Contents © 2005 WorldatWork.The content is licensed for use by purchasers solely for their own use and not for resale or redistribution. No part of this article may be reproduced, excerpted or redistributed in any form without express written permission of WorldatWork and appropriate attribution. Reach WorldatWork at 480/922-2020; customerrelations@worldatwork.org

Reprinted from WorldatWork Journal, first quarter 2005, with permission from WorldatWork, 14040 N. Northsight Blvd., Scottsdale, AZ 85260; phone (877) 951-9191; fax (480) 483-8352; www. worldatwork.org. © 2005 WorldatWork. Unauthorized reproduction or distribution is strictly prohibited.

Gainsharing and Lean Six Sigma – Perfect Together

Robert Masternak Masternak & Associates

Michael A. Camuso, CCP, CBP, GRP, PHR Alpharma

s companies continue to search for a competitive advantage in the global economy, they investigate a host of systems to improve operating efficiency: product quality, operating cost and most importantly, customer service. In their search, they likely may identify two approaches that have yielded particularly successful results. One is Six Sigma, more recently expanded and referred to as Lean Six Sigma. The other is gainsharing.

In their investigations, a company may mistakenly view these two approaches as competing initiatives. While both efforts are excellent by themselves in improving productivity, quality and a variety of other measures, both concepts are much more powerful together. Gainsharing and Lean Six Sigma are highly complementary systems that are mutually reinforcing. Both systems are based on the principles of continuous improvement, measurement, ingenuity, employee involvement and teamwork. Both approaches focus on change. However, Lean Six Sigma's focus is more related to the technical side of change, and gainsharing's focus gravitates more to the social side. Another important distinction:

Unlike the Lean Six Sigma concept, gainsharing, by definition, shares the monetary gains from improved performance with the total workforce.

The Lean Six Sigma Roots

Compared to gainsharing, the two parts of Lean Six Sigma (lean manufacturing and Six Sigma) are relatively new. Six Sigma has its roots in the mid to late 1980s. Motorola is one of the more heralded companies to drive its performance initiatives with Six Sigma and a major focus on customer service and product quality. Today's Six Sigma companies use its structured tools to reduce cycle time, eliminate product defects and increase customer service. The focus is on "working smarter" and doing things right the first time.

Also in the mid 1980s, a similar approach, referred to as lean manufacturing, brought an intense focus to productivity improvement and cost reduction. The focus was on producing more with less. Similar to Motorola, Toyota often has been recognized as one of the founding lean manufacturing organizations.

In more recent times, the terms Six Sigma and lean manufacturing combine to emphasize the quality and service improvement process offered by Six Sigma and the productivity and cost reduction tools offered by lean manufacturing.

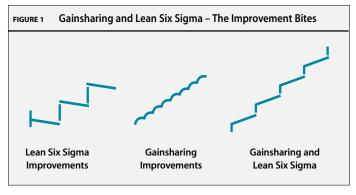
Regardless of its roots, Lean Six Sigma is driven by a close understanding of customer needs, a disciplined use of facts, detailed statistical analysis and tools to reinvent business processes. Lean Six Sigma, a well-disciplined technical approach, uses specific tools that can be used to make both a major break-through and large-scale improvements ("big bites") in the manufacturing process. The focus is on taking big steps and significant innovations in the improvement process rather than concentrating on the many "smaller bites" in the improvement process. (See Figure 1.) The big steps bring remarkable results, but require more money,

technology and time. On the other hand, if the minor daily improvements are neglected, complacency will overtake the improvement process.

Gainsharing Roots

The concept of gainsharing has roots that are much deeper, dating back to the 1930s when a labor leader, Joe Scanlon, preached that the worker had much more to offer than a pair of hands. The premise was that the person closest to the problem often has the best and simplest solution. Moreover, if the worker is involved in the solution, he or she most likely will make the solution work. Scanlon used a team approach to solicit, review, approve and implement employee ideas and suggestions to drive the improvement process. Moreover, Scanlon and the gainsharing concept shared the financial gains from improved performance. The Scanlon approach often was referred to as "a frontier in labor management cooperation."

Gainsharing is a very literal term. In short, as an organization gains, it shares. The typical gainsharing organization measures performance and, through a predetermined formula, shares the savings with all employees. The organization's actual performance is compared to baseline performance (often a historical standard) to determine the amount of the gain. Because gains are measured in relationship to a historical baseline, employees and the organization must change to generate a gain. The gainsharing system is one that



Compared to Lean Six Sigma, the focus of gainsharing is less on technical tools and more on the social and philosophical side of the workplace.

builds ownership and employee identity to the organization. The employee becomes more of a stakeholder.

Gainsharing is focused on social aspects of the organization and looks to make many of the smaller day-by-day changes that drive continuous improvements. The steady and small improvements lead to significant progress over time. The performance bar continues to rise in daily work activities, the employee mindset and the way people do their work. Compared to Lean Six Sigma, the focus of gainsharing is less on technical tools and more on the social and philosophical side of the workplace.

Driving Gainsharing and Lean Six Sigma Through Employee Involvement

Teams and employee involvement are key elements to both Lean Six Sigma and gainsharing. However, the level of employee involvement in the Lean Six Sigma process is much more narrow and limited than that found in gainsharing. Lean Six Sigma is more of a top-down process. Lean Six Sigma involves a limited number of employees through performance improvement project teams. On the other hand, gainsharing attempts to engage the total workforce through many different means.

Lean Six Sigma assigns select employees to lead project teams and perform in roles such as master black

belts, black belts, green belts and champions. Master black belts are the technical leaders who enable the company to integrate Lean Six Sigma within its operations. Black belts lead the project and generally are devoted full time to the assignment. A black belt usually is a manager or professional employee who is a technical expert in the area of the project. This person is selected for the assignment based on his or her management and technical skills. The black belt position often is used as a development assignment for individuals who have higher-level management potential. Black belts tend to work on projects that deliver in excess of \$100,000 in savings. On the other hand, green belts work part time (approximately 25 percent) on smaller projects, generally those that produce \$50,000 to \$75,000 savings per year. A green belt may lead his/her own project or may be supervised by a master black belt, black belt or champion. Finally, each project has a champion. Champions generally are key managers at the facility. Champions are responsible for selecting the project, drafting the project charter, getting the initial approval for the project, selecting the black and green belts, identifying resources needed to complete the project, removing barriers and conducting ongoing reviews with the leaders of the project to monitor the team's progress.

In comparison, employee involvement is at the heart of the gainsharing concept. In fact, gainsharing often is considered to be an "employee involvement plan with teeth." Unlike Lean Six Sigma, gainsharing is not "top-down." However, top management commitment and support are critical to its success. Conversely, gainsharing shouldn't be thought of as bottom-up approach. Basically, gainsharing attempts to engage everyone. It's about getting everyone in the organization "rowing in the same direction."

Typically, employee involvement and team activities run parallel to employees' regular duties. At the very early stages of the development of a gainsharing plan, employees are involved in many elements of the plan's design. A design team consists of a cross-section of employees who mirror the organization as a whole. Depending on the size of the organization, the design team consists of as few as four and as many as 30 employees. The design team is responsible for developing many of the plan components, obtaining uppermanagement approval and kicking off the plan in facilitywide meetings with the total workforce. The concept is to build employee identity and ownership toward the plan at the onset.

A gainsharing plan also has an ongoing structured system of employee involvement. The involvement structure typically varies by organization, but tends to grow and evolve over time. Initially, involvement may be as minor as conducting regular communication meetings or as major as forming self-directed work teams. Some organizations drive total involvement by having every employee participating on a team. In this case, work teams meet on a regular basis to discuss results, identify problems and work on plans for improvement.

A team-based suggestion system is a common gainsharing involvement structure. Basically, employee involvement teams are formed to solicit and review performance improvement suggestions from other members of the workforce. The groups are permanent

and meet on a regular basis to approve and implement ideas within their spending authority. Suggestions that are approved by a team, but are beyond its spending authority, are advanced to a higher-level review/steering team. The steering team generally consists of the captains of each involvement team and key members of management. The steering team announces the bonus results, reviews business trends, identifies operating problems and approves higher spending ideas. The steering team also provides guidance to involvement teams and provides direction on problem areas where idea generation can focus. Also, the steering team may form project teams as needed. Basically, gainsharing attempts to involve all employees in many different ways.

The Link Between Lean Six Sigma and Gainsharing

A major problem with Lean Six Sigma is that it cannot endure without the longer-term commitment, support and participation of all employees. If only a few isolated individuals develop an innovative "big step," the improvement will be short term until competition catches up and surpasses the improvement. As previously noted, most companies only have select employees involved in Six Sigma efforts. The problem is that often, Six Sigma teams need the participation of employees who are on the sidelines to help ensure the successful completion of the project. Clearly, the momentum cannot be maintained unless the organization truthfully and sincerely engages the total workforce, not just a few. In large part, this is why so many other improvement initiatives have died. This is where gainsharing comes into play. Gainsharing has endured for more than 70 years. Why? It engages everyone at the site. All employees are players in the "game."

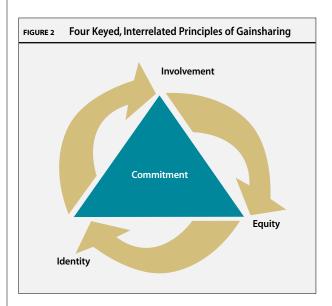
Rewarding Lean Six Sigma and Gainsharing

Many Lean Six Sigma companies struggle with trying to reward black belts and Six Sigma teams. Should an organization give significant financial awards to the black belt and/or Lean Six Sigma team? What about employees who were involved in collecting the data, providing advic, and physically implementing the change? What about the people not directly involved in the project, but whose workload increased because they covered for team members while they were traveling or in meetings related to the project? There are many examples where companies have financially rewarded black belts at the expense of fracturing the improvement effort. There are cases where a black belt has refused a bonus and others where the black belt has shared a bonus with others in the organization. Some black belts have been placed in an extremely uncomfortable position when their bonus award was announced publicly in a "town hall meeting." If companies want Lean Six Sigma to take hold and succeed, the organization cannot create a system than ruins internal equity and causes employee dissent.

Gainsharing helps Lean Six Sigma address this critical issue: "As we make these improvements, what's in it for me? Sure it's nice to have a job, but don't executives receive larger bonuses when we help make these improvements? Is that fair?" Gainsharing provides the all-important link to this question.

Gainsharing companies believe it is fair to share. Gainsharing's bonus system provides a common focus, "a score." As performance improves by working smarter, everyone shares. Interestingly, it's not about the "money;" it's about the "sharing." Sharing and its impact on the sense of equity are very powerful, leading to a significant impact on the principle of identity. As we all know, an owner of a business acts much differently than the workers. Identity speaks to the sense of purpose, belonging, accountability and ownership. This is what sharing drives. As identity and understanding grow, the need for change is recognized. Change leads to improvement, and improvement leads to gains. As identity and the sense of ownership are developed, employees naturally will have ideas on ways to improve

performance. Involvement is a means of "working smarter," and there are never-ending ways to do so. Involvement and working smarter foster continuous improvement. (See Figure 2.)



The Marriage of Lean Six Sigma and Gainsharing

The numerous examples where organizations have married the Lean Six Sigma and gainsharing concepts together include Motorola, General Electric, Allied Signal, Sun Chemical, and Magna-Donnelly. In many cases, facilities already had gainsharing well in place as a fixture to their culture. These organizations find that employees embrace the Lean Six Sigma concept with open arms. The workforce is typically open to any management performance improvement initiative that generates gains. The attempts at "big bites" through Lean Six Sigma are much easier to support and digest if employees have the opportunity to share financially in the benefits.

One Example of the Marriage

A recent example of how gainsharing and Lean Six Sigma complement each other can be found at a pharmaceutical plant in Lincolnton, N.C., that employs

Gainsharing and Lean Six Sigma are based on solid measurements to keep score and determine success.

240 people. The facility is one of the many manufacturing sites of Alpharma, a global generic pharmaceutical company. The Lincolnton local management team had been a strong proponent of employee involvement and continuous improvement. In fact, in the late 1990s, the Lincolnton plant implemented a team structure. Basically, all employees became members of a work team. The teams met on a regular basis, sharing performance information, discussing problems and working on performance improvement projects.

In 2003, the new director of compensation, who was very familiar with and a big proponent of gainsharing, met with the Lincolnton site head and HR manager to discuss the possibility of Lincolnton being a test site for gainsharing. A proposal was made to the head of corporate HR, the divisional president, and the CEO, who in turn were highly supportive. After receiving corporate approval, the plant acquired assistance from an outside consultant. In turn, an employee design team was formed to help put together many elements of the plan. The two site Lean Six Sigma black belts were included as part of the design team, which served to ensure that there was cohesion and consistency between gainsharing and Lean Six-Sigma. In addition, one of the hourly mechanics on the gainsharing design team also was involved on one of the Lean Six Sigma teams.

When the plan was ready for kickoff in April 2004, the CEO and key members of Alpharma's leadership team made a special trip to the plant site to attend the employee kickoff meetings. As expected, the leadership team participated in the event by attending a luncheon and complementing the team and all associates for their fine efforts. The highlight of the event was a 20-minute skit prepared by some of the design team members. There was vibrant enthusiasm in the site cafeteria as employees rolled out the plan, using their humorous skit to convey gainsharing concepts to the workforce.

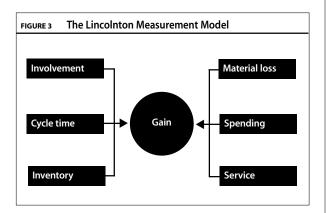
Measurement

Gainsharing and Lean Six Sigma are based on solid measurements to keep score and determine success. The gainsharing model and measures commonly used by the Lincolnton site and Lean Six Sigma organizations include:

- Cycle time
- Productivity
- Inventory turns
- Material losses
- Spending
- Customer service.

The measures are charted and posted on the team bulletin boards, along with the accompanying gain,

loss and bonus results. The charts are a focal point that have led to a much higher level of awareness and focus on results. Pareto charts, trend charts, and other Lean Six Sigma reporting tools all are used to identify and communicate problem areas. (See Figure 3.)



Continuous Improvement

Gainsharing and Lean Six Sigma strive for continuous improvement. At Lincolnton, the gainsharing baseline (the point which performance must exceed before a gain is made) typically is increased from year to year to reinforce the continuous improvement concept. The common philosophy of gainsharing and Lean Six Sigma is that there is always room for more improvement and that if an organization is satisfied, complacency sets in and systems fade away.

The Team Concept at Lincolnton

As previously noted, gainsharing and Lean Six Sigma depend on the team concept. In addition, employees participate in team meetings to review performance and discuss suggestions for improvement. In addition to improvements in the gainsharing measures, the results of the Lean Six Sigma projects also are discussed.

Black belts and the gainsharing design team members continue to stress the interrelationship and mutually reinforcing benefits of these two programs.

Results - Dollar Returns and the Spoils

Because gainsharing is about changes in attitudes and behaviors, the typical installation has a tendency to get off to a slow start. It takes people time to figure out the new system, change work habits and get over the "here we go again" mentality. However, to the surprise of many on the plant management team, this was not the case for Lincolnton. Interestingly, when the full Lincolnton management staff began to explore gainsharing, with the exception of the site manager and HR manager, there was a predominant feeling among managers that there was limited opportunity for gain. The facility had been highly successful with the team concept, and some managers thought that all the "low-hanging fruit had already been picked." However, the first quarter's results far surpassed expectations. (See Figure 4.)

FIGURE 4 First Quarter Gains – Gainsharing (Lincolnton)		
	Gain	Percent of Total
People productivity	\$136,000	34.0%
Material efficiency	\$ 73,000	18.3%
Inventory control	\$ 69,000	17.3%
Spending	\$122,000	30.5%
Total	\$400,000	

In the initiative's first quarter (April thru June 2004), the Lincolnton operation had a return of approximately \$400,000 with over half of the gains coming from productivity and spending. The productivity improvement was particularly impressive, because production volume was down for the quarter. The productivity measure focused on units of production per direct labor hour worked. In other words, if production volume is down, the only way to improve productivity over the baseline is to reduce the number of direct labor hours. Lincolnton reduced labor hours by permitting employees to take voluntary time off. The

workweek was adjusted to shorten the work schedules for Mondays and Fridays. For some associates, the opportunity for having a longer weekend was an attractive alternative. This was particularly true for those who had unused vacation time. Since volunteers helped increase productivity by reducing their work hours, the design team came up with a unique method of sharing the gains. The design team decided that the employee gain should be shared on the basis of participating hours. Participating hours were defined as hours worked plus hours of voluntary time off. The feeling was that the employees who volunteered directly contributed to the productivity gain and the company's savings.

Overall, there were improvements in all of the gainsharing measures and employees walked home with a check averaging \$825 each for the first quarter's performance.

In addition, two of Lincolnton's current Lean Six Sigma projects focused on material efficiency by reducing the overfill of finished product tubes and designing a system to reduce chemical material weighing errors. The black belt leading the projects commented that it was easy to gain cooperation from the hourly employees by explaining the projects' impact on the gainsharing measures of scrap and material loss. The black belt also found that associates' understanding of the project was significantly aided by the initial gainsharing training on how they impacted the plan's performance measures. As a result, the combination of gainsharing and Lean Six Sigma had served to heighten awareness leading to a larger gain than expected for the plant's first quarter.

Linking Lean Six Sigma and gainsharing at Lincolnton demonstrates how two very powerful complementary programs work together to improve operations. For successful organizations to sustain a long-term competitive edge, they need to experience continuous day-to-day improvements generated by an engaged employee population. One of the most efficient ways to drive

innovation — and link the technical and social dimensions of change — is to combine the elements of Lean Six Sigma and gainsharing.

Resources Plus

For more information related to this article:

Go to www.worldatwork.org/advancedsearch and:

 Type in this key word string on the search line: Gainsharing or Six Sigma

Go to www.worldatwork.org/bookstore for:

 Gainsharing - A Team-Based Approach to Driving Organizational Chanae.

Authors

Robert L. Masternak is president of Masternak & Associates in Medina, Ohio. Masternak's sole focus is on productivity and quality improvement through gainsharing and employee involvement. Masternak has extensive experience installing gainsharing plans throughout North America and has worked in non-English speaking countries, as well. He has installed tailor-made plans in a host of industries including chemical, plastics, iron, steel, aerospace, health supplies, health care, pharmaceutical, machining, lighting, energy, automotive parts, mining, footwear, glass defense equipment, distribution, aluminum, metal fabrication, printing, paper products, food manufacturing and furniture.

Masternak also is a speaker for employer associations and professional groups and has conducted well over 100 university- and industrial-sponsored public workshops on the topic of alternative rewards and employee involvement. He is the author of the book Gainsharing: A Team-Based Approach to Driving Organizational Change, published in 2003 by WorldatWork. His work has been published in numerous professional journals such as National Productivity Review, Compensation and Benefits Review and Operations Management Review.

Prior to forming his gainsharing consulting company in 1990, Masternak had more than 21 years of industrial experience and has held managerial positions in industrial relations and international and organization development.

Masternak holds a master's degree in industrial relations from the University of Wisconsin and a Bachelor of Science in economics from Michigan State University.

Michael A. Camuso, CCP, CBP, GRP, PHR is corporate director of compensation at Alpharma, a global human generic pharmaceutical and animal health company with sales over \$1 billion. Camuso has more than 20 years of multi-industry compensation and human resources experience with a strong emphasis on strategic compensation reward programs. Camuso has a bachelor's in psychology from Manhattan College and a master's from New York University in organizational psychology.

References

George, Mike and Rowlands, Dave, and Kastle, Bill (2004) What is Lean Six Sigma? New York: McGraw Hill

Japan Human Relations Association (1992) Kaizen Teian 1: Developing Systems for Continuous Improvement Through Employee Suggestions. Cambridge: Productivity Press.

Masternak, Robert (2003) Gainsharing: A Team-Based Approach to Driving Organizational Change. Scottsdale: WorldatWork.

Snee, Ronald and Hoerl, Roger (2003) Leading Six Sigma: A Step-by-Step Guide Based on Experience with GE and Other Six Sigma Companies. New Jersey: Prentice Hall.