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The Best of Both Methods

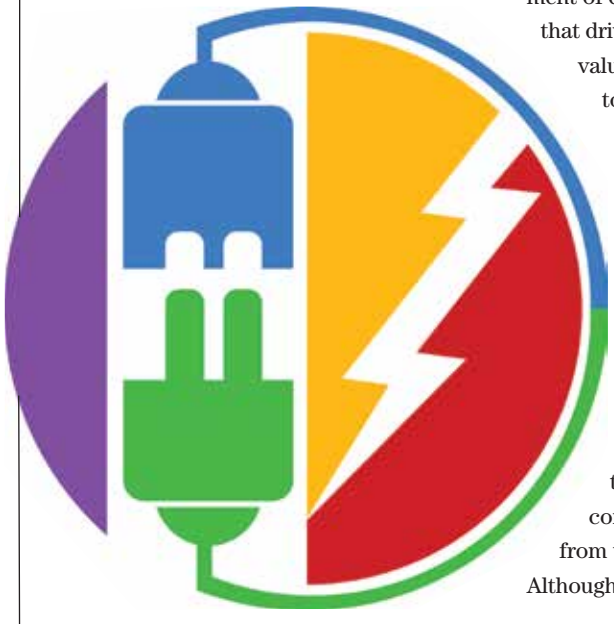
Combining business process management and lean Six Sigma

MANY ORGANIZATIONS have deployed both business process management (BPM) and lean Six Sigma. The similarities and differences between these two methods could be illustrated using a Venn diagram, shown in Figure 1.

There is some natural overlap, as well as some fundamental differences between the two, but organizations can benefit from a structured integration of these two techniques in their business.

Organizations undertake the deployment of BPM and lean Six Sigma programs for various reasons, but there can be a great amount of difference in how organizations actually implement these programs. In addition, some organizational deployments of BPM and lean Six Sigma have been successful, while others have been less so.

There are attributes of BPM and lean Six Sigma methods that are fundamentally positive and other characteristics that could be improved upon. There are improvement opportunities for these deployments that can be mapped out to combine the best of both methods, which then can lead to a sum that is greater than the parts.



First things first

Before discussing the creation of an orchestrated method, it's important to lay out a general description of BPM and lean Six Sigma to understand how to integrate the two:

- The Association of Business Process Management Professionals (ABPMP) defines BPM as "a disciplined approach to identify, design, execute, document, measure, monitor and control both automated and non-automated business processes to achieve consistent, targeted results aligned with an organization's strategic goals. BPM involves the deliberate, collaborative and increasingly technology-aided definition, improvement, innovation and management of end-to-end business processes that drive business results, create value and enable an organization to meet its business objectives with more agility."[1]
- Lean Six Sigma, on the other hand, is a method that provides a framework to execute projects to improve quality, increase speed and reduce waste through improved workflows. Lean Six Sigma projects are often a one-time process event in which controls are established so gains from the project are maintained.

Although I think it's best to integrate the tools of lean and Six Sigma when executing projects, organizations often undertake the task of project execution using differing approaches for Six Sigma and lean.

Six Sigma projects typically follow a define, measure, analyze, improve and control (DMAIC) roadmap for process improvement efforts or a define, measure, analyze, design and verify (DMADV) step-by-step approach for design projects. Lean improvement projects often use *kaizen* events, which can involve the active participation of operators, engineers, maintenance technicians and others so immediate action can be taken.

BPM and LSS's process focus

The efforts of BPM and lean Six Sigma highlight the importance of process execution. This is good because overall business performance is the result of the effectiveness of the organization's processes.

But the deployment of these methods has evolved over time and can differ greatly between organizations. Even though there are differences in the details of execution, consider a high-level perspective of the general focus for each deployment type.

From my observation, those undertaking BPM often give much focus to process automation. A Six Sigma deployment spotlights the quantification of monetary savings from executing projects, and lean implementations target the reduction of waste for their improvement efforts.

A general question that typically arises when undertaking all of these methods (that is, BPM, lean Six Sigma and lean) is: Where should efforts focus when initiat-

ing a deployment? Where should they focus on an ongoing basis? Organizations have various approaches to address this question; however, much of this selection process for all deployment options is based on opinions and can result in organizational silo enhancements that don't provide whole-system benefits.

A better way to address these questions is through an orchestration system, which provides as a foundation an accurate view of what is being done in the organization from a process point of view and of the performance of how well these activities are being executed. With this readily accessible point of view, enterprise and operational efforts can be undertaken through the use of analytics so the big picture benefits from their efforts.

An orchestrated system

The ABPMP book that contains the BPM body of knowledge[2] provides attributes for inclusion of the enterprise in a BPM deployment using the tools of enterprise process management (EPM). But this book and other literature do not describe how to best orchestrate these methods or provide details on how to execute an actual process improvement project.

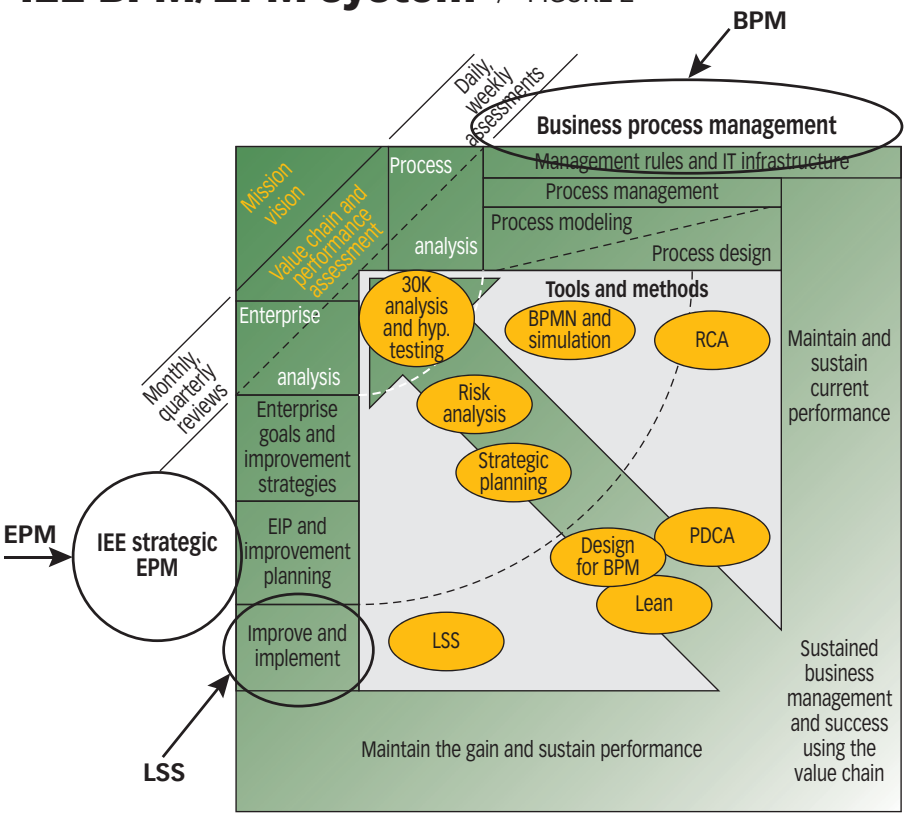
The roadmap in Figure 2 addresses this need by outlining an Integrated Enterprise Excellence (IEE) integration of BPM, EPM and lean Six Sigma methods. In this IEE BPM/EPM figure, the application of BPM methods is described across the top, while the execution of EPM is described vertically on the left side.[3]

The application of lean and lean Six Sigma improvement undertakings is highlighted in the roadmap step's "improve and control," in which these efforts from a lean Six Sigma point of view could follow a DMAIC roadmap, DMADV execution, *kaizen* event or a just-do-it project.

Also in Figure 2, note that:

- The upper-left corner describes the initiation of an IEE BPM/EPM implementation, which involves two steps in which the first initiation step is the organization's vision and mission.
- The next step shown in the upper-left corner of the roadmap is "value chain and performance assessment." This IEE value chain provides a description of what an organization does and how it measures its performance. The IEE value chain is an extension of Porter's value chain.[4]
- A split in the flow next occurs in the

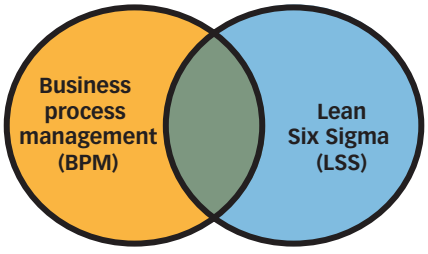
IEE BPM/EPM system / FIGURE 2



BPM = business process management
BPMN = business process model and notation
EIP = enterprise improvement plan
EPM = enterprise process management
hyp. = hypothesis
IEE = Integrated Enterprise Excellence
LSS = lean Six Sigma
PDCA = plan-do-check-act cycle
RCA = root cause analysis

Modified from Forrest W. Breyfogle's *The Business Process Management Guidebook: An Integrated Enterprise Excellence BPM System*, Citius Publishing, 2013.

BPM and LSS methods / FIGURE 1



roadmap with the use of information provided in the organizational value chain and its performance reporting. The figure's top horizontal branch shows the path for a BPM implementation beginning with process analyses, while the vertical branch addresses analyses and other activities of the EPM system.

- Both paths then recombine in the lower right, which represents the sustainment of business success when BPM and EPM together are emphasized in an organization.

The EPM execution (the left side of Figure 2) step-by-step process begins after an enterprise analysis and realistic financial goals are established with a timeline for achievement. Next, analytically and innovatively determined targeted strategies are created with an alignment to the financial needs and organizational objectives.

Whenever possible, these strategies should lead to targeted operational value-chain performance goals, in which process owners become highly motivated for the execution of lean Six Sigma projects in their area so that the completion of these projects will benefit their performance metrics.

Successful completion of these projects will have a positive impact on the entire organization because project selection is based on the needs of the business. An enterprise improvement plan approach is a means to obtain the alignment of projects to business needs.[5]

Lean Six Sigma projects that improve operational metrics in the IEE value chain, which positively affect the entire enterprise to the magnitude desired, are considered successful. Controls then must be established in the organizational value chain to maintain the gains and sustain performance.

An IEE value chain 30,000-foot-level performance metric[6] can be one form of controls for maintaining a project's benefits.

Analytically and innovatively determined targeted strategies are created **with an alignment** to the **financial needs and organizational objectives.**

The step called "sustained business management and success using the IEE value chain" (lower right) shows an arrow that looks back to enterprise analysis. This is equivalent to W. Edwards Deming's plan-do-check-act (PDCA)[7] improvement method for the entire enterprise.

Figure 2's BPM execution (top of the figure) includes the methods that are considered BPM components in which:

- The creation of an IT infrastructure includes implementation of the IEE value chain with automatic performance data updates, which can be accessed readily by those authorized in an organization.
- The IEE value chain is used for the day-to-day management of processes.
- An approach for systematically maintaining and sustaining current performance is applied.
- Process design for effective implementation.
- Process modeling for assessing the risks of new process designs' implementation and the optimization of processes is applied.
- An EPM analysis is used to determine where the automation of IT processes should focus so that the enterprise as a whole benefits.

The approximate time sequence of potential tool applications in the IEE BPM/EPM structure is shown as oblong circles in Figure 2.

Move to the 3Rs

Organizations have benefited from BPM and lean Six Sigma methods, but often these benefits have been short term and the deployments were not sustainable. Organizations profit when they orchestrate the methods of BPM and lean Six Sigma so they can move toward achievement of the 3Rs of business: everyone doing the right things and doing them right at the right time. QP

REFERENCES AND NOTE

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2. Ibid.
3. Forrest W. Breyfogle, *The Business Process Management Guidebook: An Integrated Enterprise Excellence BPM System,* Citius Publishing, 2013.
4. Michael E. Porter, *Competitive Advantage: Creating and Sustaining Superior Performance,* Free Press, 1985.
5. For an example of an enterprise improvement plan, see Forrest W. Breyfogle's "Inputs Into Action," *Quality Progress*, January 2012, pp. 52-55.
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7. W. Edwards Deming, *Out of the Crisis,* MIT Press, 1986.

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