



The Role of Human Resources (HR) in Six Sigma

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Chances are you've heard of Six Sigma, perhaps in connection with General Electric, the company that made it popular in the 1990s. You may even know that Six Sigma uses statistical techniques to improve processes in both manufacturing and service industries. But did you know there is an important role for Human Resources (HR) in this sophisticated process improvement approach? Or that Six Sigma initiatives are unlikely to succeed without HR's help?

HR professionals with the right skills can contribute to a Six Sigma initiative at both strategic and tactical levels. This article describes the areas in which HR should play a role in Six Sigma and discusses how HR professionals can increase their chances of being included in Six Sigma decision-making and implementation.

To appreciate the important role HR has in Six Sigma, it is important to begin this discussion by having an understanding of what Six Sigma is, all the roles played by others in a Six Sigma implementation, and the factors critical to a successful implementation.

Six Sigma Defined

The term "Six Sigma" is widely used to refer to all of the following:

- A structured method for improving business processes. This method, called DMAIC (define, measure, analyze, improve, and control), is supported by an assortment of statistical tools.
- A statistical measurement of how well a business process is performing. A process that performs at "Six Sigma" produces only 3.4 defects out of every million opportunities to produce a defect. Processes that perform at lower sigma levels (such as one sigma or four sigma) produce more defects per million opportunities. It is possible for a process to perform at an even higher level (and thus have even fewer defects), but Six Sigma has become popular as the standard for excellent process performance.
- An organizational mindset in which people make decisions based on data, look for root causes of problems, define defects based on customer rather than internal requirements, seek to control variation, track leading indicators of problems to prevent them from happening, etc.

Six Sigma Roles

Six Sigma has a martial arts convention for naming many of its professional roles. The chart below describes how these roles are typically defined.

Table 1: Six Sigma Roles And Responsibilities

Sponsor	Senior executive who sponsors the overall Six Sigma Initiative.
Leader	Senior-level executive who is responsible for implementing Six Sigma within the business.
Champion	Middle- or senior-level executive who sponsors a specific Six Sigma project, ensuring that resources are available and cross-functional issues are resolved.
Black Belt	Full-time professional who acts as a team leader on Six Sigma projects. Typically has four to five weeks of classroom training in methods, statistical tools, and (sometimes) team skills.
Master Black Belt	Highly experienced and successful Black Belt who has managed several projects and is an expert in Six Sigma methods/tools. Responsible for coaching/mentoring/training Black Belts and for helping the Six Sigma leader and Champions keep the initiative on track.
Green Belt	Part-time professional who participates on a Black Belt project team or leads smaller projects. Typically has two weeks of classroom training in methods and basic statistical tools.
Team Member	Professional who has general awareness of Six Sigma (through no formal training) and who brings relevant experience or expertise to a particular project.
Process Owner	Professional responsible for the business process that is the target of a Six Sigma project.

Leaders and Champions usually receive high-level training on the technical aspects of Six Sigma and specific training on how to lead an initiative. At the "Belt" level, each candidate is assigned an initial "training project" that he/she will work on during the formal training period. Candidates attend classroom training for a week, work on their projects for three weeks, return to class for another week, and so on until they have acquired all the skills appropriate to their role.



HR's Role in Six Sigma

As with any major organizational initiative, many factors contribute to success. Some of these factors will fall within HR's area of responsibility, such as those discussed below.

Black Belt Selection and Retention

Having the right people in the Black Belt role is critical to the success of a Six Sigma initiative. The training investment is substantial for this pivotal role. Further, Black Belts are the visible "face" of Six Sigma. They help shape the organization's impression of Six Sigma, and, consequently, the willingness of many to embrace the initiative. Therefore, you want to pick Black Belts very carefully. (Some organizations only select Black Belts from among those who have already been identified as "high potentials.").

HR professionals can help the Six Sigma Leader find the right people for Black Belt roles and ensure they remain in those positions for the typical two-year rotation. Potential HR contributions in this area include:

- Building a competency model that will help identify candidates with the right mix of technical, team, and leadership skills and abilities.
- Creating job descriptions that help candidates fully understand the position and expectations prior to signing on.
- Developing a retention strategy that will help ensure Black Belts complete their rotation and the organization recoups its investment in training and development.

Rewards and Recognition

Rewarding and recognizing Black Belts and Six Sigma teams is more complex than it may appear. Black Belts join the Six Sigma initiative from various places in the organization where they are likely to have been at different job levels with differing compensation arrangements. Determining whether and how to make appropriate adjustments in level and compensation now that all these individuals are in the same role is both tricky and critical.

Similar complexities are involved at the project team level. Six Sigma projects led by Black Belts typically result in savings in the hundreds of thousands of dollars. Deciding how the team should be rewarded and recognized and who should get credit for what is not easy. Yet ignoring these issues can result in resentment, reluctance to work on Six Sigma projects, and the potential failure of the overall initiative.

HR professionals can help the Six Sigma Leader tackle the challenge of establishing the right rewards/recognition. Potential HR contributions in this area include:

- Analyzing existing compensation arrangements to identify the extent to which those arrangements will support the Six Sigma initiative.
- Creating a strategic compensation plan that will better support Six Sigma.
- Developing a non-monetary reward program for Six Sigma teams.



Project Team Effectiveness

The work of Six Sigma is done mostly at the project team level by a Black Belt leading a small team through the steps of the DMAIC method. If the team itself does not function well or does not interact effectively with others in the organization who ultimately have to support and carry out the process changes, the project probably will not be successful. Given the typical project's potential payback, failure can be expensive.

HR professionals can help the project teams work together more effectively. Potential HR contributions in this area include:

- Ensuring team leaders and members get training and/or coaching in teamwork, conflict management, communications, dealing with difficult team members, and other team effectiveness skills.
- Providing teams with tools that allow them to diagnose their own performance and identify when and where they need help.
- Acting as a resource for Black Belts who encounter team-related challenges they cannot surmount.

Creating a Six Sigma Culture

Many Sponsors, Champions, and Leaders look to Six Sigma as a way to change an organization's culture to one that is more data-driven, proactive, decisive, and customer-oriented. But they often have little idea about how to achieve successful culture change.

HR professionals can help executives approach culture change in a way that addresses the underlying business goals without creating organizational resistance. Potential HR contributions in this area include:

- Working with Six Sigma Sponsors, Leaders, and Champions to identify elements of the culture that might hinder the achievement of Six Sigma goals.
- Advising on change plans that will target those specific cultural elements.
- Identifying how Six Sigma can be rolled out in a way that works with, rather than against, the current culture.

Change Management and Communications

Introducing Six Sigma into an organization is a major change that will have a profound effect on a broad group of stakeholders. Managers and employees at many levels of the organization will be asked to engage in new behaviors. In many cases, those leading other initiatives will see Six Sigma as a source of competition for resources, executive attention, and organizational power. Others may see it as an indictment of their past performance. Many will be confused about how Six Sigma fits with the large number of other ongoing organizational initiatives.



HR professionals can help reduce the uncertainty and anxiety surrounding Six Sigma and increase the levels of acceptance and cooperation in the organization. Potential HR contributions in this area include:

- Drafting a change management/ communications plan that addresses the people side of the Six Sigma rollout.
- Helping create a "case for change" that describes:
 - The reasons for and benefits of Six Sigma.
 - How the organization will help employees succeed in new ways of working.
 - How Six Sigma fits with other ongoing initiatives.

- Counseling Six Sigma Leaders and Champions on how their behavior can help or hinder Six Sigma's acceptance throughout the organization.

Being Included in Six Sigma

Just because HR professionals can play a role in the success of Six Sigma, it doesn't automatically follow that they will be asked to participate. Unless you are in an organization that views HR as a partner in all business initiatives, you may have to push to be included in Six Sigma.

HR can greatly increase its chances of being included in the Six Sigma initiative by:

- Ensuring HR professionals have the right skills and knowledge.
- Marketing its potential contribution early in the initiative.

Gaining the Right Skills and Knowledge

In addition to HR/organizational development-related areas, HR professionals need a familiarity with Six Sigma itself. Without a basic knowledge of the DMAIC method, supporting tools, roles, jargon, and even simple statistical methods, HR will not have the credibility it needs to be considered a potential contributor to the initiative.

The time to get this knowledge is now. Even if your organization is not rolling out--or even considering -- Six Sigma today, there are two reasons why it's worth a HR professional's time to become familiar with the concepts now. If the organization does decide to implement Six Sigma, there won't be enough time to catch up. HR has to be involved at the very beginning of the initiative. In addition, there are many applications of Six Sigma to HR's processes themselves, e.g., the payroll process, benefits administration, selection, and recruiting. HR might even consider setting an example for the rest of the organization by adopting Six Sigma techniques to enhance its own processes.



Marketing HR's Potential Contribution

The marketing challenge is twofold. First, senior executives may not believe that the people issues are just as critical to Six Sigma's success as are its many technical components. In that case, HR will need to sell the importance of the people side. Second, executives must perceive HR as being able to make a significant contribution on the people side of Six Sigma. Besides ensuring that it has both the required skills and knowledge described above, HR can also meet these challenges by:

- Gathering data that supports the need for attention to the people side of Six Sigma. Potential sources include Six Sigma publications, case studies, conference sessions, and executives in companies that have already implemented Six Sigma.
- Deriving lessons from previous organizational initiatives in which people issues and/or HR actions played an acknowledged role in success or failure.
- Meeting with senior executives to discuss their business/Six Sigma goals and then identifying areas where HR could provide very specific and measurable help.
- Speaking to Six Sigma Leaders and Champions in the language of Six Sigma, not the language of HR. These executives are typically interested in improving efficiency (i.e., internal cost) and effectiveness (i.e., what the customer sees as "defects"). HR needs to understand what the executives care about and pitch HR's services in relevant terms.
- Taking the lead and applying Six Sigma successfully within the HR function

HR has a substantial role to play in the success of a Six Sigma initiative. But it will have the opportunity to contribute only if its professionals have the right skills and knowledge and are able to show Six Sigma executives the value they can add. Gain those skills now and make sure senior leadership knows how HR can help support the success of the initiative. Only then will they realize they just can't do it without you!

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