

DEVELOPING A PERFORMANCE MEASUREMENT SYSTEM FOR EFFECTIVE TEAMWORK

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ABSTRACT

"At Schwab, we have three possible ratings for employees. The bottom one is never assigned," says Maureen Hilts, vice president of compensation at Charles Schwab & Co. The Schwab case illustrated that measurement alone is not enough to solve any problem. Any measurement system should support both the mission and the vision of the organization. Systematic and integrated measures are the key step to successful teams.

KEYWORDS: Performance measurement system, effective teamwork

Introduction

The failure rate for work teams is tremendous. That's a big problem when you consider many of us work on them. Research at the Center for the Study of Work Teams at the University of North Texas indicates that 80 percent of Fortune 500 Companies have half their employees on teams. Many of these teams are of the self-directed nature with estimates of the failure rate at around 50 percent (Joinson, 1999). So what are the reasons for under achievement and under utilization of resources? There are many reasons for these failures. Lack of accountability for results is certainly a factor as is poor interpersonal skills among group members. But, there are even deeper, more fundamental issues. Stacy Myers, President of Advanced Management, Inc. in Oak Ridge, Tennessee believes training in interpersonal skills is a factor in successful teams, but, he says, "Teams must know how their work affects the company and how their success will be measured" (Joinson, 1999). Likewise, Amy Gillespie, an HR specialist for Boeing Company's Airlift and Tranker (A&T) Programs noted a significant change when one of the company's supervisors began educating their team members about performance measures. She said teams had been focusing on people issues at first, but then they began to work on metrics, measures, and charts. Initially, these concepts had been intimidating, but group performance really kicked in when they took responsibility for these things (Joinson, 1999).

Performance measures and teamwork

"At Schwab, we have three possible ratings for employees. The bottom one is never assigned," says Maureen Hilts, vice president of compensation at Charles Schwab & Co. The San Francisco-based discount broker has about 14,200 workers (Ruiz, 2006). That creates a disconnect between what managers write in performance reviews and the reality of how well, or poorly, employees do at helping the company achieve its goals, Stiffler says. He warns that not leveling with people about their performance cements an entitlement mentality. That hampers a company's ability to move forward with a performance management plan, let alone adopt a variable compensation structure in the future (Ruiz, 2006). So how many of you think their performance management system will really accomplish anything? What it does do is reinforce bad behavior with bad management.

Employees complain that management fails to intervene when someone is not performing well. This leads them to conclude that their managers don't notice poor performance, or worse yet, that they notice but don't care (Wall, 2007). Creating systematic performance measures can be a powerful force for teamwork, but it still remains the often-ignored stepchild of team management. Measurement practices are of keen interest for industrial engineers, but group leaders have only used the concept in a piecemeal way. According to the Institute of Management Accountants, 64 percent of US companies are experimenting with some sort of new performance system (Manochehri, 1999). A Saratoga Institute survey of 61 US companies also showed that two-thirds of participating companies use some quantifiable measures of team effectiveness, another 13 percent used only individual assessment, and 21 percent did not even measure team effectiveness. This lack of a cohesive and integrated approach to team accountability and performance measurement is perplexing considering the evidence in favor of it. Research has consistently shown that team performance levels must be **measured** in order to optimize team performance, manage conflict, maintain team momentum, and identify team progress (Convey, 1994).

A lack of useful metrics is also undoubtedly one reason that the success rate for new product development has not improved appreciably over the last 40 years. Studies during the 1960's indicated failure rates averaged 31 percent, in the 1970's it averaged 41 percent, 37.5

percent in the 1980's, and 42 percent in the 1990's (Lynn, 2000). It is possible though to have a kind of measurement overload, where you track so many things you end up not managing anything. It has been suggested than simply have one critical measure is the way to go. Use a single metric that bests expresses progress for the entire project and have a relentless campaign of communication regarding that metric's performance. The type of open book management espoused by Jack Stack, author of *The Great Game of Business*, is giving people a single critical number (Maurer, 2005).

The Schwab case illustrated that measurement alone is not enough to solve any problem. There must be a way to turn insight into action. If measurements, by itself, were the only answer, nobody with a scale would be fat. There are many reasons why measurement alone is not enough. One key reason is that the measurement process all too often is done without much forethought. Easy measures are often chosen rather than relevant ones. Anyone can track and plot numbers, but few truly understand what individual or item attributes should be measured. Even if some team members know what to measure, they often have little understanding of how measurement ought to be done. It is one thing to measure cost; it is another matter to measure creativity, communication, and teamwork. Finally, few understand the importance of not analyzing tracking and reporting number in isolation. Very few teams, departments, or organizations use a set of integrated measures that are designed to drive performance toward clear objectives. Integrating critical measures is essential in helping individuals manage their day-to-day operations.

Developing a performance measurement system for effective teamwork

Organizational measures most often revolve around financial issues. These types of measures have a long history, are easy to determine, are black and white, and come with a ready infrastructure making it easy to collect, analyze and report figures. Profit, cost, return on net assets direct behavior toward those things that can be measured in dollars. In isolation, such measures ignore the customer's perspective and internal group dynamics so essential to successful teams. Improving groups and organizational performance depends upon measuring the right things.

Any measurement system should support both the mission (what is our purpose or reason for being) and the vision (where are we going, what great things are we trying to accomplish) of the organization. Change the metrics; measure against the new goals. Publish the metrics, and how each business unit is doing against them....Consider a top 10/bottom 10 listing of under/overachieving units (Maurer, 2005). Teams cannot be great if they do not have a clear sense of purpose and direction. Only when this has become crystal clear can specific measurable objectives be determined. Measuring the right stuff depends upon having a clear vision and mission. With a clear sense of purpose and direction, team members can identify both critical outcomes and processes.

All team measurements should ultimately revolve around those accomplishments, results, outcomes, and processes under the control of team members. Initially, it should not be too difficult for most members to agree on key result or outcomes. It will take more time to agree on how best to achieve them. Measuring critical outcomes helps keep the team focused on what is really important. To do this, all team members should first ask “what value does (or should) we produce that helps the organization achieve its strategic objectives.”

Outcome measures including profits, market share and cost concerns are necessary metrics because each helps everyone keep score, but such “lagging indicators” do not help team members, monitor their activities, capabilities and efforts or correct performance. Such outcome measure cannot help improve performance because it does not help a service representative know what they personally should do differently to improve those numbers.

Process measures, on the other hand, examine the on-going actions, capabilities, resources, effort and even thinking of group members that contributed to the current situation. Knowing the average time spent per service call last month rose 15 percent, and as a result the number of late calls also rose 10 percent, would explain why service costs have gone up (Meyer, 1994). Knowing a project is late and over budget does not tell you what went wrong. However, tracking staffing levels, turnover or attitudes during the course of the project might reveal both the number of bodies and corresponding years of experience in major job categories. These process measures in turn can be specifically addresses in order to correct performance.

Neither outcomes nor process measures should be used in isolation; both are needed for a holistic picture. Tracking profits, sales and service levels is important because both are necessary for monitoring what is going on. But, outcomes only show what went right or wrong and tell you nothing about what must be done to improve your performance. Knowing you had cost overruns or knowing the project is late is useful information, but it doesn't tell you what to do differently. First, choose a few critical outcomes that indicate you are achieving your objectives, vision, and reason for being. Then it will be essential to identify critical processes, activities, and capabilities that are needed.

Developing Integrative measures for performance measurement

The primary role of traditional measurement systems, which are still used in most companies, is to pull good information up so senior executives can make good decisions that flow downward. Meanwhile, within the organization, everyone is busy doing their own thing with marketing focused on market share, operation is watching, inventory and finance monitoring cost. Individually, each of these outcome measures tells each section of the organization where it stands in reaching its own objectives. Each measure tracks what goes on within their function, but does not show what is happening across functions. Some numbers may be okay, others may need improvement, but the critical weakness is that they are often unrelated to each other. Have a single or few integrated measures like revenues, gross margins, cost of goods sold, capital assets and debt to other measures is essential if we hope to create a "big picture" mentality.

Traditional accounting measures have served a business scoreboard, but a very limited one. It is limited, because there is little reference to all those things that lead to higher revenues and lower debt. In baseball, it would be like keeping score, but not tracking the hitting, fielding and pitching. Process measures or "leading indicators" are essential to managing the game that produces wins, and losses. Using strictly financial outcomes or lagging indicators creates a false reality that keeps managerial attention too narrowly focused. There are obviously other issues that deserve attention and should be one of our scorecards ranging from customer service issues to internal concerns like teams attitudes, creativity, cooperation and sense of fairness.

These issues may be more difficult to measure, but groups or organizations, much like baseball players must see the big picture (multiple outcomes) and pay attention to the details (process measures). Can you imagine what would happen if baseball players only looked at the scoreboard? Players must watch the ball (process measures!) in order to get a hit. Can you imagine how successful a team would be if their players only watched the financial scoreboard, but that is what we force our people to do when we measure performance strictly on monetary or cost outcomes.

Successful teams depend on systematic and integrated measures. It requires a commitment to setting down and isolating specific objectives for the team. Next, is the need to identify quantifiable measures that address the critical outcomes we want to achieve. Finally, we have to look at the processes, like cooperation, communication, team plan, and so forth that lead to each of these outcomes and then find a way to measure them.

Any of these processes can be measured, it is most important to identify the ones that lead to good outcomes. First, you identify critical outcomes in the areas of customer satisfaction, market leadership, quality, responsiveness, technological leadership, reliability or superior financial results. Then you identify the essential processes (hit the ball) that lead to those outcomes. Reliability, for instance may refer to promised delivery dates such as on-time delivery percentages.

There is an old adage that goes “what gets measured is what gets done.” A simple reliance on measuring on-time delivery percentages can motivate people to favor filling out an order that was on time rather than one that was already late. This does not mean piling more and more measures on top of operational personnel in order to encourage them to work harder. The immediate result of this tactic can result in employees spending far too much time collecting data and monitoring activities and not enough time simply managing their job. A general rule of thumb is not to have more than 15 measures of performance (Meyer, 1994). Too much time will be spent discussing the mechanics of the measurement system and not enough on what to do. The overriding purpose of any measurement system should be to help you, rather than top managers gage your progress. It should not limit our vision too much nor simply track

disconnected or detached statistics. Isolate the critical few outcomes and processes you feel are most important.

What you will find out is that there will be more measures suggested than useful ones so only measure those things you can collect and track. Any list of potential measurables will eventually be followed up with a discussion on where, when, and how the data is to be collected, analyzed, and reported. The cost and difficulty of this measurement process must also be balanced against its potential usefulness. Therefore try to identify the critical few measures.

Identifying the critical few measures

There are many, many ways to measure team performance. Steven Convey mentioned such things as measuring how close you are in achieving milestones. These might entail completion of tangible work activities that could represent a success for the teams. Rating systems can also be used in the form of charts that is filled out at the end of each team meeting. Team members could evaluate the degree that certain positive attributes were exhibited in the meeting. Peer review might provide another way to rate the team's work in progress. It could allow members to receive feedback from others on the quality of their work. Self-assessments can also be taken, usually at the beginning or end of meetings. There are also many more means of collecting information including surveys, outside evaluators, customer and supplier appraisals and so forth.

The type and means of information collected is not as important as its purpose. Any technique chosen must be used with a sense of purpose or else it will simply be more detached data. In the midst of collecting data, always keep in mind "why are we (team, department or organization) here?" Before collecting data, first identify what common assumptions will guide your behavior, attitudes, efforts, and thinking. Only when the group agrees upon its purpose and ultimate direction can you set down and review existing measures to see if they match those assumptions. You may discover, for instance, that your group wants to emphasize customer service or internal cooperation and creativity, but only financial measures are being used to gage performance. In which case, your group's reason for being here (service, cooperation, and so

forth) is not aligned with how you are measured. In which case, either your assumption needs to change or new measures need to be created.

One way of getting a handle on the “critical few” outcomes and processes essential to your group performance is to map your workflow. This does not have to be a complex process. It involves creating a simple flow chart that diagrams all the steps in a process. It involves creating a simple flow chart that diagrams all the steps in a process. The amount of detail needed depends upon your needs. This process can best be visualized using an analogy of planning a trip from St. Louis to Dallas. The first thing you might do is get a national map to determine which states you would be driving through. You would need to decide what route would best meet your needs. A flow chart parallel would be to construct a general map of how certain classes of jobs move through your business or department.

Continuing the use of the trip analogy, after you have decided which route you are going to traverse, you would then analyze pages containing detailed maps of those states. Individual state maps would provide information on interstate highways and routes around cities. Lastly, if you had intentions of stopping in or passing through major cities you might consult city maps. Detailed maps can be used to help you see a friend, visit landmarks, and other critical concerns.

When mapping any process make sure boundaries are set for each of these tasks. Secondly, make sure to only use simple symbols, no pictures, just simple boxes used for processes. Everyone involved in the effort has to be tracking the same thing. Begin by listing possible **errors** or things that can cause rework in your specific environment. Any mapping will involve measuring final results, key process steps, and perhaps intermediate results. The key thought to keep in mind during the whole process is what outcomes, activities, capabilities, or processes support your reason for being and what you want to become.

Pacific Northwest provides a good illustration of the problems and opportunities of performance measurement. The company is a medium sized aerospace corporation with 90 million in annual sales. It started process measures in 1989 using a wide range of measures that were designed to make their departments look good. The company’s chief executive officer

recognized the problem and at an executive staff meeting said, “middle managers had created a Tower of Babel.” The proliferation of different measurement “languages” had undermined rather than improved communication. He suggested performance measures be reduced, but consistent across the organization (Ramanathan, 1995).

Always begin any measurement process by listing your strategic objectives in the area of profitability, quality, creativity, innovation and so forth. Identify your group’s purpose or reason for being and what is it you ultimately want to achieve. Set down and agree upon key outcomes and processes needed to achieve this mission and vision for your group. These are the tactics you hope to use to achieve group and organizational objectives and goals. It will take some time, but it will be well worth the effort. Make a commitment to have only a few measures, perhaps, fifteen or so. Do not use measures simply because they are easy to collect. Use only those relevant to your mission. For instance, a department wanted to address a long standing issue of warehouse automation. They did not want to automate strictly for automating sake. After some thought, they came up with a ratio (relative change is generally a better measure than absolute numbers). They measured the total associate hours involved in the shipping process divided by total shipments. Using this measure, warehouse automation had a purpose and payback because any process including automation that caused the numerator of the equation to decrease and/or the denominator to increase would be considered (Rivers, 1999).

Conclusion

The important point is to make sure each measure of an outcome or process is one that can be graphed. Total Quality Management school of thought suggests you treat the things you measure as defects. People can easily record defects when they might not take the time for more complex measurements (Roberts, 1993). Ease of measurement is obviously valuable, but again, the overriding concern is to keep the big picture in mind and “Does this measure address your core concerns, and reason for being?” What you measure is what will be done, so make sure you are headed in the right direction.

REFERENCES

- Convey, Steven, "Performance Measurement in Cross Functional Teams," *CMA Magazine*, October 1994, Vol. 68, Issue 8, p. 13.
- de Nijs, Eric, GRACE at Work, T+D, Mar2006, Vol. 60 Issue 3, p47-49, 3p
- Joinson, Carla, "Teams at Work," *HR Magazine*, May 1999, Vol. 44, Issue 5, p. 30.
- Lynn, Gary W. and Richard R. Reilly, "Measuring Team Performance," *Research Technology Management*, March/April 2000, Vol. 43, Issue 2, p. 48.
- Manochehri, Gus, "The Road to Manufacturing Excellence," *Industrial Management*, March – April 1999, Vol. 41, No. 2, p.7
- Maurer, Rick, Sustaining Commitment to Change, *Journal for Quality & Participation*, Spring 2005, Vol. 28 Issue 1, p30-35, 6p
- Meyer, Christopher, "How the Right Measures Help Teams Excel," *Harvard Business Review*, June 1994, Vol. 72, Issue 3, p. 97.
- Poyssick, Gary, "Mapping Your Workflow," *Electronic Publishing*, Nov. 1997, Vol. 21, Issue 11, p. 38.
- Ramanathan, Kavasseri V. and Douglas S. Schaffer, "How Am I Doing," *Journal of Accounting*, May 1995, Vol. 179, Issue 5, p. 81.
- Rivers, David L., "Proactive Performance Measures," *Hospital Material Management Quarterly*, May 1999, Vol. 20, No. 4, p. 65.
- Robert H., B. Sergesketter, "Quality is Personal," New York, *The Free Press*, 1993, p. 9.
- Ruiz, Gina, "Lessons From The Front Line", *Workforce Management*, 6/26/2006, Vol. 85 Issue 12, p50-52, 3p, 8c
- Wall, Bob, " Being Smart Only Takes You So Far", T&D, Jan. 2007, Vol. 61, Issue, 1, p. 64-68

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