been globally used and validated over a 50 year period. This score is the sum of three individual sub-scores that measure:

- (1) Originality-- an individual's capacity to generate a large quantity of ideas
- (2) Rule and group conformity (how important is it to an individual that consensus is maintained, agendas are followed, etc.)
- (3) Efficiency (is a person's thinking and problem solving process externally visible?).

These three sub-scores are usually, but not always, consistent with each other. Total KAI numbers below 90 indicate a more adoptive, structured individual and numbers higher than 90 indicate individuals who are inherently more innovative and un-structured.

Individuals with differences in KAI™ profiles greater than 15-20 points can expect to have problems in collaboration and differences in the 35+ range are a foundation for serious conflicts. This is possible even if the individuals' MBTI™ profiles are similar. A study of both MBTI™ and KAI™ profiles for individuals involved in organizational innovation are available in many references available through on line searches.

If this information is available, it can be used in the following ways by a team leader:

Combining MBTI™ and KAI™ Profile Information to Optimize Team Performance

Though it is not always possible to have sufficient choice about team membership, some basics should always be considered:

(1) The quantity of ideas expressed by high KAI™ individuals (especially if they are also strong “E” Myers Briggs individuals!) may overwhelm those expressed by low or adoptive KAI™ (especially if they are strong “I” Myers Briggs individuals). Adoptive KAI™ individuals tend to “filter” ideas prior to expressing them. This filtering may actually be a mental decision that an idea is not feasible. It is important for the team leader to ensure that these “filtered” ideas be discussed and further evaluated. Adaptive KAI™ individuals should always be asked about ideas they had but may not have expressed. People with adaptive KAI™ profiles can provide great insight into the practical aspects of implementing ideas. One interesting exercise is to separate the group into adoptive and innovator KAI™ individuals and ask each to sort and prioritize the output of an idea session. From a diversity standpoint, consider an introverted female with an adaptive KAI™ profile. A team leader would need to make a very special effort to bring her ideas into the discussion.

(2) Differences in KAI™ profiles can also be used to analyze the problem solving process itself. Individuals with highly adoptive “R” (rule and group conformity) profiles can assist and serve as organizers in driving a team session to a logical conclusion. The difference in “E” value can be used to draw out ideas that at first may appear unusual, but with further consideration by others, may find practical expression.

(3) Composition vs. Objective. Is the composition of the team appropriate to its objectives? Of course, technical competence and experience are part of this decision, but consider a team comprised primarily of “STJ’s” and strongly adoptive KAI™ individuals (profile less than 80) being asked to work on the issue of a new corporate policy and its effect on employee morale. The possibility of this team

being able to accomplish this type of goal without outside assistance is very slim. Similarly, a team composed of high KAI™ individuals asked to come up with a detailed plan for a short term project with key deliverables will also struggle.

(4) New product development teams need special consideration. Frequently, the objective of these teams can vary from making a minor change to an existing product or process to deal with a short term customer requirement all the way to a team being asked to develop a next generation product or service to replace the current product or service. In this case a broad range of capabilities and insights may be required. Without something in addition to “who is available”, the results of these efforts will be less than optimum.

A Word of Caution

The use of psychological assessment tools and individual profiles is both a major opportunity and a danger. Public or “behind the scenes” use of this information to eliminate individuals from career considerations or diversity in assignments is potentially harmful both to the organization and the individual. If a decision is made to proactively use these assessment tools in the way suggested here, a complete understanding of the proper use and potential misuse of such tools must be part of the early stage leadership education.

Conclusions

There are scientific ways to measure the diversity in social and problem solving styles of individuals. This information, used proactively in a team setting, can increase team productivity by matching team goals with project goals and the strengths of the team members. This knowledge and awareness, if used properly, can be used to

better form project teams, matching their composition with the team goals.

References and Readings

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