

A Systematic Approach to the Unit Self-Assessment: 24 Steps to a “Connected” Report

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Abstract

This paper presents a systematic approach to addressing the Unit Self-Assessment Report and the Quality Air Force (QAF) criteria. After a brief review of the self-assessment process this paper presents a 24-step approach to conducting the assessment “Item-by-Item.” The foundation for the approach is the organization’s “value-added chain” of events to accomplish the mission. This chain consists of the organization’s outputs, processes, and external inputs. Supporting this chain is an infrastructure of people, plans, leadership, and information. Finally, it addresses the focus of the infrastructure and value-added chain--the mission.

Introduction

Conducting a Unit Self-Assessment is a complex task for an Air Force wing. When you assess an Air Force wing you apply the QAF criteria to an organization with all the functions and processes of a small city, an airport, and an aircraft operator. When starting the project the most common questions are: where do I start? and in what order do I address the Items? Although the Items are scored separately they do not stand alone, they are an interrelated management system. Reports that are not consciously built with these interrelationships in mind are somewhat schizophrenic and disjointed. Preparing an assessment that speaks with one personality and voice requires forethought and planning. Although there are not any cookbooks nor any one perfect approach, there is a logical flow.

Self-Assessment Process

The method used to apply the QAF management system is the self-assessment process. A typical assessment cycle is based on Shewhart’s (later Deming’s) Plan, Do, Study, Act cycle. Each phase produces a document which is the basis for the next phase. (figure 1)

Plan

The planning phase consists of selecting the team, determining the extent (breadth and depth) of the assessment, training the team, and developing the assessment instruments which include the criteria based questions. The product is a comprehensive plan for conducting the assessment.

Do

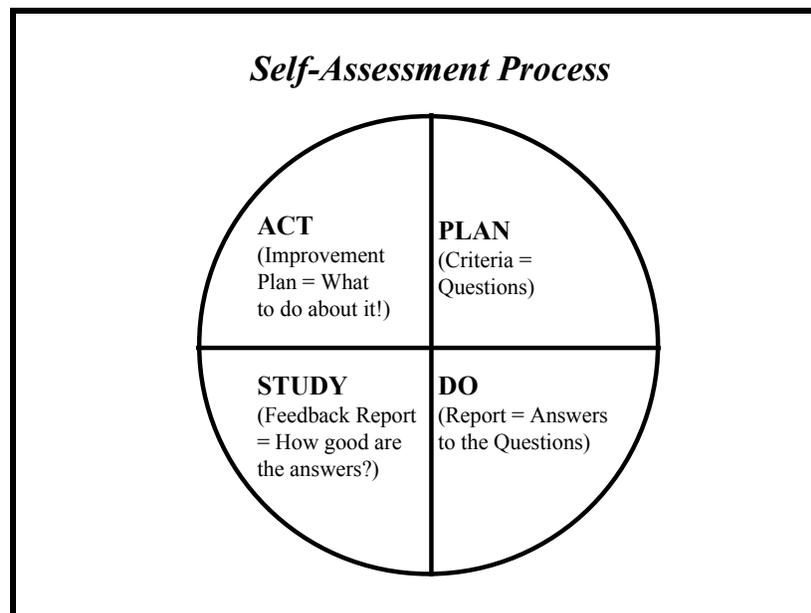
The **Do** or conducting phase generates the report by answering the criteria questions identified in the plan. This phase consists of collecting the data, organizing it into information, analyzing the information, and writing a synthesis narrative report that answers the criteria.

Study

The study or analysis phase consists of determining how well the answers in the report stack up to the criteria. The product of this phase is a feedback document identifying the organization's strengths and areas for improvement.

Act

The action phase consists of prioritizing the areas for improvement, planning the actions required to improve, implementing the actions, and tracking the progress. All this should be integrated with the organization's strategic planning process.



(figure 1)

The Report

The **primary** purpose of the unit self-assessment is to improve organizational performance which, for most Air Force organizations, equates to increased combat capability. The four stages of the assessment process are interdependent. The action plan is only as good as the analysis which is only as good as the report which is only as good as the plan. Focusing on the mission as the customer (Holmes, 1994, p. 25-27) provides the necessary foundation to

begin building the assessment. While the criteria are grouped into seven categories it is really a criteria of 24 Items. The 24 Items can be grouped into three main bodies: the value-added chain, the infrastructure, and the mission. Beginning with customer or mission requirements, address the criteria from a process stand point first, then address the infrastructure as it relates to the processes and finally, the goal--mission accomplishment/customer satisfaction. (figure 2)

The QAF Value-added Chain

The value-added chain described in Porter's *Competitive Advantage* is the sequence of events that adds value to the inputs by transforming them into a product or service. The QAF value-added chain is composed of 3 elements: key processes, internal support, and external input.

Key Processes

The key processes component includes: identifying the customer's requirements; the key products and services which fulfill or satisfy those requirements; the processes which produce those products or services; the quality indicators the organization measures; the internal process measures; and how the organization designs quality into the products and services it provides.

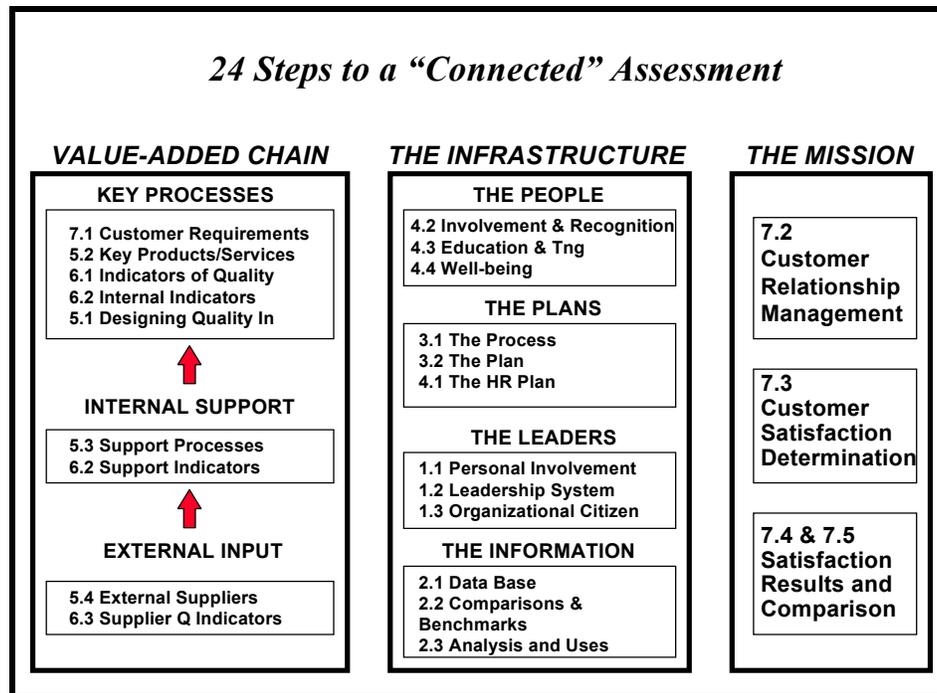
Step 1

Who are the organization's primary customers? How does the organization identify their requirements? (Item 7.1) While customer may be a new word for the Air Force the concept is not. During peacetime the Air Force has traditionally used the war planning process, OPLANS, and Design Operational Capability (DOC) statements as primary methods for articulating the customer's requirements. During the execution of conflict the customers' requirements are articulated via special instructions (SPINS), air tasking orders (ATOs), etc. These requirements drive the key products and services the organization provides. To address this item begin by analyzing the mission as described in *The Quality Approach*, 2nd ed., p. 25-27. For example, a customer requirement may be "timely destruction of enemy positions to facilitate the land battle."

Step 2

Identify the organization's key products and services and their requirements. (Item 5.2) What are the processes which produce the products and services that satisfy the (external) customer or mission requirements identified by Item 7.1? How does the wing control these processes to ensure mission performance? How does the wing systematically improve these processes? A macro flow chart is a concise way to articulate the key processes including the customers and

suppliers. To satisfy the example customer requirement of “timely destruction of enemy positions to facilitate the land battle” a wing’s service might be Air-to-Ground Support. The product and service characteristics which facilitates the land battle might be: overhead when needed and destroy the target. The key process to provide this service might be the combat “air-to-mud” sortie process. To “control” this process the Air Force has a formal command and control system to ensure the mission progresses as planned.



(figure 2)

Step 3

Identify the indicators of quality for the key products and services. (Item 6.1) Since it is usually impracticable to have the customer stand over your shoulder while you accomplish the mission, the organization needs indicators they can track which are “proxies” for or predict the customer’s satisfaction. Customer satisfaction is the goal but you simply cannot manage to that. The organization needs measures they can monitor and manage to. Considering the requirements in Step 1 what are the product and service characteristics that if you do well, will result in a happy customer? For the air-to-mud example the indicators which should correlate with customer satisfaction are: time-over-target (TOT) and bombs-on-target. These would be reported in Item 6.1 Other “proxies” for customer satisfaction might include the indicators currently reported in SORTs. If an organization is not C-1 then the “potential customers” of the “air power potential” are probably not very happy.

Step 4

Identify the internal indicators used to control and improve the key product and service processes. (Item 6.2) These are the internal efficiency and process performance type indicators that are important to the organization but the customer couldn't care less about. To build on our example, this might be the take-off time. The customer doesn't care if you take-off on time only that you are overhead on time. The organization knows however, that the probability of being over the target on time is dramatically increased by taking off on time. So on time take-off would be an in process measure that a wing might use to ensure you meet the end of process measures (6.1) that are important to the customer. In this example, on-time take-off is the independent variable and TOT is the dependent variable. Logically there is a causal relationship between these variables, consequently an on-time take-off should to a limited degree predict an on-time arrival.

Step 5

Determine how the organization designs or plans customer defined quality into its products and services. (Item 5.1) Although many designs are given to the typical AF wing there are some the wing designs for itself. For instance, the plans to launch a mission are often developed at the wing and used by command and control to monitor and control the efficient, timely launch of a mission. Starting with the customer's requirement to be there at a specific time the plan backs up and specifies each step in the launch sequence such as: take-off time, taxi time, engine start time, crew show time, aircraft crew ready time, load time, etc. This is all based on the customer's requirement to be there at a specific time. Now that you have identified: what the customers want; the key products, services, processes, indicators; and the design process, the next question is what are the necessary internal support products, services, and processes needed to enable the key processes.

Internal Support

Step 6

Identify the key support and business processes that make the key products and services possible. (Item 5.3) These are the essential (internal) processes that supply the key processes. Building on our example this might be the POL process which acquires, stores, transports, and delivers fuel to the aircraft during the sortie generation process. Other support and business processes might include back shop repair of the hydraulic struts; the travel voucher process; the pre-mission weather briefing; or the snow removal processes so the aircraft can taxi and take-off, etc.

Step 7

Identify the key support process indicators. (Item 6.2) This item includes all the measurements for support processes such as: quality indicators as identified by internal customer requirements (timeliness, cycle-time, etc.); internal process measures such as efficiency, effectiveness, timeliness, etc.; and internal customer satisfaction measures. The identification of these indicators is the same method as used in Steps 1-4 for the externally focused key products and services. The wing's processes (key, support, and business) all require external inputs or supplies.

External Input

We started with the output (key products and services to satisfy mission requirements) as the focus, then examined the processes themselves both key and support, now the focus is on the input side of the equation. Since the value-added chain increases the quality of the input it is in the organization's best interest to help the external suppliers provide quality products and services--as computer programmers say "garbage in--garbage out."

Step 8

Identify the external suppliers to the organization. (Item 5.4) In a wing there are two key functional organizations that are responsible for the majority of this Item, Contracting and Supply. Although they are a great source of information they are not the only source. Most wings have many external suppliers including other Air Force or DoD components such as the Air Education and Training Command, etc. In our example the POL function of supply contracts for JP-5 in quantities sufficient to conduct daily operations, generate for mobilization, and support enroute operations, etc.

Step 9

Identify the wing's indicators of quality for its supplies. These are "proxies" for the wing's satisfaction with its suppliers' products and services. (Item 6.3) The Army ground forces defined quality as on-time and on-target, how does the organization define quality to their suppliers? This is the suppliers Item 6.1. They need the same information from the wing, that the wing needed from its customers when they were addressing their Item 6.1 (Step 3).

The Infrastructure

The QAF value-added chain is supported and enabled by an infrastructure composed of four major elements: the people, the plans, the leaders, and the information.

The People

Now that the organization has identified their processes, someone has to do the work. How does the organization systematically: involve the people in improving the organization and recognize their efforts; train and educate them to perform the mission, lead the troops, and improve their work; and ensure their health and well being? Although this category is addressing people, it is the systems and methods that enable the people that are being assessed.

Step 10

What methods does the wing use to involve the people in performance improvement efforts? (Item 4.2) Although suggestion programs provide the opportunity to get involved and is an appropriate answer for this item they do little to proactively promote involvement of all the workers. Other methods include process action teams and natural working groups. What are the indicators (levels and trends) of the effectiveness and extent of the involvement systems you have just described? (report those results in Item 6.2) How many people and what have they accomplished (dollar or personnel savings, improved mission performance, etc.)? Trend charts and graphs are appropriate tools to display this data.

Now that they are involved team members, how does the organization ensure the people repeat the “role model” behavior. What gets measured gets done--what gets rewarded gets repeated! Does the reward and recognition system reinforce behavior that helps accomplish the organization’s goals and objectives, i.e., does your quarterly award criteria contain elements of organizational improvement or goals? After you identify the reward systems how many have you recognized and how effective are they at promoting the role model behavior? Again trend charts and graphs of the levels and trends are appropriate and reported in Item 6.2. In order for involvement to be beneficial, the individuals must have the knowledge and skills to contribute.

Step 11

How does the organization systematically educate and train the people to do their jobs, lead the organization, and improve their products, services, and processes? (Item 4.3) This item includes but is not limited to: the OJT program, the NCO PME Schools, the quality education and training efforts, flying upgrade and mission qualification training, etc. How effective are the training programs and how many people are involved in each type of training? How many did you train? How much did they learn? What were the students' perceptions at the end of training? Trend charts and graphs of the levels and trends in these indicators are appropriate and reported in Item 6.2

Step 12

Now that you have determined how you systematically involve, motivate and train for superior performance, how does the organization make sure organizational member's health and well-being needs are taken care of? (Item 4.4) What services and facilities does the organization provide to ensure their members and families are taken care of so they can take care of the mission? How do you know that their needs are being taken care of? This answer should be extensive for wings that operate a base/small city. Trend charts and graphs reported in Item 6.2 are appropriate to indicate the level and trends in their health and well-being.

The Plans

A strategic plan provides the organization with a roadmap to help navigate the dynamic environment in which they operate. We know that a wing can't plan the future in detail. However, it can purposefully work toward improving the organization and continuously review their progress and direction. When aircrews mission plan they have an objective and a planned flight path. Even though they know they may have to deviate from the planned course due to weather or a threat, the plan enables them to track their progress and modify their course to reach the objective regardless of the deviations. A strategic plan is a tool to help a wing focus its limited resources on the things that influence organizational success the most.

Step 13

Identify the wing's strategic planning process. (Item 3.1) What steps does the organization take to develop and deploy their strategic plan? The planning process should take several things into consideration such as: customer requirements, customer satisfaction, organization capabilities, supplier capabilities, human resources, and the environment and risks (threats, budget, regulatory, societal, etc.) How does the wing deploy the actual planning process? This is not asking for implementing the plan but the deployment of the planning process itself. For example, if the method for planning includes goals and objectives handed to lower levels to develop action plans, how does the organization accomplish this? How do they connect their vision of the future with improvements on the front-line? Finally how does the organization evaluate and improve the planning process just described?

Step 14

Identify the wing's plan, their goals and objectives for the near- and long-term. (Item 3.2)

Step 15

A strategic plan without resources is a dream. Identify the organization's human resource (HR) plan that will make the strategic plan a reality. (Item 4.1) The human resource plan should focus the human resource development efforts to support the organization's improvement goals identified in Item 3.2. HR plans that are not aligned with the organization's direction are at best less than optimum.

The Leaders

All of this must be led. The single greatest factor in organizational change and performance improvement is senior leadership. Organizations move in the direction the people perceive is important to the leader.

Step 16

What does the organization's senior leader and direct reports personally do to create and maintain an environment for improving quality/mission performance and customer focus? (Item 1.1) Include planned activities such as: speaking before NCO PME graduations, Quality classes, Officer's calls; personally presenting recognition; personally attending training, personally meeting with customers/users; leading improvement teams; etc.

Step 17

What leadership system does the organization use to implement the mission/customer focused improvement efforts? (Item 1.2) What review methods are used to ensure the plans are being accomplished? The Air Force has an in-place structure (hierarchy) to implement quality from the top to the bottom. Some organizations use inter-linked senior leader groups to communicate and implement their improvement efforts.

How does the leadership system know that the value-added chain and infrastructure are working together to accomplish the mission? Identify the methods the wing uses to assess its performance to ensure the mission/customer is satisfied. These include but are not limited to: financial audits, exercises, unit self-assessments, self inspections, etc.

Step 18

How does the organization as an entity lead in the community? How does it address its community responsibilities in its policies, improvement plans, and practices? (Item 1.3) In addition to accomplishing the wing's mission, and systematically involving, training, motivating, caring for the health and well-being of the people, how does the organization systematically fulfill their responsibilities

as a citizen in the community? This includes activities such as cleaning up and improving the environment. What does the wing measure to track its performance in this area? Actual results should be reported in Item 6.2.

The Information

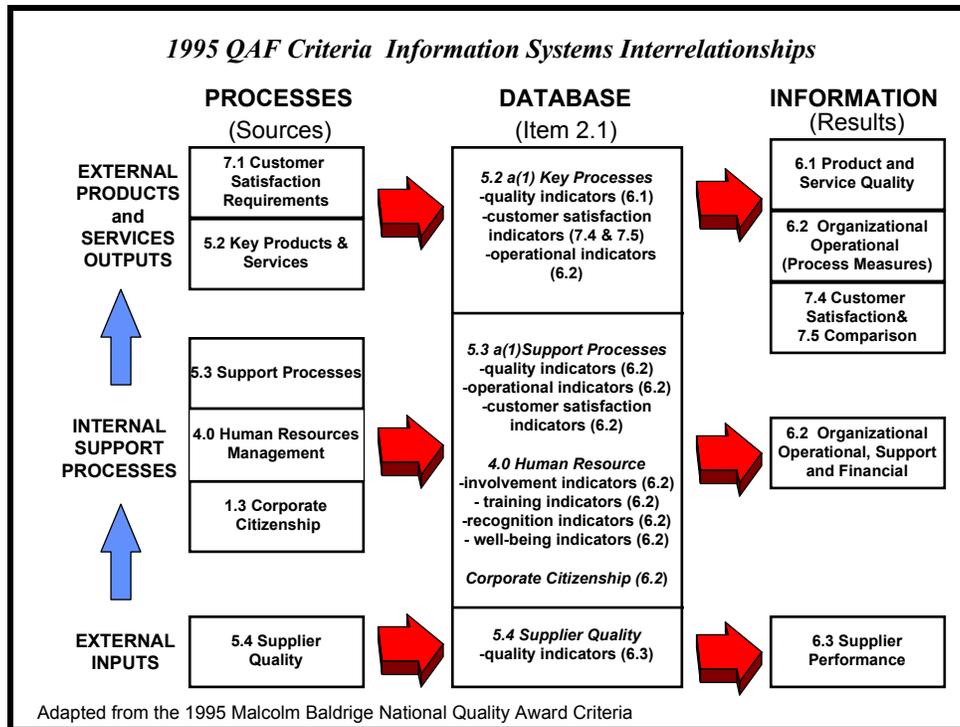
How do you know? All the methods and processes needed to run the organization require some sort of information to monitor, control, evaluate, analyze, and improve. The information component is dedicated to identifying the system, scope and management of quality and performance data; comparison and benchmarking; and analysis and uses of organizational-level data. This is the neural network that connects the organization's process and systematic approaches and feedback results.

Step 19

Identify the management information system contents. (Item 2.1) What does the organization measure--key types and roles of data? How do they ensure reliability, validity, etc.? How does the organization evaluate and improve the system just described? This item connects the systematic approaches and their deployment with the results. (See figure 3) For example, the key products, services, and processes identified in item 5.2 should correspond to the indicators in part of the database in item 2.1 which should correspond to the results graphs depicted in Items: 6.1, 6.2, 7.4, and 7.5.

Step 20

Identify the wing's benchmarking process and its sources and scope of information. (Item 2.2) The purpose behind comparison is two fold. First, when analyzing the level of organizational performance, it provides a level to compare with to better understand the meaning of the organization's performance. Second, for important processes in need of significant improvement, the information enables the organization to select someone to benchmark with who is world-class (really good) in that specific process. Identify the comparisons and benchmarks for customer satisfaction in Item 7.5 and add the process comparisons and benchmarks to the graphs in Items: 6.1, 6.2, and 6.3.



(figure 3)

Step 21

Now that the organization has a data base of valid, relevant, and accurate data, including comparison and benchmarking data, how do they convert the data to information that can be used to manage and improve the wing's performance. Include the inferential statistical tools used to analyze the wing's performance. (Item 2.3)

The Mission

This 24-step system begins and ends with the purpose and driving force behind the organization--the mission. Although the organization plans, executes, and improves the mission based on the customer's requirements that may not be enough!

Step 22

Now that the organization has all this information about what the customer desires and what the organization is capable of, how do they manage their relationship with the customers? (Item 7.2) Does the organization systematically respond to customer complaints or does it depend on who answers the phone? Although the focus is on the prevention of poor quality, until the organization's processes are perfect, there are going to be foul ups. How does the organization

make it right when things go wrong? Does the organization have specific people specially trained to deal with the customer? What about the mission commanders when the unit is deployed? What is the organization's commitment to accomplishing the mission? Although, this is usually very high it may not be formalized. This is more essential to the military than for civilian industry. When a military organization fails to provide the timely accurate support needed by other forces the consequences can be grave. The organization with well-designed processes, a comprehensive information system, and people to lead them, can provide fact based guarantees of their performance to the customer. What is the organization capable of guaranteeing the customer?

Step 23

What methods does the organization use to measure mission or customer satisfaction? (Item 7.3) How often are they used? There are two ways to measure customer satisfaction: perception and behavior. Perceptions are measured by simply asking how happy the customer is after the service is performed. Behavior is measured by repeat business--did the customer come back? Since many wing customers are a "captive audience," repeat business as an indicator of customer satisfaction may be of limited use. However, when appropriate repeat business is superior to measuring customer perceptions alone. This item is dedicated to validating the strategies, methods, and results presented in the first 22 steps. The customer's satisfaction should correlate to the trends and levels of organization performance in Category 6.0. Since the organization relies on the indicators in Category 6.0 to control and improve their processes it is important that they equate to the ultimate goal of customer satisfaction.

Step 24

Identify and chart the key indicators of customer satisfaction from step 23. (Item 7.4) How does this organization compare with organizations with like operations? (Item 7.5) (refer to Step 20)

Conclusion

Improving the organization's combat capability requires a prioritized action plan. An action plan requires identified areas for improvement which depends on accurate analysis. Analysis of the organization requires an accurate report of the organization's current approaches to the elements of the QAF Criteria. Writing a coherent interrelated report requires a well thought-out framework or model. The late Dr. Deming used to say, "all models are wrong but some are useful." The criteria is much more complex than this paper describes it. A linear model is always limited in its ability to describe a non-linear comprehensive assessment of a complex organization. Although this model is wrong, I hope you find it useful.

References

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