Chapter VII
Data Smog, Techno Creep and the Hobbling of the Cognitive Dimension

Peter R. Marksteiner
United States Air Force, USA

ABSTRACT

Information overload is an increasingly familiar phenomenon, but evolving United States military doctrine provides a new analytical approach and a unifying taxonomy organizational leaders and academicians may find useful in conducting further study of this subject. The overabundance of information, relentless stream of interruptions, and potent distractive quality of the internet draw knowledge workers away from productive cognitive engagement like an addictive drug, hobbling the quality and timeliness of decisions and causing considerable economic waste. Evolving U.S. military doctrine addressing “Information Operations” applies time tested principles regarding the defense of physical resources to an information age center of gravity—the decision making capacity of people and organizations, or the “cognitive dimension.” Using military doctrine and thinking to underscore the potential seriousness of this evolving threat should inspire organizational leaders to recognize the criticality of its impact and motivate them to help clear the data smog, reduce information overload, and communicate for effect.

INTRODUCTION

The instruments of national power come from the diplomatic, informational, military, and economic sectors. . . . They are the tools the United States uses to apply its sources of power, including its culture, human potential, industry, science and technology, academic institutions, geography, and national will. (JP1, p. x)

Prominent voices in business occasionally borrow military vocabulary to describe their strategic plans or business visions. When über capitalist Gordon Gekko (played by Michael Douglas in Oli-
ver Stone’s “Wall Street”) told his young protégé, Bud (Charlie Sheen) there was much he could learn about making business deals from Sun Tzu’s Art of War, aspiring tycoons began pulling the book off shelves in record numbers. Taking advantage of military thinking makes good sense. The U.S. Department of Defense (DoD) is an enormous and complex organization. It manages a budget more than doubling the world’s largest corporations and employs more people than a third of the world’s countries. Moreover, the U.S. military has a fairly impressive win-loss performance record. In business terms, it’s a market leader. The U.S. military has maintained its position by methodically incorporating advances in technology into strategic thinking. From precision weapons, to stealthy invisibility, to space based surveillance the U.S. military, guided by time tested doctrine, has capitalized on technological advance with overwhelming success. Evolving U.S. military doctrine addressing “Information Operations” (IO) applies time tested principles regarding the defense of physical resources to information age centers of gravity—the aggregate decision making capacities of people and organizations. Modern military doctrine defines that center of gravity as the “cognitive dimension” of the information environment. Using that doctrine to underscore the potential seriousness of this evolving threat should inspire organizational leaders to recognize the criticality of its impact and motivate them to help clear the data smog and reduce information overload.

Mission Creep and Fog & Friction

Obviously, not all military principles are useful in the commercial world, but some absolutely are. In business, for example, choices about pursuing one course of action over another are typically based on projected economic returns on investment (ROI). By contrast, choices made by nations about engaging in armed conflict may include considerations of economic ROI, but quite often also involve other non-economic considerations. Among those military principles particularly well suited to evaluate how organizations produce and manage information are the concepts of “mission creep” and “fog and friction.”

Consider the concept of “mission creep.” The term is commonly used in defense-related and mainstream publications to describe situations wherein a military operation is initiated for a stated purpose but morphs over time into a considerably broader undertaking, often based on early successes (e.g., Stevenson, 1996; Yates, 1997; Siegel, 2000; Hoagland, 1993; Freemon, 2004, Weiland, 2006). More recently, the term is frequently used along side phrases such as “requirements creep” and “scope creep” to describe the tendency of bureaucracies to direct more and more resources to ever expanding and imprecisely defined goals (See e.g., Bennett, 2008; Appelo, 2008).

The phrase “fog and friction” was introduced into the soldier’s catechism in the 18th century by Prussian Army officer Carl Von Clausewitz in perhaps the best known work on military thought in modern history, On War. “Fog” describes the inherent uncertainty and unpredictability of war. “Friction” describes the proposition that in almost any plan requiring human action, unanticipated variables pop up that not only introduce delays and diversions in their own right, but also often combine with one another to produce entirely unpredictable results, the aggregate effects of which far exceed the sum of their individual impacts.

Mission Creep — Techno Creep

Much of what’s happening in businesses and organizations around the world constitutes a very mission creeping approach to the use of Information Technology (IT). In this chapter, the term “IT” is used generally to describe those capabilities that enable knowledge workers to access information or to communicate using a PC or other device. Such capabilities facilitate—even encourage, a sort of bureaucratic mission creep in a way unparalleled
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