



WHITE PAPER

Implementing Enterprise-Wide Business Process Improvement / Continuous Process Improvement using LSS

**PRACTICAL UTILIZATION OF
LSS FOR BPI / CPI SUCCESS**



Implementing Enterprise-Wide Business Process Improvement/Continuous Process Improvement Using Lean Six Sigma

Executive Summary

Business processes are foundational components of every organization. Yet, billions of dollars are lost every year to inefficient, ineffective, and poorly-executed processes. All organizations need effective, affordable, sustainable Business Process Improvement (BPI) and Continuous Process Improvement (CPI) programs to meet ever-evolving customer and stakeholder needs. Such programs, if properly designed and maintained, are not only effective but are also affordable and provide significant return on investment to the broader organization they support.

Introduction

Business processes are the exclusive mechanism by which an organization achieves its mission and goals or how an organization “gets its work done.” Inefficient, outdated, or cumbersome business processes significantly contribute to organizational inefficiency, lost or wasted resources, poor employee morale, and ineffective service delivery. Research shows 20%-30% of an organization’s revenue is lost due to inefficient business processes and 26% of every employee’s day is wasted on unnecessary tasks.¹ Further, in 2018, the Federal Inspector General identified \$34B in potential savings across the Federal government if process inefficiencies were addressed in multiple agencies.²

Thus, to function efficiently, all organizations need to regularly examine, improve, and document their business processes from a standard perspective, using a standard approach. Yet, doing so can be a challenge. Many organizations struggle with understanding the opportunities for and benefits of Business Process Improvement (BPI).

Effective BPI and ongoing Continuous Process Improvement (CPI) require a structured, systematic approach, centered on a sound methodology, effective planning, and efficient execution. Such an approach will improve organizational functions, enhance organizational efficiency, better meet customer/stakeholder needs, and advance an organization’s culture toward one that is forward-thinking, nimble, dynamic, and efficient.

¹ <https://www.financialdirector.co.uk/2019/06/19/how-inefficient-processes-waste-nearly-a-third-of-employees-time/>

² <https://www.oversight.gov>



Effective BPI/CPI

To be effective, a BPI/CPI effort requires the following elements:

1. Executive buy-in and leadership
2. Understanding of an organization's culture and how to improve it
3. A structured methodology, rooted in established principles that are flexible and adaptable
4. Employee training and empowerment
5. Persistence, patience, and permanence

The following is a detailed look at each element.

Executive Buy-in and Leadership

Executive buy-in and leadership is fundamental to any BPI/CPI initiative. It is through these actions that the entire organization learns, recognizes and understands that ongoing process standardization, efficiency, and execution are central to the organization's mission and are priorities of the organization's leadership.

Effective executive buy-in means that a BPI/CPI effort is more than just a "service" offered when someone within the organization has an interest in it. It means the BPI/CPI effort is a recognized, strategic program within the organization and that the leadership is supportive of it. It also means that leadership will play an active role to step in when needed: mitigating challenges, encouraging staff, and promoting the project. Most importantly, it means that they will hold the organization accountable for BPI/CPI success.

The most effective executive leadership of a BPI/CPI Program is one that has a direct line to the chief executive of the organization. This means that the effort is not "buried" in a "quality" or "IT" group. In this manner, the broader organization understands the significance and importance of the program and the program can speak directly and honestly to the executive on progress, challenges, mitigations, etc.

Organizational Culture

Most organizations have an inherent culture that is professional and collegial. Individuals who make up organizations typically want to work together effectively to meet their goals. Putting professionalism and collegiality to use are good strategies for doing so.

Unfortunately, such a culture often impacts the organization's ability to perform at its best, to adapt to new realities, or to better respond to shifts in customer/stakeholder needs and expectations. Cultures don't like tension and traditional BPI/CPI efforts can be seen as tense situations. Fundamentally, when processes are being examined, people are being asked to change and, culturally speaking, there is often resistance to that change. Thus, the BPI/CPI effort struggles to gain traction.

To address this, the BPI/CPI effort needs to understand the culture of the organization. It needs to, at



the start, work within that culture to help staff understand BPI/CPI and the opportunities and benefits it brings; not only to the organization but to the employees as well. Employees make up an organization and will benefit in multiple ways from the BPI/CPI Program.

BPI/CPI empowers employees to make tangible improvements in operations, operations they execute. It improves employee morale as staff recognize and benefit from the advantages of improving processes. Functions become more efficient, operations become smoother, information becomes more transparent, and their contribution is recognized. Indeed, once a process is improved, employee performance is no longer considered in the context of an inefficient process but, rather, an efficient one. This fact alone helps employees understand and appreciate the benefits of BPI/CPI. By empowering employees to improve processes, the leadership is trusting and vesting them in the BPI/CPI Program, making them part of the solution rather than “the problem.”

Ultimately, BPI/CPI is a “people” business and the skills necessary for success need to be people-based – communication, empathy, tact, etc. To ensure employees see the value of BPI/CPI, the program needs to be led by skilled practitioners – individuals that have the experience and diplomacy necessary to lead the effort while supporting staff to accept process improvement. BPI/CPI practitioners too closely affiliated with the organization tend to be part of the existing culture and won’t press the organization to make improvements. Practitioners that don’t appreciate or respect an organization’s “culture” often focus too much on the quantitative aspects of BPI/CPI versus the qualitative aspects.

Structured Methodology

Effective BPI/CPI efforts must be properly organized, structured, and executed in order to be successful. The best approach for BPI/CPI revolves around the utilization of Lean Six Sigma (LSS) and the DMAIC approach – Define, Measure, Analyze, Improve, and Control. DMAIC provides a structured methodology for effective assessment of organizational business functions and their ongoing improvement. It includes all the key requirements for a successful BPI/CPI Program.

However, DMAIC has limitations and challenges that must be adequately addressed. For example, within DMAIC, each phase features a “project control gate” that must typically be cleared in a “formal” manner for the next phase to commence. This expectation can make individual projects take an excessively long time. Further, traditional LSS DMAIC requires the assessment of process data. Many organizations don’t have such data readily available because they can’t collect it, there is resistance to its collection, they don’t know how to collect effective process data, or it is genuinely not applicable to their work. In these situations, the BPI/CPI effort must emphasize qualitative measures to ensure success. Finally, success using DMAIC is best achieved when the methodology is modified to the realities of today’s organizations, including the need to work efficiently and seamlessly to enhance organizational business processes in a non-disruptive manner.

It is well understood that all organizations have an inherent level of business process maturity; i.e., an



understanding of how mature their business processes currently are and how mature they need to be to support effective, efficient, responsive, and high-quality service delivery. For LSS, organizational process maturity can be determined and assessed via a maturity model, featuring the following phases:

1. Launch – a recognition that organizational processes need improvement, standardization, and efficiency.
2. Initial Success – engaging in process improvement efforts to energize the organization and prove the benefits of BPI/LSS/CPI to the organization.
3. Scale and Replication – identifying project success characteristics and repeating those across the organization.
4. Institutionalization – enterprise-wide recognition of the benefits of process improvement to the organization, its employees, its stakeholders, etc.
5. Culture Transformation – the organization develops an organic culture of efficiency where processes are regularly reviewed and employees are empowered to make process improvements.³

To operationally and functionally implement a BPI/CPI Program for most transactional organizations, including government agencies, the following activities should be included:

1. Development of a Program Charter that defines the broad goals and scope of the program.
2. Formal introduction to the organization of the overall program and its leadership.
3. Identification and establishment of a BPI/CPI enterprise repository, such as a SharePoint site, that becomes a location for all public BPI/CPI materials and communications, such as:
 - a. All program artifacts (i.e., process models, process narratives, briefings, etc.)
 - b. Directory of staff participating in BPI/CPI efforts
 - c. A space that provides opportunity for staff to recommend BPI/CPI or related initiatives
 - d. Updates on ongoing BPI/CPI efforts
4. Development of a Process Inventory of all known business processes within the organization, by sub-organization or function, and with a tentative “Process Owner” (see example, Figure 1 below). A Process Inventory is an excellent strategy for organizing the overall program and demonstrating to the organization its scope, purpose, and approach.

³ <https://www.isixsigma.com/implementation/basics/maturity-model-describes-stages-six-sigma-evolution/>



| F | Area | Process | Process Owner | | | | | | | | | | | Comments/Observations/Descriptions | | |
|----|-----------|----------------------------------|---------------|----------------------|---|--|------------------------------|------------------------------------|----------------------|---|-------------------------|---|--|------------------------------------|--|--|
| | | | | Review Documentation | Develop As-is Model and/or Conceptual Model; from documents | Identify Improvements for To-Be Process; via analysis of documents | Model/Validate To-Be Process | Leadership Review/Comment on To-Be | Finalize To-Be Model | Approved for Implementation by Leadership | Draft Process Narrative | Model and Narrative delivered to organization for utilization | | | | |
| 1 | Pre-Award | Acquisition Planning | Name | X | X | | | | | | | | | | | Process identified as part of OA process inventory and provided as a TRAC Routing Process provided by Eric Coles 9.19.16 |
| 2 | Pre-Award | Simplified Acquisition | Name | X | X | | | | | | | | | | | Checklist to be addressed in November 2016 |
| 3 | Pre-Award | Streamlined Acquisition | Name | X | | | | | | | | | | | | |
| 4 | Pre-Award | System Security Reqs | Name | X | | | | | | | | | | | | |
| 5 | Pre-Award | AP for non-R&D reqs over \$500k | Name | X | | | | | | | | | | | | |
| 6 | Pre-Award | Task Order Contracting | Name | X | | | | | | | | | | | | discussed in R&D session 2015 |
| 7 | Pre-Award | Purchase Orders | Name | | | | | | | | | | | | | |
| 8 | Pre-Award | Acquisition of Commercial Items | Name | X | | | | | | | | | | | | |
| 9 | Pre-Award | FSS Contracts | Name | X | X | | | | | | | | | | | |
| 10 | Pre-Award | CWPF0C | Name | X | X | | | | | | | | | | | |
| 11 | Pre-Award | IGCE | Name | | | | | | | | | | | | | |
| 12 | Pre-Award | Sources Sought Notice | Name | X | X | | | | | | | | | | | |
| 13 | Pre-Award | Market Research | Name | | | | | | | | | | | | | |
| 14 | Pre-Award | D/F to Enter into Multi-year | Name | X | X | | | | | | | | | | | |
| 15 | Pre-Award | D/F to Enter into Award Fee | Name | X | X | | | | | | | | | | | |
| 16 | Pre-Award | D/F to Enter into Exceed 5 Years | Name | X | X | | | | | | | | | | | |
| 17 | Pre-Award | D/F to Enter into T&M | Name | X | X | | | | | | | | | | | |

Figure 1 - Process Inventory Example

5. Prioritization of the inventory; i.e., ranking of all processes to be assessed and improved in a sequential order, determined by a desired organizational criterion; i.e., criticality, low-hanging fruit, etc. This can be done via discussions, scoring, etc.
6. Initiation of individual business process projects within the BPI/CPI Program. This includes:
 - a. Development of individual Project Charters for each process to be improved.
 - b. Forming of a Process Improvement Team featuring organization Subject Matter Experts (SMEs).
 - c. Kaizen sessions developing as-is and to-be views of each process.
 - d. Finalization, validation and approval of each to-be process with leadership.
 - e. Development of a process narrative for the new, to-be business process.
 - f. Implementing the to-be process, as appropriate, to include development of communications, change management, and related materials.
 - g. Storing of the finalized materials in the developed enterprise BPI/CPI repository.
7. Following implementation and after a fixed period of time (typically 4-6 months), newly improved processes should be revisited. As processes become more mature and standardized, the reassessment period can be extended.
8. All artifacts should be developed in a consistent manner with a consistent look and feel, from a single voice perspective, and stored in the enterprise repository noted above.



The goal of any methodology should be to work within the existing framework of the organization to extend the organization's process maturity from launch to culture transformation. To do so, the methodology must be structured enough to offer organized, controlled program execution but flexible enough to adapt to organizational realities. Further, it must work methodically and with purpose to transform the organization to an efficient, high-performing one.

Employee Training and Empowerment

A key aspect of any BPI/CPI effort is employee acceptance or buy-in. Organizational employees are the ones executing business processes and it is ideal if they have some stake in the overall transformation effort. Ideally, employees are provided guidance by leadership on the goals of the BPI/CPI effort and what leadership expects to achieve. Employees are then encouraged to achieve those goals through active participation, promotion, buy-in, and implementation. Employees demonstrating a commitment to the vision are rewarded and recognized appropriately.

It is ideal to train employees in organizational process improvement and the techniques to be used by the BPI/CPI Program, prior to the formal establishment and implementation of the program. For example, a practical Lean Six Sigma Yellow Belt course is excellent training for employees to take at the start of a BPI/CPI effort. Such training will provide employees with an understanding of BPI, CPI, and LSS, and help ease concerns they may have regarding the effort.

Further, employees will be able to immediately contribute to the overall BPI/CPI effort by introducing the techniques they learned into their everyday work as well as to any process improvement project they may be a part of. Finally, such training is a great tool to demonstrate to employees leadership's commitment to BPI/CPI and their belief in the key role employees play in such an effort.

Persistence, Patience, and Permanence

Virtually all BPI/CPI Programs are a marathon, not a sprint. To truly adjust an organization's culture to one of accountability, agility, responsiveness, and efficiency, an organization must be prepared to invest and maintain a BPI/CPI Program. To do so will take persistence, patience and permanence; persistence by maintaining an active, ongoing BPI/CPI Program; patience by leadership to recognize that change takes time; and permanence in establishing a BPI/CPI Program at the highest levels of the organization. Ultimately, a BPI/CPI Program with a dedicated group of experienced LSS professionals will be able to improve organizational efficiency, enhance organizational performance, and transform an organization's culture to one that meets and exceeds the requirements and expectations of leadership, customers, and stakeholders.

Conclusion

The most important characteristic of any organization is its people, followed by its business processes. It is through those processes that organizations meet their goals and deliver their services. All high-performing organizations make Business Process Improvement / Continuous Process



Improvement using Lean Six Sigma an organizational priority. Organizations that don't make it a priority, run the significant risk of becoming obsolete. Further, a properly executed and implemented BPI/CPI effort, one that implements and monitors to-be process execution across the enterprise, will pay for itself in multiple ways including through reduced process costs, higher process quality, reduced organizational risk, improved employee morale, and higher customer and stakeholder satisfaction. Ultimately, given the cost of inefficiency, the resources spent on engaging in a well-organized, well-executed BPI/CPI effort are dollars well-spent and typically recouped multiple times over.