The Stable Framework in 10 Minutes

A typical IT organization wastes about 35% of its personnel efforts redoing work that wasn't done correctly the first time. Some groups report 50%, or as much as 80% of their efforts are attributed to this "Hidden Factory." *When expressed as a dollar amount, the effects are alarming.*

The Stable Framework™ was designed to combat this problem. Stable is a framework for organizing qualitative work assignments into quantitate performance information. The framework provides tools to keep employees focused on daily tasks, yet have their progress roll up into corporate quarterly KPI's. It's a combination of the latest Agile and Lean techniques and provides a simple, but robust Quality Management System "in a box." Heavy emphasis is placed on customer and supplier relationships, and Kaizen-based continuous improvement. Altogether, we call this Operational Excellence.

Stable can be used to compliment a Scrum development team, or it can be implemented as a complete replacement for Scrum. In addition to Development, Stable is applicable in Operations, Implementation, DevOps, and any other work containing repeatable process steps.

The Stable Framework™ is comprised of one Master Cycle, two roles, three domains, four core meetings, and five quality principles. Taken together, they form a structure enabling IT groups to perform six process improvement fundamentals. All of these are summarized below.

The Master Cycle

The Master Cycle is how we measure progress over time. Similar to an Agile Sprint, a Master Cycle can span in length from one to four weeks. The length should be consistent, and if you have an Agile team it's best to synchronize your Master Cycle with your Agile team's sprints. This way you can report together at the end of each cycle and sprint.

The Master Cycle starts with a Cycle Planning Meeting which lasts several hours and ends with a Cycle Review Meeting, and a Cycle Retrospective Meeting. Combined, both meetings at the end of the cycle should last no longer than two hours.

During the cycle, each member performs planned work they have selected at the beginning of the cycle, and any urgent work that has become important during the cycle.

Every day within the cycle the group performs a daily Kaizen Stand-Up Meeting, where they inform each other about their work activities.

Kaizen is a Japanese word which means "Ongoing improvement involving everybody, without spending much money."   We call it a Kaizen Meeting because as we perform our activities, we are always seeking ways to improve.
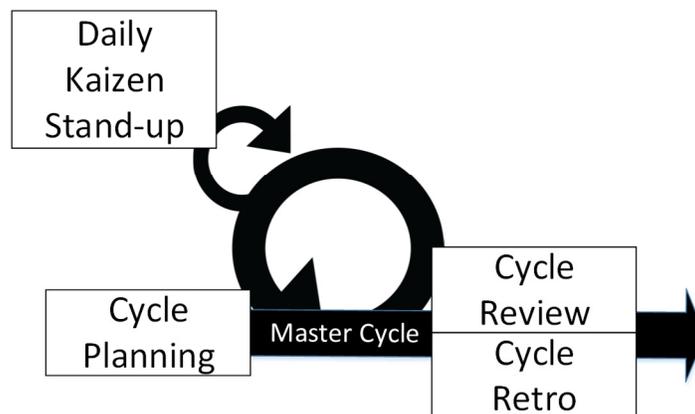
The Master Cycle

FIGURE 1 - THE STABLE FRAMEWORK™ MASTER CYCLE

The Two Roles

The two roles in Stable include the Master Chief and one or more Process Owners. The Master Chief (MC) is the group leader, who assumes the role of chief quality agent, and is responsible

for making sure the Stable Framework is set up and being followed correctly. They work "on" the system, whereas the Process Owners work "in" it.. This means:

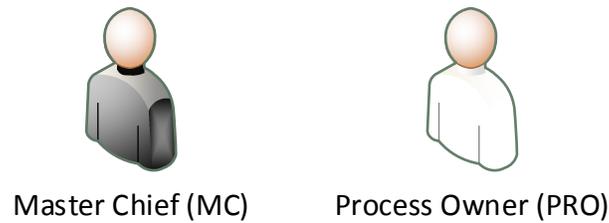Master Chief (MC)　　　Process Owner (PRO)

FIGURE 2 - THE TWO ROLES IN THE STABLE FRAMEWORK™

Environment Support:

1. Establishing the Stable environment (Quality Planning), including Configuration Management, the three domains, the performance console, and training for all involved.

2. Providing to the team a culture of empowerment, accountability, and continuous improvement.

3. Coordinating the whole set of value streams and their associated processes that collectively we call a System. This is done through facilitating the System Schedule and the Work Queues in the System Backlog.

4. Establishing a customer feedback and a supplier feedback channel. The MC doesn't necessarily need to collect feedback metrics directly, but must put in place a feedback mechanism, via marketing or help desk surveys, or some other means.

Individual & Team Support:

5. Enabling the individual success of each Process Owner. This includes establishing the intent, boundaries, and constraints for each process, empowering the Process Owners, and coaching each Process Owner to continuously improve the performance of his or her repeatable processes, called Katas.

6. Prioritizing the work objectives for the team of Process Owners in the Cycle Planning Meeting, and at the start of each day in the morning Kaizen Stand-up Meeting, as needed.

7. Presenting suggestions from the suggestion box to the group each morning.

8. Creating a Supplier Services SLAM Chart for reporting on the performance of shared Supplier Services into the System.

Individual & Team Accountability:

9. Verifying process accountability (Quality Assurance) at the end of each process value

stream.

10. Collecting and storing Kata Card, Metric, and Training information in Historical Logs.

11. Ensuring all team members area properly trained on their process kata's, and on the Stable Framework™.

<u>Corporate Liaison:</u>

12. Providing information to the group about market conditions, CCAPA updates, as needed, and other relevant corporate news every morning.

13. Creating a Cumulative System Performance Chart and being sure to have Process Owners Update it at the end of every Master Cycle. This chart is used for quarterly reporting purposes.

A Stable environment requires one or more Process Owners (PROs). Each PRO is responsible for the results of each process they own. They work "in" the system, which includes:

<u>Customer Mastery:</u>

1. Ensuring that the current service levels represent their customer's current expectations.

2. Ensuring the process results (Quality Control) meet the current service levels.

3. Ensuring frequent and insightful communication exists between the customers and the Process Owner to be certain of #1 and #2. A byproduct of this is a high Customer Satisfaction Rating.

4. Establishing a healthy positive emotional relationship with their customers and suppliers. A byproduct of this is a high Net Promotor Score.

<u>Supplier Mastery:</u>

5. Ensuring inputs meet expected quality levels (Initial Quality Assessment).

6. Working with suppliers, indicating process and customer needs, to improve the material and information-based process inputs. A byproduct of this is improvements to process efficiency and effectiveness.

7. Ensuring the process, or Kata, is executed according to each Standard Operating Procedure and corresponding Kata Card (Quality Assurance). This is done by receiving the completed Kata Cards from the upstream process checkpoints, and handing them off, along with the newly completed Kata Card, to the downstream checkpoint, or to the Master Chief when at the end of the value stream.

8. Going straight to recovery models to recover systems and assets as quickly as possible. This minimizes downtime.

9. Asking coworkers for help, when needed. Brief Ad-hoc Kaizen Teams comprised of volunteers are extremely effective in overcoming sudden technical challenges.

10. Ensuring the Standard Operating Procedures, Kata Card templates, and recovery models remain updated and represent the best-known ways to perform and apply recovery steps to the process.

11. Ensuring newly discovered issues and recovery techniques are added to the Kata Card templates, or process or asset recovery models as new problems and root causes are encountered.

12. Updating Service Level Attainment Monitoring (SLAM) Charts each day.

13. Updating Kata Cards and process descriptions as needed.

In addition, ad hoc teams called Kaizen Blitz Teams can be voluntarily formed to troubleshoot a team member's technical challenge if needed. Kaizen Teams should be comprised of volunteers. Companies that adopt Kaizen practices have learned the volunteer aspect of a Kaizen team is critical. They have learned that volunteers seem to generate the best ideas.

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Kaizen improvement efforts can be performed on several levels. They can be triggered at the daily Stand-Up when a team member needs help, as described above. They can also be triggered in the Cycle Retrospective Meeting, when either the entire group identifies an item to improve, or one or more team members voluntarily identify an item in their work environment to improve.

The Three Domains

The three domains are shared by each role and include the Future, the Present, and the Past Domains. We have to plan our work ahead of time before we can measure the results of our work.

The Future Domain contains information we'll need to access in the future. The Present Domain contains current work in process. The Past Domain contains our work history and our status reports.

All three domains are tied together through a performance console, which is how senior management is kept aware of present status.
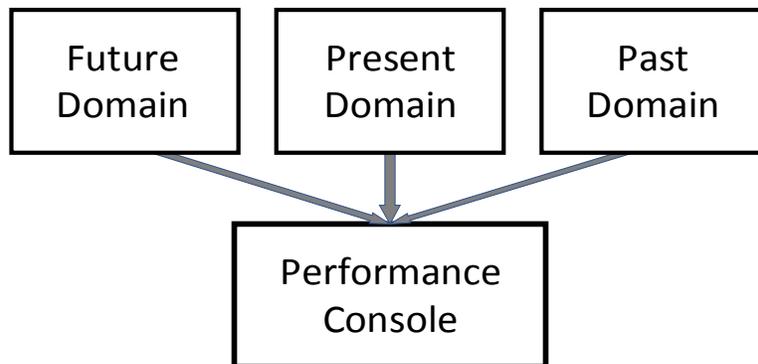

FIGURE 3 - THE THREE DOMAINS OF THE STABLE FRAMEWORK™

The Four Core Meetings

The four core meetings that comprise a Master Cycle are the Cycle Planning Meeting, the Daily Kaizen Meeting, the Cycle Review, and the Cycle Retrospective Meetings.
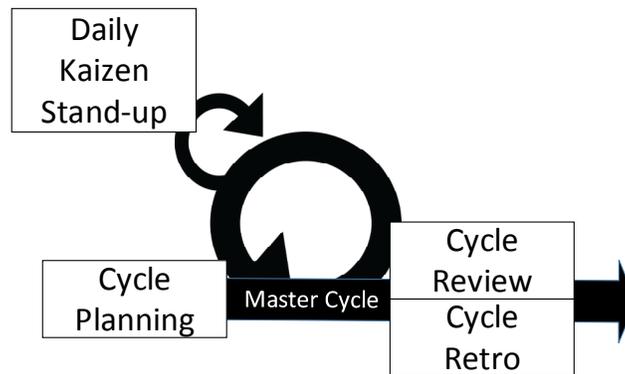
Four Core Meetings

The Master Cycle Planning Meeting starts each cycle. In this meeting the Master Chief and Process Owners gather around a Kanban Board and the Master Chief identifies the primary goals for the cycle. Using items accumulated in four work queues, the MC is able to prioritize these items into a System Backlog. The work queues are Scheduled Activities, Customer Requests, Asset Maintenance, and any corrective action items in the CCAPA queue (Corrections and Corrective & Preventative Actions) which would have come from the Support Desk.

The Process Owners select who will work on which prioritized items and they make plans to execute those tasks as time permits. During the day more urgent items may materialize and they simply add the more urgent item the Kanban and work it until finished. When finished they can continue with the plan for that cycle.

The Daily Kaizen standup meeting is where the MC and the PRO's discuss what is being currently worked on and any question about priority can be discussed. At the start of this meeting the MC provides the team with a brief summary of any company or industry news that would be of interest to the team. Then MC & PRO's gather in a circle and the PRO's in round-robin format and update their Kata performance metrics and answer three questions:

1. What I accomplished yesterday.
2. What I intended to be accomplished today.
3. What roadblocks do I have?
4. What improvements have I made since yesterday?

The MC or other team members can assist with removing roadblocks as needed.

The Cycle Review Meeting is where the team gathers with the executive sponsors and after having updated their final performance metrics and customer satisfaction ratings for the cycle they articulate the status of any problems and what has been done to improve the processes going forward.

The Cycle Retrospective Meeting happens directly after the executive sponsors have left the Cycle Review Meeting. In the Cycle Retrospective, the team discusses these three questions:

1. What did we do well?
2. What could we improve?
3. What still puzzles us?

In addition, the team or individual team members can optionally accept a Kaizen project to improve something in their environment that troubles them. This is something they wish was better than its present condition. The can optionally report on this at the next Cycle Review meeting.

Several other meets involving other departments are encouraged in Stable. A CCAPA Committee meeting should happen at least once a cycle, and possible daily for busy environments. This meeting is attended by Operations, Development, and the Support Desk. Non-conforming items from customer contacts are brought to the attention of Development and Operations, from the Support Desk. It's best to have this meeting in the morning before the daily Kaizen.

Another meeting is the Quarterly Business Review Meeting, attended by the MC and other executives. Here the Cumulative System Performance Chart maintained by the MC is presented and discussions can be had about needed areas of improvement.

The Five Principles

Stable represents advance approaches to process management and accountability. For new practitioners, it may be unclear where and how to apply the Stable Framework for maximum lift. The following principles provide guidance.

Principle 1 - Anything Repeatable Can be Improved.

Stable practitioners operate under the belief that anything repeatable can be improved. Again and again, from Toyota to Ford to Hyundai and other companies that adopt Lean philosophies, these companies have realized that anything repeatable can be improved, and they operate with

that mentality.

At first, only a few ideas for improvement may be identified. The nature of improvement is such that the constant focus and pursuit of these improvement ideas will uncover even more ideas over time. Sometimes improvement is a massive breakthrough, sometimes it is a patient journey.

Principle 2 - Improvement Requires Repetition, Reflection, and Change.

Repetition alone brings systematized inertia. Add reflection and you get better insight. Better insight generates new ideas and those new ideas require change in something to bring improvement. Shewhart's model for gaining system insight is the Plan-Do-Check-Act model. In this model, you make an improvement plan (Plan), then you act on the plan (Do), then you measure the results (Check), and if favorable, you update the Standard Operating Procedure and process Kata Cards to reflect the updated improvement (Act).

If the results are not favorable, of course, you'd skip the last step and try the next idea, working through the model.
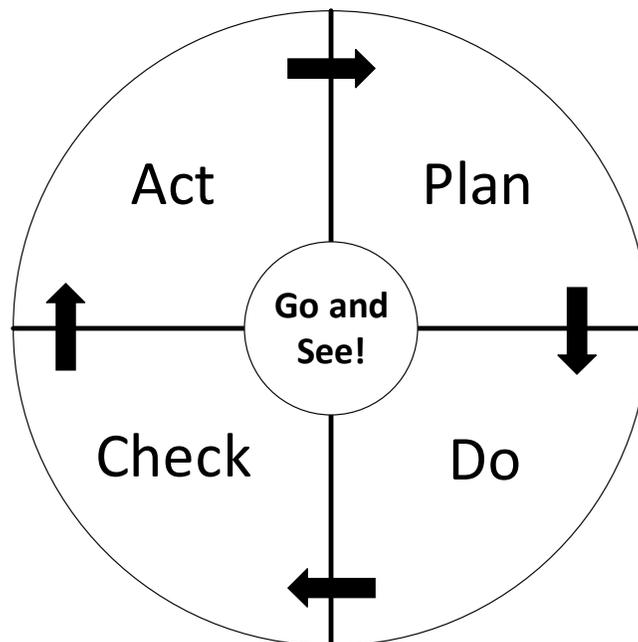

FIGURE 5 - PLAN-DO-CHECK-ACT

Principle 3 - Sustained Improvement Requires Systematization.

Continuous improvement is not enough. You must have sustained continuous improvement. Anyone can have a new idea for improvement, and implement it. But what happens when that person gets promoted, or takes a new job? The improvement vanishes with them. For this reason, sustainable continuous improvement requires a system of record.

There must be a go-to repository containing lessons learned, standard operating procedures, Kata Card checklists, Recovery Models and other mechanisms to preserve each new improvement. Without this, you might be engaging in continuous improvement, but not sustained continuous improvement.

The financial loss to an organization that lacks the discipline to create such a repository is incalculable. In his popular book *Kaizen*, Masaaki Imai tells a story he heard from Toshiro Yamada, a Professor Emeritus of the Department of Engineering at Kyoto University. Yamada had visited an American steel manufacturing plant for a managerial discovery exchange when he was young, and then visited the same plant 25 years later.

He was shocked to see no significant improvements in how the plant was managed. In 25 years, nobody had come up with any significant sustained innovations. Don't let your environment be like this plant!

Principle 4 - Improve Systems, Respect People.

Deming taught us that when problems occur, management must focus on improving the system and not on blaming the person. The old industrial model held employees accountable for problems and would often make them pay with their jobs. Deming taught us that the real question to ask is how the system can be improved so the problem does not occur again...both with the same employee and future employees working the same task.

This "safe culture" engineering fosters trust and assurance among employees and drives creativity when problems occur. When a problem does occur, the Master Chief should challenge the Process Owner to brainstorm permanent improvements to the process to prevent those same problems from happening again.

For difficult problems, other members from the team or the entire team can be asked by a Process Owner to volunteer solutions and work together through the problem. Working together to solve problems in a short amount of time is encouraged. We call this a Kaizen Blitz. Blitz teams work best when they are comprised of members who have volunteered to help.

Principle 5 - Speak Using Data.

Whenever possible, use data to express reality.

If you want to know how happy your customers are with your products or services, survey them. If you want to know how much time is spent reworking bad code that was rejected from the test department, measure it. The Stable Framework™ is all about improvement. You cannot conclusively improve something unless you first measure it.

Kata Cards presented at process handoff checkpoints, and SLAM Charts updated daily provide measured accountability data. In Stable we resist vague status updates like "we think we are on track," or "we feel like we are moving along OK." Comments like this are of little value.

From most workers perspectives, measuring has unfortunately been used in the past primarily for rewards or punishments. We need to think differently today. The proper application of measurement should be to provide a window into reality enabling employees and management to brainstorm ways to improve their systems. This is an empowering experience and means that measurement should be a recurring and vocal part of any team's continuous-improvement process.

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As a group's objectives are made known to them, they should identify which drivers will bring success, and then which measures would indicate progress along those drivers. Measuring performance in this manner will keep the team unbiased and much closer to reality, meaning they will make better decisions along the way, achieving success faster. Measurement approaches should be scrutinized and revised regularly.

The team should always consider better ways of measuring to improve visibility into the reality of the status and improvements of its processes and process goals. Measurement should be discussed often and should be an ever-present part of the work culture.

Be sure to keep efforts to measure information in check with the value of the information. One form of waste is collecting metrics nobody uses.

Some measures we'll use may be components of larger measures and indicators of organizational progress. These are primary indicators and we call these measures Control Points.

Six Forms of Process Improvement

Implementing Stable enables your organization to improve any set of repeatable processes in the following ways:

1. **Systematization**: The establishment of identified value propositions, value streams, service-levels, and process control information for each that will grow in time.

2. **Measures**: Anything repeatable can be improved, but it must be measured to understand how much it was improved.

3. **Flow:** The lack of resistance value experiences as it moves from the triggering mechanism to the fulfillment mechanism in your value streams. Are you able to deliver as fast as your customers purchase?

4. **Lean**: The absence of byproduct as your value stream advances towards fulfillment. No excess time, expense, or material Sounds amazing, doesn't it.

5. **Resilience**: The ability to recover from unexpected outages or failures. How fast can your group diagnose unexpected problems and bring those servers back online?

6. **Durability**: The absence of mistakes or system outages. Mistake-proofing processes can be as simple as checklists, or as complex as automated & redundant platforms.

Combined, these six concepts will save tremendous costs and move your organization along at several orders of magnitude faster than ever before.

In Summary

Stable equips organizations with a concise, working model for insight, structure, stability, collaboration, accountability, and continuous improvement. All of these elements implemented together create an Operational Excellence program for any organization.

For more information: www.StableFramework.org