

Plan for Success with Better Situational Awareness



*In a series of articles, we discuss key challenges and solutions to making business improvement more effective, efficient, and sustainable. The seventh article is about **Situational Awareness**.*

Manage Upstream to Gain Downstream

Many business improvement programs and projects are in trouble from day one because of inadequate planning and set-up [1]. These initiatives might look fine on the surface, with enthusiastic people, colorful slides, and bold goals, but underneath, there are serious issues that make them risky endeavors.

Too many of these ill-conceived projects can jeopardize any improvement program by consuming resources without returning any real benefits, thereby eroding commitment [2], [3].

Business improvement is a system that turns opportunities into high-quality solutions that people accept, and leaders are accountable for (Figure 1) [4]. Pursuing too many and too large and complex opportunities that exceed the improvement system's capability and capacity can make the whole improvement effort ineffective, inefficient, and hard to sustain.

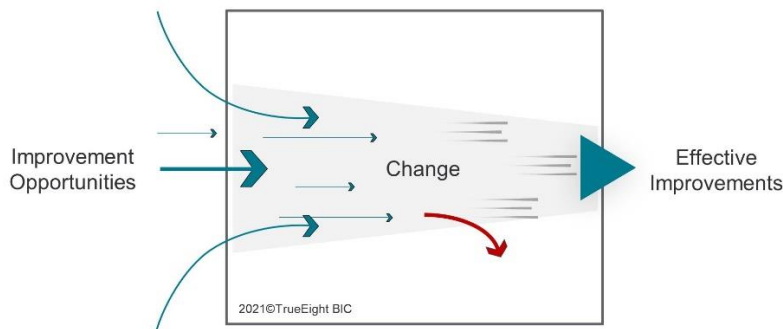


Figure 1. Manage business improvement upstream.

Thus, the better awareness of the overall situation and understanding of the improvement opportunities upstream, the better the improvement work can be planned and executed downstream. Accurate situational awareness and understanding of key characteristics of improvement opportunities are critical to plan, position, and prepare the improvement initiative for success.

Importance of Situational Awareness and Planning

Situational awareness is knowing about the cues in one's environment that matter to achieve goals and make decisions [5]. The term originates from World War I when it was recognized as a crucial skill for fighter pilots and called the "ace factor" [6]. Later, USAF pilots came to equate situational awareness with the Observe and Orient phase of the OODA loop (Figure 2) [7].

The first step in the OODA loop is to observe and collect the information that matters before making sense of it (step 2) and making decisions based on it (step 3). Actions will follow (step 4) that impact the situation and the information. The cycle then repeats.

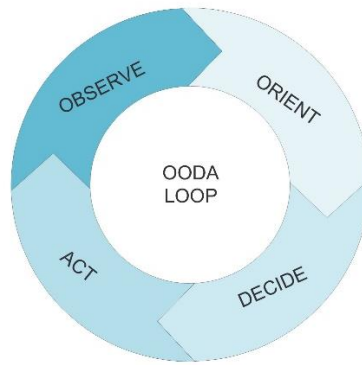


Figure 2. The OODA loop.

Although most would agree that planning is essential, some might form the impression that planning is becoming less relevant with the introduction of agile, iterative work cycles, incremental delivery, and the fail-fast concept. This is a dangerous proposition that would suggest giving up control and passively waiting to react to others' moves. On the contrary, in a fast-changing world, the frequency of planning and decision-making needs to increase, as the OODA loop demonstrates [8].

Planning for Success with AIIM

The integrated and adaptable improvement model (AIIM) is a complete improvement system that supports active management of improvement opportunities and the planning of initiatives (Figure 3).

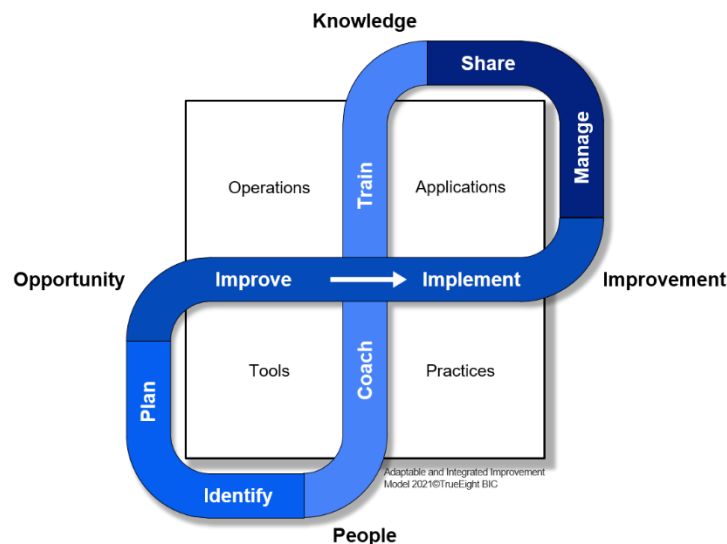


Figure 3. The adaptable and integrated improvement model (AIIM).

AIIM guides the whole continuous improvement cycle in eight steps: identify, plan, improve, implement, review, share, learn, and coach (Figure 3). The step “identify” contains methods and tools to find the best opportunities to improve the business, whereas the “plan” step supports reviewing and prioritizing opportunities and planning improvement initiatives.

Contrary to a method-driven approach in which a given improvement method is used for all types of problems and opportunities, AIIM applies a need-driven approach that combines the strengths of several improvement methods and knowledge areas. AIIM deploys eight knowledge areas that employ time-tested improvement methods such as Agile, Lean, Six Sigma, Business Process Management, SPC, project management, and change management [9]. By combining the best components of these proven methods, a wide range of opportunities can be handled with the same model.

The planning cycle starts with a review of the improvement opportunity (1) before selecting the most suitable approach and application (2), which are then customized by adding or subtracting tools and practices based on specific needs (3) (Figure 4). By understanding key characteristics of the opportunity well, the most appropriate approach and application can be selected, and the initiative set up to maximize the likelihood of success.

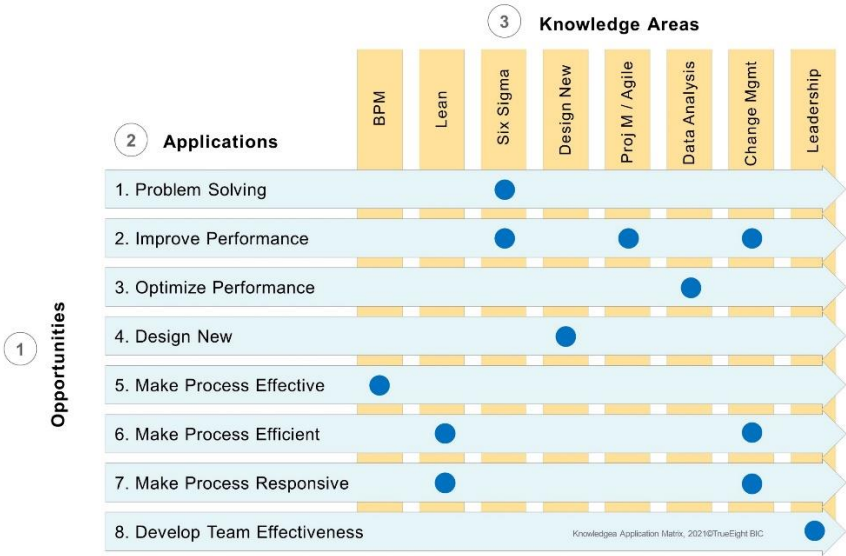


Figure 4. Need-driven business improvement.

Opportunity Characteristics

Many characteristics could potentially be used to assess improvement opportunities. It took us several years to review, apply, and validate different characteristics from more than 100 improvement projects and programs before selecting eight key characteristics (Figure 5). The chosen characteristics provide information and situational awareness that greatly assist in deciding which opportunity to pursue, identifying and mitigating risk, and planning how to run the project, program, or other forms of improvement initiative (Figure 5).

The selection grid was developed to assess improvement opportunities. It is a tool that evaluates several factors to score the eight characteristics and visualize the result. The graphs summarize the opportunity characteristics in the four dimensions of process, people, value, and culture (Figure 5).

The selection grid makes the assessment of improvement opportunities time-efficient, transparent, and interactive, and collaborative.

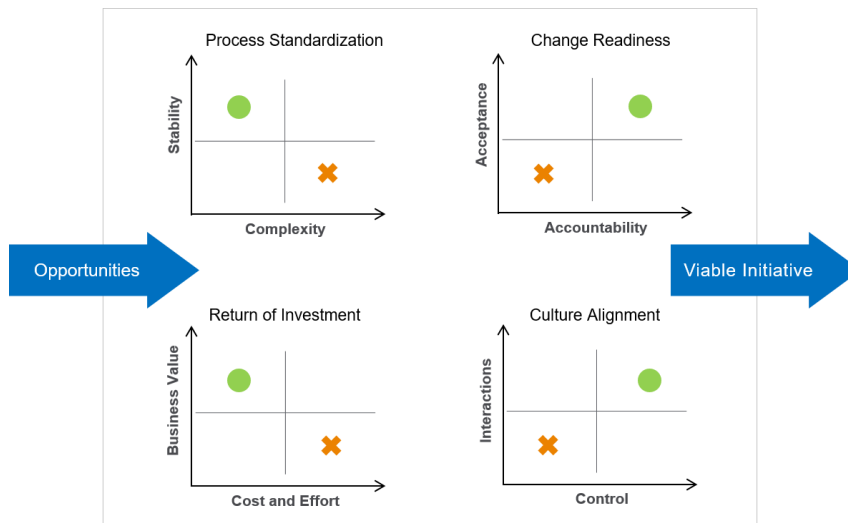


Figure 5. Assessment of opportunities with the Selection Grid.

For example, the circles in the four graphs represent an opportunity that originates in a stable and mature process, and therefore suitable for further improvement and standardization. The low level of complexity reduces the need for technical expertise, which is also positive. People are willing to improve and follow the process, and management is willing to take action to make the change happen. Furthermore, the improvement effort is relatively inexpensive but of considerable value for the business, making it a good investment. Lastly, the current culture aligns well with the objective.

Altogether, it looks like an excellent opportunity to engage in, contrary to the opportunity marked with crosses, which would require significant risk areas to be addressed before kicking it off.

These examples show how the selection grid and the eight characteristics can focus the team's discussion on the things that matter, facilitate creating a shared awareness of the situation, and help set up improvement initiatives for success, thereby avoiding unnecessary effort, stress, and grief downstream.

References

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