8

COMMERCIAL INDUSTRY

Today, businesses either evolve or perish!

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Introduction

This chapter brings to the forefront work previously done under the topic of DoD's adaptation of "commercial practices," specifically as it applies to this study of modifications and upgrades. The interview process focused primarily on collecting information from DoD personnel such as headquarters staff, PEOs, PMs and modification staff, limiting the time spent on researching the commercial industry. However, our Harvard experience provided ample opportunity to poll our classmates (who were by-and-large middle managers in large multi-national companies) concerning their companies' commercial practices. Thus, our research observations heavily leverage these experiences.

This chapter briefly describes the current business environment, provides a working definition for "commercial practices" and highlights some of the inherent "motivational" differences between a commercial enterprise and government "business." Next, it describes some commercial practices which seem to merit DoD attention and adaptation. It concludes by reiterating key points.

Environment

There is overwhelming evidence that DoD is inefficient and much too bureaucratic regarding its purchase of goods and services. This has led to an almost mantra like chant in the media of, "DoD needs to do business like world class companies." Well, that may be good advice but what are world class companies' practices? Interestingly, but not surprisingly, what was a successful business practice when the idea of DoD adopting commercial practices came into vogue in the early 1970's, may not remain viable today. The commercial world is experiencing the same pressures as DoD: they need to improve their practices and products or they disappear. Read any newspaper and one quickly sees that global competition and technology availability are forcing even successful companies to reengineer. Therefore, the practices the DoD chooses to emulate will be critical if the government is to suc-

ceed in its quest to reengineer the DoD acquisition system. Two points that world renowned Harvard business professor Michael Porter makes may offer DoD some clues; 1) a company's competitive advantage comes from its capacity to improve and innovate and 2) to sustain a competitive advantage requires that it (the company) be relentlessly upgraded.[1]

Definition

For the purposes of this chapter the term "commercial practice" means the full range of activities (entire process) by which commercial companies conduct their business. Thus, to adapt commercial practices for DoD use, the government needs to focus on the processes they use.

Commercial versus DoD Differences

If adapting or adopting commercial practices is such a good idea, why is it taking DoD so long to do it? The most obvious reason is that something or someone is holding DoD back. When a previous group of DSMC Research Fellows examined the issue of adopting commercial practices in 1989, they reported the following impediments to the government using commercial practices.[2] The report points out that key motivators for a company's management in the commercial marketplace are the shareholders, process efficiency and profit.[3] DoD's leadership has a much longer list. In DoD there are multiple constituencies, each with a different interest and focus on where the government should go. Also, unlike a commercial company which can mea-

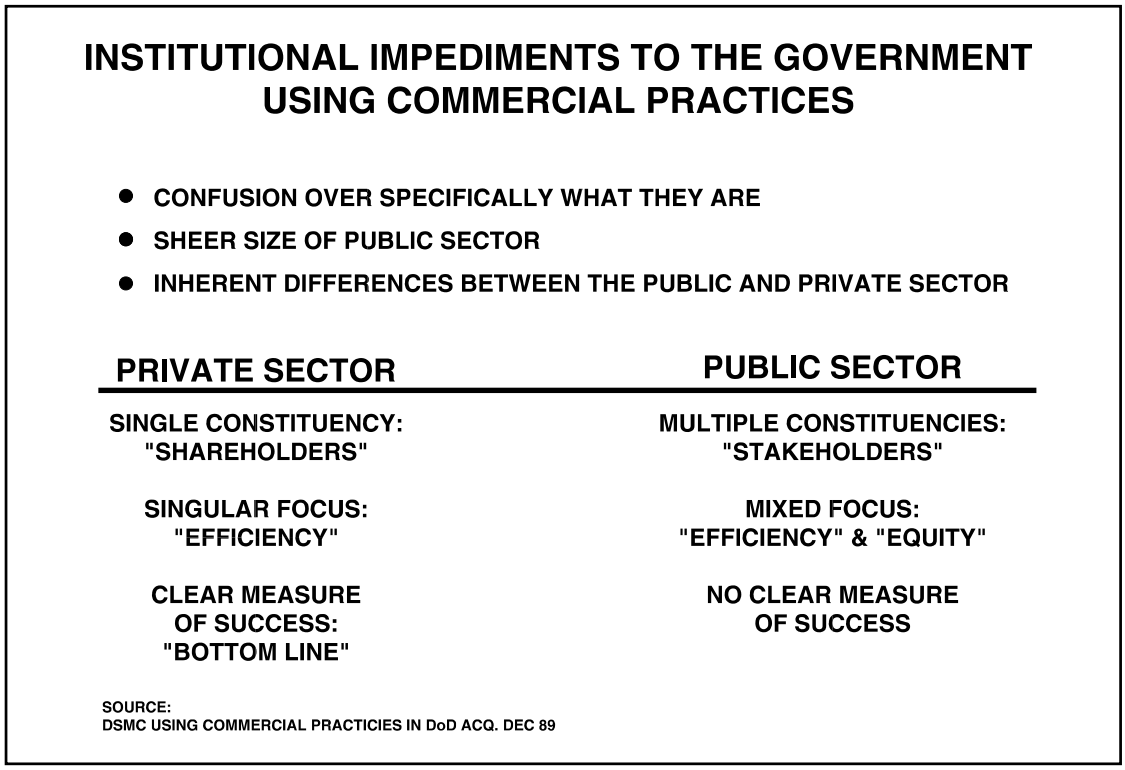

Figure 8-1. Institutional Impediments to the Government Using Commercial Practices

sure its success by profitability, DoD has no obvious (repeatable) yardstick to measure its performance. Finally, DoD, as a steward of public funds, has the additional burden of ensuring equity to the detriment of efficiency in its business dealings. The priority that equity has been given shows up as regulatory and statutory limitations to procurement actions.

Notwithstanding these impediments to DoD pursuing its business as does commercial industry, our leadership is trying to move smartly toward adopting commercial practices. One of the five planks in the draft DoD vision statement is the reengineering of the acquisition system to procure the best-value goods and services. Its three sub tenents are 1) eliminate DoD unique product or process specifications that inhibit the purchase of commercial items or services or dictate how to provide the goods and services, 2) use commercial practices to acquire military unique items as well as commercial items to the maximum extent possible, and 3) establish and maintain more effective working relationships with industry using integrated product and process teams.[4]

Commercial Practices Applicable to Modifications and Upgrades

One overarching business trend affecting commercial industry which appears relevant to DoD is product customization. If one reflects for a moment, one can think of numerous examples where the products sold today have been customized (modified) to meet the unique needs of a group of consumers. This customization does not spring from an altruistic motivation, rather it is being done to remain competitive. An example of this trend is found in the automotive industry. In the not too distant past, U.S. auto makers offered few models with a modest number of (expensive) options. In order for the consumers to get what they wanted, they had their cars "modified" by someone other than the original manufacturer. Today, these same U.S. auto companies offer many models which change frequently and offer a bevy of (less expensive) options. Why did this happen? First, it seems the model of "one size fits all" has lost its appeal to customers when the price differential between getting exactly what one wants and something less has shrunk. Second, once U.S. auto makers finally achieved a quality parity with foreign manufacturers, to make their products more attractive they needed to change styling and models more frequently, offer more individually tailored (customized) cars, and design better creature comforts that customers would perceive as high value. This trend should be important to DoD managers because to a large degree it defines how a successful company must organize, train and equip to remain viable. Also, as DoD attempts to purchase more equipment from non military industrial base companies DoD needs to understand their motivations. Briefly, some of the commercial practices that seem most important in enabling products to be tailored to the customers' needs:

- Quality product and services
- Customer(user)driven product development
- Short product development and production cycle
- Rapid decision making cycle

Quality Products and Services

In discussions with business managers, they listed quality as the dominant characteristic

required to make a sale in today's market. Most would rather be second to market with a new product or service if it meant quality was sacrificed for speed. This translates to, only adding new features or customizing (new technology) when the product or service quality can be retained/improved. As a major buyer with a much smaller purse, DoD should take heed. The DoD may be able to leverage its resources more effectively by co-opting contractors to deliver evolutionary product enhancements instead of revolutionary products that tend to have high costs and high risks.

Customer (User) Driven Product Development

Having the customers (users) drive product development goals is critical if one is going to meet their unique needs. Quoting from a special edition of Fortune magazine dedicated to the customer, "The customer isn't King anymore. The customer is dictator."[5] A good example of this analogy was the development of the Boeing 777 aircraft. Speaking with Boeing personnel, they stated that in the past Boeing used the philosophy that "we know airplanes so we will build them and the customer will buy them." The Boeing 777 was built with a new philosophy, *total customer involvement*. In these efforts customers of all types (pilots, airline management, flight attendants, mechanics, passengers, etc.) participated in all phases of the product design and development. This radical shift in focus serves both the developer and customer well. The developer cuts out costly redesign when the customer's needs are better met. Customer focus and involvement seems to be an area in which DoD leadership is on-track. In each of the services, there was evidence of strong examples of direct customer involvement. Also, the services' practice of putting the resources in the hands of the operating commands for distribution definitely facilitates better developer attention to the user. One of the best commercial practices, mentioned by several industry managers, is ensuring that anyone who has the ability to influence the product's success should be represented when the product is developed. The DoD is definitely moving in this direction by advocating greater use of IPTs, refer to Chapter Five for more details.

Short Product Development and Production Cycle

Shortening of the development and production cycle of a product pays important dividends—no pun intended. Reminiscent of the proverbial "chicken versus egg" dilemma, a short development process goes hand-in hand with customization. First, as the availability of new technology and global competition accelerate those companies that take a long time to develop and produce a product run the risk of product obsolescence upon delivery. Second, if one has the shortest development time, then costs are usually lower and more time is available to promote the products before market competition catches up. Most of the processes DoD uses to buy goods and services actually force the suppliers into long development and production cycles. In his book, *Skunk Works*, Ben Rich, a top designer and leader in the field of military aircraft, eloquently validates this fact when he states,

> *Military aircraft were so expensive and complex and represented such a sizable investment of taxpayers' money that no manufacturer expected to win a contract without first jumping through series of procurement hoops, culminating in the flight-testing phase, that under nor-*

mal circumstances stretched nearly ten or more years. From start to finish, a new airplane could take as long as twelve years before taking its place in the inventory and becoming operational on a flight line after it was already obsolete.[6]

In effect DoD's policies and procedures cause them to be less efficient and probably make them less competitive for the future. Thus, given the way DoD currently operates, can suppliers afford to do business with the DoD? The footnote here should read; trim, reengineer or eliminate any process or policy not legally required, that slows product development. The phrase "time is money" is just part of the problem with slow development. Today, slow product development means the user will most likely end up with less than world-class warfighting equipment.

Rapid Decision Making Cycle

Rapid decision making goes hand-in hand with having a short product development cycle. To almost every person, our Harvard classmates mentioned their company's efforts to streamline company decision making as a preferred way to improve efficiency and cut product or service development time. The primary tactic to speed decision making is to decentralize the authority for making a decision down to the person responsible for developing the product or service. This makes sense since the project manager is the person with the most direct access to meaningful information. This strategy also complements the goal of customer responsiveness. The strategy allows (forces) the project manager, in most cases, to make timely changes without heavy corporate involvement, as long as there is no requirement for additional resources. It cuts the layers of management and functional staff involved in decision meddling. Another by-product of this approach is lower overhead burdens to the product or service. Also, this leaner approach to decision making usually results in more direct and effective communication.[7] All these benefits free up time for generating "good ideas" about how to best tailor a product or service to unique customer needs. These thoughts are succinctly stated by noted business professors C.K. Prahalad and Gary Hammel in their article on *The Core Competence of the Corporation*, "In the long run, competitiveness derives from the ability to build, at lower cost and more speedily than competitors, the core competencies that spawn unanticipated products."[8]

Speeding up the decision making cycle is an area ripe for DoD harvest in acquisition reform. One way of slowing the PM's decision making is through DoD's Byzantine oversight process. On paper there is not supposed to be more than two levels of review between a PM and their designated MDA.[9] While this is technically true, in fact there are several other actors whose oversight review has the effect of adding burdensome management or review layers. Congress, Office of Management & Budget (OMB) staff, auditors to name a few, insert themselves into the decision making process. Therefore, for the purposes of trying to emulate the "world class" commercial practice of rapid decision making, it is incumbent on DoD to continue to scrutinize its own oversight and review processes for further streamlining.

Summary

The DoD will continue to be well served by looking to successful commercial industries for "commercial practices" that it can adapt. Much of the specific practices industry uses clearly is not appropriate for adoption be-

cause the DoD serves different constituencies and therefore operates under different legal rules. The practices listed here, however, are practical for adaptation to DoD's business realm. The need for commercial industries to be able to customize products in order to remain competitive drove wholesale changes in their practices: quality products and services, customer driven product development; short product development or production cycles; and rapid decision making. These practices are very reasonable for DoD to adopt.

ENDNOTES

1. Porter, M. E. (1986). *Competition in Global Industries* Boston, MA: Harvard Business School Press.

2. Perkins, C.A., LTC, Spencer, A.C, LTC, & Sweeny, B. D, LTC. (1989). *Report of the Defense Systems Management College 1988-89 Military Research Fellows, Using Commercial Practices in DoD Acquisition: A Page from Industry's Playbook*, Fort Belvoir, VA: Defense Systems Management College. (NTIS No. ADA 265-694).

3. Ibid.

4. Preston, C., DUSD(AR). (1995, April 6). Statement to the Acquisition and Technology Subcommittee, Senate Armed Services Committee.

5. McManus, J. (1993, Autumn/Winter). Meet the New Consumer, *Fortune Magazine Special Issue* 128 (13), 6-7.

6. Rich, B. R. & Janus, L. (1994). *Skunk Works: A Personal Memoir of My Years at Lockheed*. New York: Little, Brown and Company (Canada) Limited.

7. Prahalad, C. K. & Hamel, G. (1990, May-Jun). *The Core Competence of the Corporation*. Harvard Business Review, pp 79- 91.

8. Ibid.

9. Department of Defense. DoDD 5000.1, Part 1, page 1-7