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Summary

Air Force Procurement Transformation

The Air Force is in the process of significantly changing the way it purchases goods and services, with the goals of reducing costs and increasing performance to better support its missions. During spring 2002, SAF/AQC developed a Procurement Transformation Strategy that outlines a roadmap for changing the Air Force’s procurement policies, processes, personnel, and related technologies to meet the changing needs of a transforming Air Force. A procurement transformation division (SAF/AQCA) was created to lead these implementation efforts, and the new division highlighted two related areas for particular emphasis: (1) implementation of cross-functional teams (commodity councils) to develop strategies for individual commodity groups and (2) procurement workforce development to support implementation. These efforts involve designing a commodity council approach for the Air Force, analyzing data to identify appropriate commodity groups, identifying skills needed for council members to effectively participate in council activities, analyzing current workforce skills and training and identifying any gaps, and developing a plan to grow skills that are lacking.

PAF was asked to conduct three analyses to assist with these efforts:

- Review ongoing research, industry publications, and other available sources on the transformation of commercial purchasing and supply management practices and organizations to identify the
skill set needed by Air Force procurement personnel to successfully implement commodity councils. Then conduct a preliminary evaluation of current Air Force procurement skills to identify any gaps.

- To help the Air Force efficiently and effectively address any identified training needs, gather information about how commercial firms provide purchasing and supply management training, as well as concrete examples of training programs and publicly available courses.
- To help ensure that workforce transformation efforts are successful, develop a portfolio of performance metrics that will facilitate evaluation of progress and refinement of implementation plans as needed.

This report describes our findings and recommendations based on these analyses.

**Research Approach**

This research draws from a variety of private sector, Air Force, and Department of Defense sources. We reviewed a sample of the literature on accepted purchasing and supply management practices, interviewed commercial sector purchasing professionals, held discussions with Air Force acquisition and training professionals, and reviewed training curricula available to Air Force acquisition personnel. Based on these sources, our analysis reaches the following conclusions with attendant recommendations.

**Commodity Councils Require a Wide Range of Skills**

We find that commodity council membership requires a wide range of skills (see Chapter Two), including use of computers, teaming/interpersonal skills, business skills such as creative problem solv-
ing, core purchasing and supply management skills such as cost analysis, analytical and technical skills such as statistical analysis, and contracting skills (see pp. 14–15).

Based on our preliminary assessment of available training, it appears that additional training, as well as increased access to selected existing Air Force Institute of Technology (AFIT) graduate courses, will be needed to grow the full set of skills required for Air Force commodity council members (see pp. 17–20).

Specifically, we recommend that the Air Force further refine the list of skills required for commodity council members (found in Appendix B), based on the experiences of its prototype commodity council. Once skill needs are comprehensively identified, a detailed evaluation of the goals and content of the new Defense Acquisition University (DAU) and AFIT curricula will be required to identify any new types of training needed to build those skills (see p. 19). Opportunities to attend these new or improved courses will need to be increased as the commodity council approach becomes widespread.

As an alternative to developing additional “in-house” training, there are many existing course offerings that are utilized and endorsed by well-respected commercial sector purchasing and supply management organizations that the Air Force could consider (see pp. 19–20).

**There Is No Single Answer to Procurement Training**

Our literature review and interviews (discussed in Chapter Three) suggest that commercial firms have also struggled to grow purchasing and supply management organizations that contain the needed mix of skills and expertise.

We find that while there is no single right way to implement training, there are some common characteristics. Successful training programs tend to be multifunctional, involving personnel with diverse backgrounds that are relevant to new practices (see p. 22). Different firms’ training programs are organized differently, some relying on structured classroom or web-based learning to instill a basic understanding of a broad range of concepts, while others use more-
applied forms of learning such as formal on-the-job training and mentoring programs to develop more-sophisticated capabilities and high levels of expertise (see pp. 82–84). Finally, we note that different types of training are appropriate for developing different levels of expertise (see pp. 22–23).

All of our findings from the literature and in current business practice are consonant with two central themes (p. 22): First, training must prepare purchasing and supply management personnel for the realities of the current and continuously evolving environment in which they work; as such, training and training program development are always ongoing. Second, training should reflect the fact that a traditional “functional” perspective is less useful in today’s business environment, which rewards broadened perspectives; training that is cross-functional and emphasizes process management is ideal to support an integrated approach to procurement.

This overall perspective suggests that procurement training should be offered to a wider range of personnel than those traditionally considered core procurement personnel and that training programs should have tiers of instruction provided through multiple modes and approaches that depend on the desired level of mastery of a given topic and the starting level of competence demonstrated by individual students (pp. 30–31).

**Effective Metrics Link Practices to Outcomes**

Metrics facilitate evaluation of workforce development progress and aid in the identification of areas for further improvement. In Chapter Four, we identify a hierarchy of five levels of interests to monitor with appropriate metrics (pp. 34–35): Air Force outcomes associated with mission performance (Level One), contracting performance and cost outcomes (Level Two), application outcomes associated with performance of desired purchasing and supply management activities (Level Three), individual learning outcomes associated with mastery of desired skills (Level Four), and training outcomes (Level Five). This framework explicitly links training to mastery of desired skills, to
appropriate implementation of desired purchasing and supply management activities, to improved outcomes of purchased goods and services, and to the effectiveness and efficiency of the procurement organization itself. We identify and recommend metrics for all levels except Air Force/mission level outcomes, which are affected by a host of factors other than contract performance.

In each case, metrics should be revisited over time to ensure that they are providing needed information and that they remain aligned with organizational objectives. In addition, the cost of implementing individual metrics should be assessed relative to the value of the information provided (pp. 49–50).