

Under One Roof

by **Ronald L. Sedlock**

Quality function deployment (QFD) is a great tool for designing a business based on the voice of the customer. Many quality tools are multifaceted. Here is how QFD and its house of quality can be used to better schedule and scope audits.

One of the guiding principles of quality is cross functionality. This principle is embedded in many current quality management standards. For instance, *ANSI/ISO/ASQ Q9001-2000* says the following:

“The application of a system of processes within an organization, together with the identification and interactions of these processes, and their management, can be referred to as the ‘process approach.’

“An advantage of the process approach is the ongoing control that it provides over the linkage between the individual processes within the system of processes, as well as over their combination and interaction.”

How do you audit interaction? In Figure 1’s example, the columns are the general departments at most companies (or they could be specific processes). The roof becomes all the interactions between any two departments.

There are eight departments in this example, making the number of two-way interactions 28 (sC_2). With eight

departments, the roof would be made up of 28 interactions. Is it necessary to audit all 28 interactions? Probably not. You can always do a Pareto chart and audit the six vital few interactions. Which six? Probably by consensus we can agree on four or five interactions

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of the six vital few.

Not only do we have four bad (–) interactions, we also have four good (+) ones. You can audit for objective evidence of the bad interactions to begin a process of determining root cause and implementing effective corrective action. We can audit the positive interactions to collect “what we do well” information (the appreciative inquiry method).

For example, you can audit the bad interaction between the engineering and production departments to objectively shed light on the problem. You can audit how the engineering department produces and delivers standards to the production department. You can audit the production department on how useful it finds the engineering department’s standards. A revealing exercise is to see if the supplier output is equal to the customer input, as illustrated in Figure 2.

As a positive example, you can audit the interaction between the HR and production departments to identify something you want to continue and perhaps replicate. You can audit HR on how it hires production workers. Perhaps you would find that HR goes to observe the actual work environment. You can audit how the production department’s new hires perform. Perhaps you would discover that HR receives feedback one month later on how a new hire is working out.

Auditing interactions would require you to expand the scope of audits to include more than one department or process. Auditing several departments or processes might sound impossible with time and budget constraints. But remember, scope down audits of suppliers to a specific commodity in the main process you are auditing. If nothing else, make sure all your audits cover at least two departments or two processes. You must begin auditing the way the business actually operates—a system of processes, including interactions.

Another use of the roof is to determine how to build cross functional teams, perhaps to tackle a Six Sigma project. If you know there is a weak relationship between two functions, why not put representatives from these areas on the same team with a single purpose? I have seen a weak relationship become strong through a team building process. Moreover, this strong team relationship might have a spillover effect on day-to-day business operations.

Whether forming cross functional teams or auditing process interactions, you will provide value added information for management review of the effectiveness of the quality system. Using the house of quality for cross functionality and interactions makes sense.

After all, aren’t your departments and processes under one roof?

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FIGURE 1 Example of Interactions Under One Roof

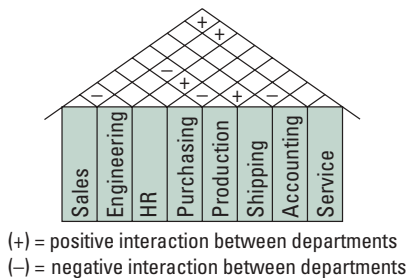
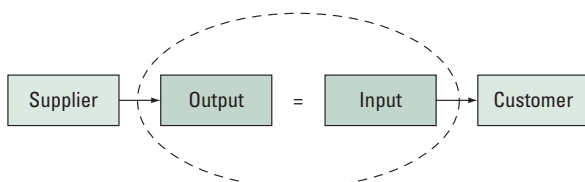


FIGURE 2 Supplier Output, Customer Input



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