Projectz! from FREE leansite.com

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Special Interest Articles:

Individual Highlights:

New Employee Orientation Takes Off

One of the first projects tasked a Lean Advocate is developing Lean Six Sigma material for New Employee Orientation (NEO). The purpose of the training is to introduce the Company Culture and 'improvement' foundations to all newly hired associates - so a consistent message is provided.

The one-hour (typical) mini LSS workshop promotes company strategy regarding process improvement and reviews the vision and objectives for operational excellence.

Learning objectives include: Defining value-added and non-value added work; definition of the 7 wastes and their causes; review of a problem solving methodology and an introduction to some of the lean six-sigma tools.

A group activity around the concepts of 'push vs. pull' can rapidly demonstrate the effect of process improvement.

Reference material and a commitment from the CEO/ President close the session.

Find power point NEO material at www.freeleansite.com [*Training tab*]

Placing a Lean Six Sigma (LSS) training module within the NEO provides evidence that pursuing operational excellence is important to your organization.

Newsletters Made E-Z

The purpose of a newsletter is to provide specialized information to a targeted audience. Newsletters can be a great way to market your product or service, and also to create credibility and build your organization's identity among peers, members, employees, or vendors.

First, determine the audience of the newsletter. This could be anyone who might benefit from the information it contains, for example, employees or people interested in purchasing a product or in requesting your services.

You can compile a mailing list from business reply cards, customer information sheets, business cards collected at trade shows, or membership lists. You might consider purchasing a mailing list from a company.

Next, establish how much time and money you can spend on your newsletter.

These factors will help determine how frequently you publish the newsletter and its length.

Editor's note:

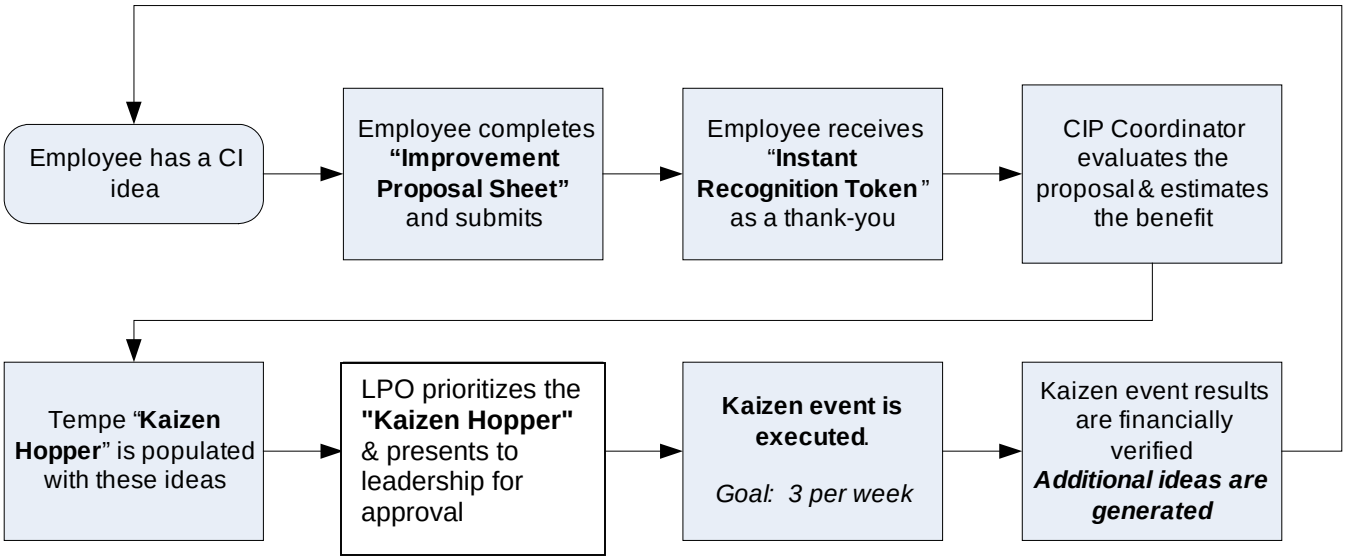
Check out sample formats and free Lean Six Sigma Newsletters at:

www.freeleansite.com

[Letter Pile tab]

"The clash of ideas is the sound of freedom."

Continuous Improvement Ideas feed Kaizen List (Hopper)



As part of the Lean Promotion Office (LPO) communication effort for a Tempe, AZ manufacturing plant, we established the CIP process to engage our workforce, generate continuous improvement ideas, and most importantly, recognize employees for their contribution toward improving Safety, Quality, and Delivery (Speed).

A suggestion system (CIP) coordinator and committee were established to review, analyze, and implement ideas. Within a few weeks, over 25 suggestions were received, with several in process of implementation.

As a "thank you," all who submit their idea through their immediate supervisor received a red "Instant Recognition" coin worth $5.00 in either the cafeteria or the employee store. Coins may be accumulated for bigger purchases – company hats, polo's and gifts.

Suggestion forms are posted within the production cells and in the HR "people centers" across the site.

"Continuous Improvement Proposals (CIP) provide a positive work environment"

Suggestion Status On-board

As the suggested ideas came in, they were posted on a centrally located bulletin board in the factory. The three columns were labeled (l to r): New Ideas, Ideas in process (under evaluation) and Ideas Implemented (adopted!)

The sub-headers indicated the type of suggestion - Safety, Tooling, Material flow, etc.

By posting all the suggestions, employees could see what others were thinking and chime in with new ideas, as well.

The leadership team monitored implementation status regularly - as this station was included in the daily 'Gemba' walks.

Keep Supplies on Kanban

Incorporate these tips to save time and money!

Banish office supply anarchy: Avoid buying only name-brand items in small quantities. Shop for bargains online. Superstores like Office Depot, Staples and Office Max offer "store brands" at reduced prices. And when you establish an online account, they'll often send coupons worth $10 or $20 off orders of $100 or more.

Foil photocopying follies: Don't photocopy high-volume items that you can print for less. Copies typically cost five to fifteen cents each, even if you do them yourself, including paper, toner, labor and maintenance. Printing can lower costs to three cents or less. Biggest cost culprits are forms, flyers and form letters that you *think* you use in small quantities. But if you photocopy a few dozen per week, that can be thousands per year and you could save by having it printed.

Be an inventory maniac: Think of your inventory - raw materials as well as finished goods - as company cash sitting on a shelf or in a warehouse doing nothing. Costs include storage, insurance and taxes, among others. Keep good records and regularly root out dead items. Set min/max levels.

Kick the overnight habit: Express shipments for next morning delivery are costly. Consider next afternoon or maybe two- or three-day service.

Review everything annually: Review vendor relationships at least annually for internet services, phone, wireless, DSL, shipping, legal, printing and other day-to-day expenses. Prices and package deals change, and you may be overpaying.

Organize and Label all central supply locations

Keep it open and visible

Picture Success

Walt Disney utilized storyboards and "Imagineering," Stephen Covey began "with the end in mind" … you can visualize success on your project by developing sound problem statements and project objectives using the 'SMART' mnemonic. Is your objective Specific, Measurable, Achievable, Relevant, and Time-bound?

Others ideas include: asking the team what they think success might look like… also facilitate the team in developing a "future state" map, then taking actions towards accomplishment.

Document the current process through value stream maps, procedures, or pictures. As the project progresses, document the improvements. Compare the pictures side-by-side.

Take a picture of the process improvement team and include it in the team report-out. Also, capture team members working the improvements – it motivates others to join a team in the future. Once, when I knew the CEO was touring the plant, I filled the CIP / Lean Enterprise project bulletin board with over 25 separate Kaizen team member pictures with the heading: : "Watch *our* Teamwork!"

Lastly, fill your company newsletter with team pictures. People love seeing themselves in the newsletter. Also, highlight any Safety, Quality, or Productivity Awards earned that period.

Success breeds success.

For more sample LSS project Report-Outs refer to: www.freeleansite.com

[Letter Pile, Report-outs]

Factory Cell Leader Standard Work Developed

Discover Cell Leader Standard Work templates on www. freeleansite.com [Letter Pile, Case Studies]

Problem Statement:

There is no core standard process for site leaders to interface and understand what is happening in their factories.

Goal:

1. Develop a standard template for site leader standard work.
2. Develop a set of fundamental primary tasks to include into site leader standard work.

Before: No formal process for factory interface process between site leaders and their factories. Excessive variability between leaders and sites regarding factory touch time processes.

After:

1. Site leader standard work template complete.
2. Site leader standard work primary tasks complete.

NOTE: This Kaizen event took 3 days with 4 people.

Jay Watson(r), in weekly work review session

"Status - Three ways to Sunday…"

As a project manager, I kept track of my projects three different ways.

The first was very big, white boards in my office. These were updated daily as projects (and ideas) came and went. Some things were months off, some due today. (Helpful in work reviews…)

By color-coding, my team, (and others) could tell at a glance what was in work.

The second way was a detailed rolling action item list (RAIL) or corrective action matrix. (CAM) It listed all my objectives and projects in great detail. See a copy of the form at www.freeleansite.com From HOME, click-organizing tab…

The third way - a standardized one page weekly report to my superior (in his report format) - listing what was in work, what was completed, and what was coming up for the next week. (Audits, major issues, travel plans, project reviews, etc)

"reduced process tolerance of +/- 0.005 inch allowed design engineering team new opportunities to implement close tolerance and flexibility of weld joints on both miniature and full-sized transducer assemblies…"

Designed experiments key factor in E.B. welding technique

Through careful Design of Experiment (DOE) methodology, this black belt team identified key factors in controlling electron beam weld depth penetration on a critical semiconductor package (housing enclosure).

Initial MSE of 14% launched immediate operational improvements: Upgraded illumination from single source incandescent bulb to dual halogen adjustable…

Upgraded lenses from 30x monocular to 75x stereo… Developed Standard Work instructing Operators on microscope operation including zero adjust methodology, sample crest and root identification, lighting level and angle adjustments 0-1", 0.0001" resolution micrometer operation and data accuracy use of 0.00005" resolution for 0.0001" graduations.

A second MSE performed yielded 1%.

Following DMAIC methods, team identified controlling Beam Current, Beam focus, and RPM w/ key results:

Mathematically model the Wentgate Welder, improve process capability, and reduce weld penetration tolerance from +/- 10 thousands to +/- 5 thousands. [*Design Engineering goal.*]

CAD IPT Process 'Designed' For Results

This highly focused 5-day event concluded that programs will conduct Integrated Product Team (IPT) Drawing release meetings, so the cross-functional Kaizen team designed and implemented a new process.

The IPT concept requires all team members come together and openly address issues with new designs. This concurrent engineering effort has reduced the drawing release throughput time for new drawings to less than 4 days instead of 2 weeks.

Seven separate IPT teams have been initiated in the Chandler, Arizona site and through their collective effort, 229 drawings were released in August - the most drawings that the CAD (Computer Aided Design) group has ever produced for a single month.

This represents an increased output of 91% over the average monthly throughput for January through July 200X.

Drawings were also reviewed through a document checking process to identify and reduce errors that may be passed on to subsequent processing. The quality of the drawings is monitored by a metric called "drawing survivability." This first pass yield data is collected monthly from internal organizations or from supply partners who fabricate hardware.

Drawing non-conformance (N/C) identification and resolution is routinely discussed in senior staff meetings and corrective actions taken.

"this concurrent engineering effort has reduced the drawing release throughput time for new drawings to less than 4 days instead of 2 weeks"

Submersing yourself in 5S Forms a new Habit

This one-day office Kaizen blitz standardized forms and form control throughout office areas.

Obsolete forms were removed, centralized cabinets were standardized, and locations labeled. Laminated Standard work (SW) cards covering usage and re-stocking order points were posted inside the doors. Vital contact information of the administrative assistant and their back-up for each area was also provided.

- Safer working conditions
- A cleaner and more organized work area
- Reduction in non-value added time
- Effective work practices
- Efficient work processes

1S	**Sort**
2S	**Set in Place**
3S	**Shine, (clean)**
4S	**Standardize**
5S	**Sustain**

Check out 5S training at:

www.freeleansite.com

Safety first in this foundry operation!

SQS 1 - Safety

A Safety 1st theme kicked off this LSS engagement – a steel foundry in Dayton, OH experiencing missed OTD dates and poor process repeatability. Several improvement initiatives were developed and managed concurrently.

First, a safety program was launched with employees developing slogans, which would be posted throughout the foundry. Top slogan was: "**Don't Second Guess, Think Safety First**."

The facility was cleaned and organized utilizing the 5S techniques back to front and new aisle stripping and lighting installed along with weather stripping and fresh paint in break/ rest rooms.

Over-hangs were erected above bay doors for rain/ ice control and 'drive-thru' vinyl curtains were installed so over-head doors did not have to be left open, thereby reducing energy costs.

SQS 2 - Quality

From waste identified in the process maps and rejection data by defect type, cross-functional Quality improvement teams focused on critical factors controlling cleanliness and shrinkage (cleaning/ pouring/ casting methods with associated training revisions).

Secondly, teams investigated equipment related causes – glue gun tips/ filters, sand blast patterns, and also analyzed/ reviewed improved part identification methods. Location of the molds (closer to the work areas) and material handling issues (patching floors) were addressed. Process control was implemented on critical characteristics and inspection boards were fabricated and placed in appropriate areas.

Standard work and sample product "Molds" focus on Key Process and Quality requirements

SQS 3 - Speed

"After improvement, On-Time Delivery (OTD) went from 63% to 89% (product line #1) and from 79% to 96% (product line #2)."

After analysis of process flow and forklift traffic, several Raw Material shelves (kanban) were placed throughout the foundry with standardized labels for part/ process identification.

Additional conveyor lanes were added to address bottlenecks and an identification (tagging) process was incorporated for "high risk" casting informing operators of special requirements.

Visual Management (VM) technique of color coding production travelers and associated lot (parts) helped production teams identify SPC / special processes/ traceability requirements or to simply expedite hot jobs.

We utilized the staff-led 15-minute daily accountability meeting to sustain results.

After six month (part-time) improvement effort, OTD metric went from 63% to 89% (line #1) and from 79% to 96% (line #2).

Review the Project Report-Out presentation at: **www.freeleansite.com**.

Kanban controls Flow w/ Big, Bright, Clear Labeling

As part of the on-going Lean Acceleration efforts in a Tempe, AZ assembly plant – a team was formed in the Receiving / Receiving Inspection area. The Kaizen event took place over 4 ½ days. Team members included a Lean Expert, and 3 personnel from the department.

Visual Management (VM) was put in place to identify needed equipment, tools, and supplies.

Visual Control (VC) indicators were placed in incoming queues to identify flow of material and prioritization of orders.

Utilizing 5S concepts, the stations were optimized and standard work instructions (documentation) posted to represent needed work content, optimized material, training, and people flow.

Results:

- ✓ **Implemented Receiving prioritization methodology.**
- ✓ **Created a standard process for prioritizing "hot" part receipts.**
- ✓ **Reduced cycle time of priority parts by 50%.**
- ✓ **Achieved indirect labor savings of 100 hours annually.**

Clear direction provided for Government Source Inspection (GSI) personnel

One of the basic tools used in lean manufacturing is "kanban." This is a communication tool used in the manufacturing process. Simplest form of kanban can be used as a visual indication of the requirement upstream.

Kanban system goes together with the pull manufacturing system. Pull manufacturing is the basic lean manufacturing concept, which makes the system flexible and easy to use. Kanban cards are used to display the requirements of the production unit to the production facility or the warehouse immediately before it. When this signal is received, the process down stream will work to fill the requirement created by the process upstream.

In the simplest form, this communication process will take care of the internal manufacturing activities. But in systems that are more complex kanban techniques are used in signaling the suppliers and other outside parties about the requirement of the manufacturing facility. This is the ultimate aim of lean manufacturing, which will group the customers and suppliers with the manufacturing facilities. Advantages like shorter lead times, lower costs, and floor space savings are directly the result of adopting this technique.

Projectz! LSS In Action

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Thank you for reading this! *(I enjoyed writing it…)*

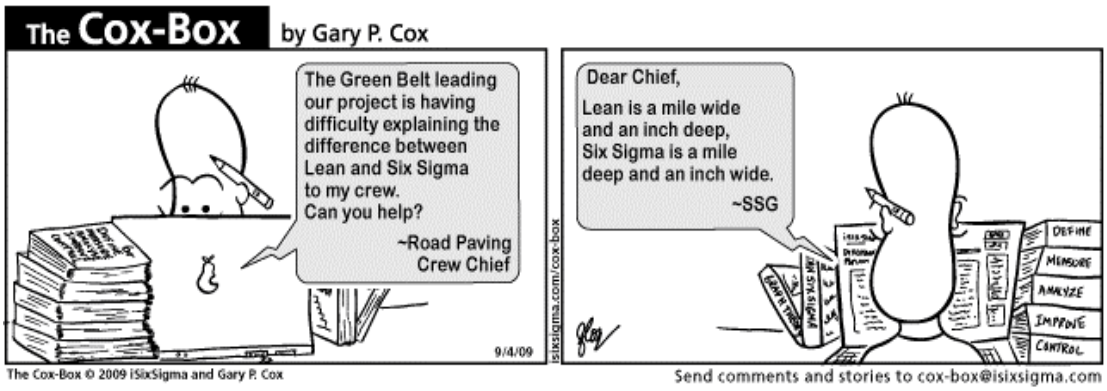
Now please recycle – pass it along to others.

Jay at ~~Work~~ Play

Over the years, people have asked me to share some of my improvement projects with them and I love to do that – hence, this publication was born! I've found it is a lot easier to start your project, when you have reviewed several others and seen some fresh ideas and explored some new approaches. It also saves a lot of time.

I hope you can walk away with one new idea or application. Something you can really use – at work or in your private life. (*Hey, Improvement doesn't clock in at eight and go home at five*.) If you are just a little more productive, I will have been successful!

Would you share this newsletter with friends and colleagues? It's the only LSS project publication of its kind available – *free!* Hope it helps.



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