: Can computerized decision support improve national security decision making?

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PERHAPS. The current review of options for exiting from Iraq demonstrates the complexity of national security decision making, but it also emphasizes the importance of finding new approaches to improving such decision processes. On Saturday evening, December 2, 2006, Michael R. Gordon and David S. Cloud reported on The New York Times Internet site (nytimes.com) the content of a secret memo from U. S. Secretary of Defense Donald Rumsfeld to President George Bush written two days before Rumsfeld resigned acknowledging that "what U.S. forces are currently doing in Iraq is not working well enough or fast enough". As a decision scientist, what interests me is examining the list of 21 illustrative new courses of action discussed in the memo to see how computerized decision support could be of assistance.

First, in the memo Rumsfeld notes "many of these options could and, in a number of cases, should be done in combination with others". This acknowledgement increases the complexity of analyzing the options whether the analysis is computer supported or unaided. There seem to be 6 major strategies: 1) troop pull back and phased withdrawal with benchmarks, 2) increase forces in Baghdad to attempt to control it, 3) increase forces in Iraq substantially, 4) set a firm withdrawal date to leave. Declare that with Saddam gone and Iraq a sovereign nation, the Iraqi people can govern themselves. Tell Iran and Syria to stay out, 5) establish three separate states - Sunni, Shia, and Kurd and then leave, and 6) try a Dayton-like peace negotiation process. Each of these strategies would result in short and long-run consequences and experts can offer arguments for and against each of them. More than likely someone could develop a cost-benefit analysis for each course of action. All of the strategies have risks associated with them that can also be quantified. Part of the difficulty for President Bush and his advisors is organizing all of the information and opinions relevant to each course of action. Appropriately designed information and decision support systems could help organize and manage such information.

Can political and military leaders rationally analyze and evaluate these alternatives? Would computerized decision support help?

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Potentially computerized decision support can play a greater role in complex, strategic decision making situations like national security decision making and that is why I have been working on PlanningDSS.com and computerized decision aids for many years. Today however computerized support would likely be confined to one or more special studies of these options.

In the United States, we have a "strong" President model for national security decisions. Such decision making is centralized and autocratic. The President as Commander in Chief is charged with assessing the magnitude and potential urgency of threats and with responding appropriately. Today the decision reaction time to hostile acts is significantly longer than in the "Cold War" era of nuclear confrontation with the Soviet Union, but the decisions seem increasingly complex and multidimensional. Decision making is becoming increasingly difficult.

Sitting in our homes reading our email or surfing the Web, it is difficult to appreciate and understand the dynamics of the exercise of Presidential power. Any computerized decision support must be integrated into a fluid, loosely defined decision process that can be changed as needed by the President. We have watched the President of the United States in Video Conferences with Pentagon and Civilian leaders and we know the President receives intelligence briefings and that sometimes information is incomplete or even incorrect. Civilian and Military planners regularly develop contingency plans and assess various threats. But, it is difficult to imagine the President with a Blackberry sending and receiving emails or chatting on a cell phone with Military commanders in Iraq while flying by helicopter to Camp David. It is even more difficult to imagine the President watching a visual simulation of possible exit strategies from Iraq. Also, it is hard to imagine the President reading planning documents on a Tablet PC and annotating the plans using the pen interface. At this point, no one is certain about the future role of computers in national security decision making. If we are to develop more computerized support, we will need to examine current decision processes in more detail and devise and evaluate appropriate systems.

Making decisions is an important part of government activity. The study of decision-making and computerized decision support is multi-disciplinary. Researchers come from many fields including management, economics, psychology, political science, military

science, computer science and sociology. Various researchers have identified alternative, possibly overlapping views of national security decision making. Some stress the rational and analytical processes that do and should occur. From this perspective, all possible alternatives are identified and the costs and benefits of each are assessed. The option that promises to yield the greatest net benefit is then selected. Increasing computerized decision support is congruent with this perspective.

Other researchers stress the behavioral and political factors that interfere with rational deliberations. This perspective suggests that the President is involved in a "struggle for power" and that decisions emerge from that struggle. This more Machiavellian view of political decision making identifies the importance of "bargaining, accommodation, and consensus, as well as controversy, conflict, bluff, threat, and even deceit" (Riemer et al., 2006). Computer support can aid in this struggle for power, but the systems and tools would be different. An alternative view emphasizes a highly bureacratic decision process. Prior policies and standard operating procedures strongly impact government decisions. The military chain of command and government bureaucrats frame problems, obtain information, shape alternatives, assess costs and benefits, and hence significantly influence the choices made by political leaders. Bureaucrats are often receptive to computerized tools, but the results from using them may or may not impact actual decisions. These perspectives are not mutually exclusive, but they do suggest the need to develop and implement a wide variety of computerized decision support systems. We probably need to develop and implement diverse systems grounded in all three perspectives. What specific DSS can we realistically build for helping with national security decision making?

Let's examine the initial decision to attack Iraq and try to identify opportunities to include computerized support in that decision process.

According to Bob Woodward (10/24/2004), on November 21, 2001 "President Bush took Defense Secretary Donald Rumsfeld aside and said he wanted to look at the Iraq war plans." Should miltary contingency plans be stored in document-driven DSS? Should contingency plans related to national security situations include risk assessment, simulations and specialized databases? Should data-driven DSS monitor

contingencies, weak signals and threat triggers?

Woodward also reports "In August 2002 (about seven months before the start of war in March 2003), Secretary of State Colin Powell told the president over a two-hour dinner that an Iraq war would have consequences that had not been considered or imagined. He said that an invasion would lead to the collapse of Iraq -- 'You break it, you own it.'" Can computerized decision support help insure that consequences of actions especially second order consequences are more systematically considered and reviewed? Can computerized planning decision support help insure that adequate planning is done for both conducting a war and for managing the aftermath of a conflict? Can knowledge-driven DSS help insure lessons learned from prior conflicts are not forgotten?

Finally, according to Woodward, "On Jan. 9, 2003, the President asked Gen. Franks: What is my last decision point? Franks said it would be when Special Forces were put on the ground inside Iraq." What information should a President receive during a crisis and how open should s/he be to new or disconfirming information? Should data-driven DSS provide summaries of opinions of intelligence analysts and experts on various topics? Should data-driven DSS track public opinion in such crises? If so what information about public opinion should be tracked and how should it be summarized?

How does a President set up a system or a process to enable his administration to alter a course of action or get a "fresh" or unbiased evaluation of its actions and possible consequences? What sort of consultation process can and should computerized decision support provide for national security decisions? Who should collaborate in national security decision making? How should views and opinions be captured, aggregated and organized?

So how does the U.S. make the decision to withdraw from Iraq? Imagine a "best case" computerized simulation of reduction of hostilities in Iraq. How likely is it that we will succeed in pacifying the country and reducing the sectarian violence? Approximately how many soldiers are likely to die if U.S. involvement continues at various levels for 18 months? What will be gained? What are the long-term consequences of our actions?

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One of the major objectives of the Iraq War was regime change, that mission has been accomplished. The Iraq people have a freely elected government and the country has a "new" military organization. Some goals have been accomplished. So a fundamental issue is establishing the goals that should be considered in making a decision. Computerized decision support can assist in setting and monitoring goals for national security decision situations. If we can identify critical success factors (CSF) and benchmarks like the number of terrorist attacks or incidents, then data-driven DSS can track the CSF and benchmarks. In Iraq, CSF and benchmarks would probably be tracked by the media however and computerized support would not be needed.

On May 1, 2003 aboard the aircraft carrier Abraham Lincoln, President Bush proclaimed the United States had accomplished its mission in Iraq. Whatever one's view of the decision to undertake the Iraq war, the U.S. President, the Congress and Military leaders still need to formulate a responsible exit strategy. Computerized decision support currently cannot do this. Perhaps in the future computerized decision support will provide more systems and tools to help the President "faithfully execute the Office". It seems reasonable that as technology for decision support improves, the President and Congress should explore how information technology can help improve national security decision making.

More that 60 years ago, Winston Churchill stated "freedom and democracy must be earned with the blood, toil, sweat and tears of those who would be free". Iraq's 26 million people have and probably will continue to pay a high price for their freedom. Those of us who live in the United States of America must also continue to earn our freedom and democracy. Perhaps information and decision support technologies will help us reduce that cost.

As always your comments are appreciated.

References

Kennedy, Robert F. 1969. Thirteen Days. New York: W.W. Norton.

Kissinger, H., "Lessons for an Exit Strategy," Washington Post, Friday, August 12, 2005; Page A19 http://www.washingtonpost.com/wp-dyn/content/article/2005/08/11/AR2005081101756.html.

Riemer, N. D. W. Simon, and J. Romance, The Challenge of Politics: An Introduction to Political Science, (2nd. edition) CQPress, 2006, http://www.cqpress.com/cs/challenge, see especially Chapter 14: Decision Making in Politics.

Rumsfeld, D., "Memo of Options for Iraq War," Nov. 6, 2006, URL http://www.nytimes.com/2006/12/03/world/middleeast/03mtext.html?_r=1&oref=slogin .

Woodward, B., "Decision Iraq: Would Kerry Have Done Things Differently?" Washington Post, Sunday, October 24, 2004, URL http://www.washingtonpost.com/ac2/wp-dyn/A55919-2004Oct22?language=printer.

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