

White Paper from Global Process Innovation

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Fourteen Metrics for a BPM Program

This white paper presents 14 metrics which may be useful for monitoring progress on a BPM program or initiative. The 14 metrics, divided into three categories, are:

Value

1. Total cost of incidents
2. Reportable incident rate
3. Number of audit findings associated with process inadequacies
4. Percentage of process improvement projects that achieve expected outcomes (as defined in the business case)
5. Total net financial benefits from process improvement/process management efforts

Maturity

1. Scores from IVI BPM maturity assessment
2. Percentage of workforce educated about BPM
3. Number of process improvement efforts started, completed, and underway
4. Number of processes defined, documented, assigned owners, measured, and monitored
5. Investments in BPM infrastructure
6. Efficiency of BPM methodology in achieving expected outcomes on process improvement projects

Satisfaction (qualitative measures)

1. Workforce satisfaction with BPM efforts and with their own processes
2. Middle and senior management satisfaction with business processes
3. Customer satisfaction with the impact of BPM efforts

More information on each of these metrics is presented below.

Total cost of incidents

Measure description

- An aggregation of calculated, direct and indirect costs of incidents incurred by an organization over a given period of time. Incidents include operational upsets or mistakes, and safety, health, and environmental occurrences.

Measure usefulness

- At a minimum, incidents are a drain on an organization's profitability and morale; at worst, incidents can be a threat to an organization's survival. A primary expectation of process management is improvement in reliability and safety performance due to clarity of mission and procedures.
- A governing body should expect to see the cost of incidents decline as BPM matures; if it does not see such a decline, investigation is warranted.

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Considerations

- Using this metric well first requires dedication to defining the standards and process associated with reliably measuring the cost of incidents. Without rigor and detail, costs will be open to interpretation, and the data will be distorted.

Expected evolution as organization matures

- This metric is conceptually straightforward and need not evolve much as BPM maturity increases. Possible changes will be inclusion of more types of incidents and/or more rigor in estimating incident costs.

Related lower level metrics (to be used optionally to increase focus)

- Average cost per incident (may indicate whether working on the right things to reduce risks).
- Number of severe incidents (based on a defined level of severity).
- Pareto charts of types of incidents, by number and by cost.

Reportable incident rate

Measure description

- A rate which measures reportable incidents as specified by policy or regulation.

Measure usefulness

- Reportable incidents often are caused by inattention to operating procedures. Process management addresses both the design of processes to produce effective outcomes, and the management system that provides the training, tools, and reinforcement to comply with procedures.
- A governing body should expect to see safety incidents decline as BPM matures; if it does not see such a decline, investigation is warranted.

Considerations

- Reportable incidents are rigorously defined in many countries and jurisdictions. The organization will need a process to properly identify, evaluate, and classify such incidents. Most large organizations will be tracking this metric already.

Expected evolution as organization matures

- If this metric does not have high visibility, then it almost surely should become highly visible. Perhaps there also will be increased rigor in identifying, evaluating, and classifying incidents.

Related lower level metrics (to be used optionally to increase focus)

- Number of severe reportable incidents.
- Health and safety insurance premiums.

Number of audit findings associated with process inadequacies

Measure description

- A count of all findings that are associated with process inadequacies over a selected time period (e.g., quarterly, annually) from audits on auditable processes.

Measure usefulness

- An expectation of a BPM initiative is to improve both process design and consistency of process execution according to design.

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- Audit findings for such processes would be expected to decline as BPM matures. By shining a light on such findings, a governance body encourages an organization to address and prioritize them for improvement efforts.

Considerations

- Different industries and organizations will have different processes that are subject to audits. Auditable processes can be defined by regulations or by company policy. Audits may be conducted by internal or external personnel.
- If findings are not categorized in terms of whether the inadequacy is a process problem or some other problem, then the organization may need to develop criteria by which such findings can be categorized. Alternatively, an organization can decide to count all findings as having some aspect of process inadequacy since the right process improvement is likely to help mitigate almost any type of finding.

Expected evolution as organization matures

- Gradually, this metric would be expected to become of less value for driving improvement activities as fewer and fewer audit findings are uncovered.

Related lower level metrics (to be used optionally to increase focus)

- Number of audit findings associated with high-risk processes.
- Number of audit findings associated with processes that have already been improved (indicative of efficacy of improvement efforts).

Percentage of process improvement projects that achieve expected outcomes (as defined in the business case)

Measure description

- A measure to indicate the accuracy of the business case estimation process. Most likely, emphasis will be on exceeding a *minimum case*, with no negatives associated with exceeding the business case.

Measure usefulness

- Instills discipline in the process improvement community to achieve what it says it can achieve.
- For the governance body, if results consistently underperform estimates, fundamental analysis of the estimating methodology may be needed.

Considerations

- Estimating benefits in an uncertain future is difficult. It is a discipline worth learning, but it also can be intimidating to those involved. Encourage participation and learning, and reinforce when good practices seem to lead to better outcomes. The level of rigor involved in estimation also should be scaled to the size of the expected benefit.

Expected evolution as organization matures

- Initially, demonstration of well-grounded analysis should receive most of the reinforcement from management, with gradually increasing emphasis on achieving the forecasted benefits.

Related lower level metrics (to be used optionally to increase focus)

- Percentage of process improvement projects of certain sizes or types that achieve expected outcomes.
- Percentage of *best practices* used to enhance estimation and project realization outcomes.

Total net financial benefits from process improvement/process management efforts

Measure description

- An aggregation of Finance-validated financial benefits from process improvement or process management efforts. The financial benefit must be visible on the organization's bottom line.

Measure usefulness

- If senior managers see trustworthy results from process management efforts, they are likely to invest in more of them.
- Being subject to the standards of this metric imposes professionalism and rigor upon the discipline.
- If a governance body does not see financial benefits exceeding costs within 1–2 years after the program begins, then it should investigate the source of the problem; for example, high-value opportunities not selected, inadequate skills for process improvement, or inadequate deployment of improvements.

Considerations

- Data for this metric tend to be easier to gather for process improvement efforts versus more general process management efforts. Process improvement efforts are often pinpointed to a specific operational area and the results can be seen immediately and directly as lower costs or higher revenues. On the other hand, process management is likely to have a more general impact that is harder to trace and can be obscured by marketplace margin fluctuations. Measures of productivity at the organizational level; that is, output per cost or output per person, are reasonable surrogates and can be translated to financial value. However, there is no guarantee that the improvements are due solely or even primarily to the BPM initiative versus other changes.
- Gathering data about benefits from process efforts requires a certain insistence with client organizations that baseline measures must be taken. To many managers, spending resources doing baseline analysis feels as if it is *"analyzing the past."*
- Some projects change multiple assets concurrently—processes, IT systems, organizational structure—so it is difficult to isolate the impact of process changes. A reasonable approach is to survey stakeholders about the percentage of benefits from a project that should be allocated to process efforts.

Expected evolution as organization matures

- At lower levels of maturity, it is typical to have little rigor behind measurement of financial benefits from BPM. But the quest for such rigor should begin as soon as possible. The organization will mature in its ability to efficiently measure baseline and resultant performance. Standards and methods for measurement of benefits gradually will become more refined.

Related lower level metrics (to be used optionally to increase focus)

- Return on Investment (ROI) on process efforts.
- Net Present Value (NPV) of process efforts.

Scores from IVI BPM maturity assessment

Measure description

- A set of maturity scores as judged against nine Capability Building Blocks across five levels of maturity. Generally, scoring is conducted through online surveys of individuals evaluating

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attributes and selecting maturity levels that best describe the current state of the organization. Interviews and analysis by external facilitators can refine the data and provide deeper insights.

Measure usefulness

- Provides a high-level dashboard of BPM maturity that can be owned by a BPM governance body as it sets priorities for capability development. Attainment of specific maturity levels will serve to highlight management's commitment to the BPM program.
- Serves as a valuable learning and dialog tool for an organization. Survey data can be segmented by demographics so perceptions between groups can be highlighted, discussed, and resolved.

Considerations

- If no action is taken as a result of the assessment, many people may think it was a wasted effort.
- Individuals should not be surveyed more than once a year, but sample surveys could be done more frequently if an organization is trying to rapidly develop its capabilities and desires frequent feedback.

Expected evolution as organization matures

- Organizations are likely to get the most value from this measure during the earlier years of a BPM effort. Once maturity levels of 3 or 4 are reached in each Capability Building Block, the organization will have a *BPM consciousness* that goes well beyond relatively simple measures.

Related lower level metrics (to be used optionally to increase focus)

- Specific milestones on any Capability Building Block that is deemed especially valuable to the organization

Percentage of workforce educated about BPM

Measure description

- A measure that tracks the percent of the workforce that has attended specified BPM course(s).

Measure usefulness

- Education and training are essential components of a BPM implementation effort. This metric will track the rate and level of formal learning in the organization.
- A BPM governance body can use this metric as one which demonstrates management's commitment of resources to development of desired skills and culture.

Considerations

- Classroom training is challenging to schedule and it is expensive. Online courses may be the best option that also will facilitate data capture of training metrics.

Expected evolution as organization matures

- Initial efforts may emphasize BPM education for large populations. As an organization matures, an array of metrics associated with education, training, skill achievement, and certifications is likely to evolve.

Related lower level metrics (to be used optionally to increase focus)

- Number (or ratio per thousand employees) of Six Sigma Black Belts.
- Number (or ratio per thousand employees) of BPM Subject Matter Experts (e.g., automation solution developers, process modelers).
- Percentage of management completing "BPM for Managers" course.

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- Other pinpointed metrics associated with specific skill sets needed for BPM, such as Process Sponsors, Process Advisors, BPM Program Coordinators, BPM Implementation Coordinators, BPM Technology Support and Administration, and BPM Consultants.

Number of process improvement efforts started, completed, and underway

Measure description

- A measure of process improvement activity level, most likely taken as a snapshot and plotted quarterly.

Measure usefulness

- As an organization matures its BPM capabilities, its process improvement efforts should become more efficient and more impactful. Therefore, management is likely to increase the number of improvement efforts it undertakes—until some saturation level is reached where existing payout improvements have been exploited, and new efforts are primarily devoted to addressing changing business conditions.
- A governance body can use this metric to fine-tune the capacity for and pace of BPM efforts.

Considerations

- This metric is actually three metrics—two “rate” metrics that indicate the rate of projects coming into and out of the improvement project pipeline, and one “level” metric that indicates the total number of improvement projects underway at any given time. An effective graphic to display these metrics should be developed.

Expected evolution as organization matures

- As an organization matures, it may evolve its standards for what constitutes an “improvement effort.” Finer categorizations of projects by size or type may evolve.
- As the organization becomes familiar with its capabilities, a target number of active improvement projects may be set.

Related lower level metrics (to be used optionally to increase focus)

- Number of process improvement efforts of a certain size or type.
- Percentage of projects discontinued after being started.
- Percentage of projects with schedules extended more than one month from original estimate.

Number of processes defined, documented, assigned owners, measured, and monitored

Measure description

- A measure of the level of attention given to processes.

Measure usefulness

- There may be no ideal target for this measure, but it can serve as a useful measure during early years of development to ensure the real work of process management is being methodically achieved.
- A governance body would expect the results associated with this metric to start small, but to grow rapidly for a period of time before tapering off due to completing work on all important processes. Any interruption to this pattern may be worthy of investigation.

Considerations

- Achieving success with this metric requires specifying what it means for a process to be, respectively, defined, documented, assigned owners, measured, and monitored. The use of this

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metric may be combined with the use of metrics that are more results-focused, such as financial value of process management efforts.

Expected evolution as organization matures

- As valuable practices are identified, the specifications for processes to qualify on this measure may narrow. At some point around capability maturity level 4, this metric probably should be discontinued because at this level all important processes will be addressed in depth.

Related lower level metrics (to be used optionally to increase focus)

- Each one of the *tasks* associated with this metric could serve as a milestone on a check sheet of processes that the organization is planning to address.

Investments in BPM infrastructure

Measure description

- A measure of the commitment by an organization to building BPM capability.

Measure usefulness

- This measure will indicate trends in commitment levels over time.
- The governance body will want to keep track of this metric to determine if investments are in line with expectations. If investment is too low, then it is possible the BPM support organization is not yet confident about making wise investments; if the investment is too high, then investment decisions may not be based on careful analysis of benefits.

Considerations

- The measure should include investments in BPM technology, BPM training and education programs, development and maintenance of BPM methods and standards, and cost of personnel supporting the BPM infrastructure. Ideally, this measure will be compared to external benchmarks.

Expected evolution as organization matures

- Investment dollars would be expected to start at a fairly low level, then increase as awareness is built, with possible significant expenditures on BPM technology as an organization moves from level 2 to level 3 to level 4.

Related lower level metrics (to be used optionally to increase focus)

- Amount invested in BPM infrastructure by category.

Efficiency of BPM methodology in achieving expected outcomes on process improvement projects

Measure description

- A measure at the portfolio level which compares the added value from projects completed in the past two years (or some other period) versus the cost to support the BPM infrastructure including personnel salaries and burden, technology license and support costs, etc.

Measure usefulness

- This measure is intended to identify the extent to which investments in the BPM infrastructure and methodology are leading to increased value creation when improvement efforts are undertaken. In theory, investments in BPM will have a high Return on Investment (ROI) because they will make projects more efficient, more impactful, and more sustainable. The governance body can use this measure to test that expectation. If BPM capability investments generate

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increasing value, then the program merits further investment; but if returns on BPM investments start to decline, additional non-maintenance investments in BPM capabilities may not be justified.

Considerations

- For this measure to be used, data must be collected on the financial value of BPM efforts as well as on the costs to support the BPM effort. While it should be quite easy to identify the costs of investments, generating credible estimates of financial value created from BPM requires a disciplined measurement process.

Expected evolution as organization matures

- In early stages, it is possible that investments in BPM will exceed the value generated from BPM efforts (e.g., via process improvement projects). But, this should turn around by level 2 maturity, and should continue to increase for years afterward until the organization has exploited the backlog of existing process opportunities. As that point is reached, further investments in BPM capability may be scaled back.

Related lower level metrics (to be used optionally to increase focus)

- Pinpointed surveys of methodology practitioners can identify areas for improvement in the methodology.
- ROI on individual projects of various types (e.g., those that utilize BPM technology versus those that do not).

Workforce satisfaction with BPM efforts and with their own processes

Measure description

- A survey of workforce members who have been impacted by process management. The number of dimensions surveyed is optional. One or more questions may comprise a “*satisfaction index*” that is cited as the measure of satisfaction.

Measure usefulness

- BPM is meant to be an empowering capability. It is expected to remove routine and trouble-prone activities from the people’s work so they can spend more time on high-value activities such as collaborating with colleagues, researching and learning, meeting with a customer, and innovating. If these ends are being served, accompanied by feelings of empowerment rather than disruption, then it is expected that personnel will be satisfied with such changes.
- A satisfaction survey will provide a useful pulse check for the governance body. If satisfaction begins to decline, the program should be examined to pinpoint and remove any unintended negative consequences.

Considerations

- Personnel may be bombarded by surveys already.
- Potentially useful survey questions may seek to understand the changes in time spent by employees on the high-value activities listed above.

Expected evolution as organization matures

- A broad-based survey may give way to more pinpointed surveys.

Related lower level metrics (to be used optionally to increase focus)

- Feedback or input (often from targeted populations) on particular areas of development or concern.

Middle and senior management satisfaction with business processes

Measure description

- A survey of managers who have been impacted by process management. The number of dimensions surveyed is optional. One or more questions may comprise a “*satisfaction index*” that is cited as the measure of satisfaction.

Measure usefulness

- For BPM to be sustainable, it must be supported by management. Managers’ perceptions of the BPM initiative should be carefully monitored, and changes should be made if dissatisfaction creeps in.
- A satisfaction survey will provide a useful pulse check for the governance body. If satisfaction begins to decline, the program should be examined to pinpoint and remove any unintended negative consequences.

Considerations

- Managers may be bombarded by surveys already.

Expected evolution as organization matures

- If and when BPM becomes part of the culture of the organization, surveys may be reduced to an infrequent basis. Nevertheless, there may be value in occasionally measuring management’s perception of various aspects of the BPM initiative, especially if new elements are introduced.

Related lower level metrics (to be used optionally to increase focus)

- Feedback or input (often from targeted management populations) on particular areas of development or concern.

Customer satisfaction with the impact of BPM efforts

Measure description

- As the organization may survey customer satisfaction already, this measure may consist of identifying questions in the normal customer satisfaction survey where results are likely to be impacted by BPM efforts. For example, responses to questions associated with responsiveness, timeliness, and product quality generally would be expected to improve as BPM benefits spread.

Measure usefulness

- BPM is expected to have a positive impact on customer satisfaction, but measuring changes in satisfaction is the only way to be sure of the results.
- If customer satisfaction is not increasing or is declining, then the BPM initiative may have too narrow a focus; for example, only on cost reduction. An investigation initiated by the governance body would then be warranted.

Considerations

- Customers may be bombarded by surveys already.

Expected evolution as organization matures

- As the impact of BPM on customer satisfaction is better understood, customer survey questions may be refined in order to identify bottlenecks to even greater customer satisfaction.

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Related lower level metrics (to be used optionally to increase focus)

- Feedback or input (often from targeted customer populations) on particular areas of development or concern.