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CURRENT THINKING AND PRACTICE  
CONCERNING  
DECISION SITUATION ROOMS

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Introduction

Mankind has been very sophisticated in terms of producing material goods. This sophistication is reflected in complex, interdependent, automated factories that produce many units, enabling the average citizen to afford some of the nicer things of life.

Unfortunately, no such sophistication has been reflected in the way planning and management is carried out--at least not until fairly recently.

Now people are beginning to realize that to get good production from human beings engaged in difficult intellectual work, it is time to give as much attention to the environment in which people are working together on complex issues as we have given in the past to our more stupid brothers--the machines.

Perhaps it is not too surprising that we have been slow to think about how to make ourselves more productive as persons working on intellectual things. There has been ample incentive for people to worry about how to produce goods to stay alive, and so forces were at work that drove societies in the direction of mechanization. This led us to design and interconnect machines, providing jobs for people to attend to the machines and help produce. Corresponding incentives have been much less evident in intellectual work.

In the United States, studies have shown that people are seldom fired from an intellectual type of job because of a deficiency in technical ability. Instead it is usually true that people are let go only when there is no money to pay them, or when they have been so hard to get along with among their fellow workers that they cause more trouble than they are worth.



Three factors have come together now in time, to cause much attention to be paid to raising intellectual productivity through the use of more sophisticated human environments. These are:

- o The increasing competition among nations of the world in high technology fields, causing nations that were once leaders in selected areas to see their leadership shifting to nations that are more productive
- o The increasing sophistication of public citizens who become readily disenchanted with poor government, and desire to see more effective public management and more sensible planning and administration of public funds
- o The development of intellectual technology, including elements of computer application, psychology, sociology, and philosophy, all coming together to yield a set of methodologies, the consensus methodologies, which allow people to work together pleasantly and much more productively than has been characteristic of groups in the past

One of the main developments that is beginning to flower in the areas of our discussion is the so-called decision-situation room or decision seminar room. This development is in its very early stages, but already there is great enthusiasm for this type of room, having it equipped with facilities that are wisely designed and carefully arranged to facilitate that productivity of groups.

It is our purpose in this writing to give a short summary of the present state of the art in such rooms. We cannot be comprehensive in listing all such rooms, for no survey has been done to find out where they all are. However we are aware of several that are in operation and others that are in the planning stages. The writer has personally designed two such rooms, both of which are now being constructed, one at the University of Virginia, and one at the University of Northern Iowa.



Wherever there is a planning activity going on, that is likely to continue at least intermittently for a considerable period of time, there is every reason to develop and operate at least one such room and, perhaps, several of them. When several are developed, they may or may not be replicas of each other. It may be appropriate to have more than one type, as we shall discuss shortly.

### Types of Decision Situation Room

We shall discuss five types of decision situation room. One of these types is the more familiar conference room arrangement which can be considered an almost trivial example of a decision situation room. Such a room provides a place for people to sit, and an opportunity for them to write and talk. This is about all that is offered, though sometimes small flip chart facilities, overhead projector screens, or a portable blackboard (almost always too small and inconvenient) or some combination of these is offered.

The second type of decision situation room we will call a "war room", after the name given to it by some military people. A room of this type is characterized primarily by two features. One is a set of display facilities, and the other is access to a computerized information system that can be accessed through terminals. In addition to these two features, there may be a multiplicity of communication arrangements that allow extended telephone operations. This type of room places great value on displaying lots of information, and places heavy stress on the people in the room to invent on the spot, usually under crisis conditions, some way to use all the information to make wise and sensible decisions. It is our feeling that the war room will eventually disappear from the society in deference to other types of room that do much more to facilitate wise human behavior.

The third type of decision situation room we will call a management science room. This name has not been used, so far as we know, for such rooms. However we feel it is a properly descriptive title for the room of this type, since such a room is normally equipped with a terminal that connects to a computer having standard management science software items in it. A good example of such a room is the one located at Decisions and Designs, Inc., in northern Virginia.



As described in the recent ORSA/TIMS meeting in Houston, Texas, the Decisions and Designs Company room is intended to provide access for groups to the following software:

- o Decision Trees Analysis
- o Influence Trees Analysis
- o Multi-attribute utility theory (MAUT)  
models for single-stage decision making
- o Hierarchical evaluation structures for  
MAUT analysis
- o Pareto analyses for two-party negotiations
- o Cost-benefit models for resource allocation

All of these types of software are standard subjects in business school courses in management science, thus the name management science room seems an appropriate one for this type of room.

Somewhat similar facilities are provided by a company called Execucom Systems Corporation (Austin, Texas), which stresses decision support systems using data base management, statistical analysis, and graphic output.

Georgia Tech University provides a room equipped with interactive computer graphics that specializes in interactive development of complex project schedules. This area is also one usually taught in management science courses in business schools, as well as in industrial or systems engineering.

The fourth type of decision situation room we will call a social planetarium. This concept, along with the early concept of a decision seminar, was originated by the late Professor Harold Lasswell of Yale University, who conceived the idea after working with primitive Indian tribes in Peru, on problems associated with their village. The concept is to build a room that has very carefully designed displays and experiential ingredients to help a person learn about what is going on in his own regional living environment. For example, the room or building might be designed so that a person could experience vicariously most of what might otherwise be experienced over a prolonged period of time to acquaint himself with the city in which he lives. This would help the individual make better decisions about where to live, how to use



time, etc. Such a room could even be conceived to display to visitors most of the major aspects of an entire nation, thereby allowing them to become familiar with the nation in a reasonably short period of time, thus helping them to become assimilated into the culture, or to enjoy a tourist experience.

The fifth type of room, and the last type we will discuss, is the type that we are building at the University of Virginia. We call this type of room by the name DEMOSOPHIA (a word formed by joining two Greek words, one meaning "community" and the other meaning "wisdom"). This type of room is intended to maximize the capacity of individuals to work with each other and to benefit from and organize the best wisdom and knowledge of the people who are working together. With this type of room, the information used will ordinarily be qualitative rather than quantitative, though it is not necessary that this be true.

Many applications of the consensus methodologies that form most of the basis for using DEMOSOPHIA were made over a period of nine to twenty years (depending on the methodology) before this room was designed and its construction begun. In this extended trial period, we have found that the consensus methodologies are very effective in getting improved productivity and satisfaction from groups of people trying to work together to achieve some kind of resolution to a complex issue.

Without the kind of facilitation provided by the consensus methodologies and the kind of functional environment offered in DEMOSOPHIA, what often emerges from the work of a group is the lowest common denominator, in unorganized form. With this kind of facility, properly equipped and managed, what can emerge is a synthesis of the most valuable knowledge and wisdom of the group.



The primary physical facilities in DEMOSOPHIA are carefully developed wall space in substantial amount, useful for posting large displays or for writing at length, along with a wide-screen television display connected to a computer that contains software for some of the consensus methodologies. Another requirement of DEMOSOPHIA is the availability of a skilled, experienced facilitator--normally a person who has been trained in facilitation by someone who previously has done this work successfully. While group facilitation has been made a career by a moderate number of people, most of the present facilitator population is not aware of the consensus methodologies, and need to become knowledgeable about them before trying to do facilitation of a group in DEMOSOPHIA.

The reader who wishes to read more on this topic is referred to the paper:

Robert W. Lamson, "Planning and Using Situation Rooms"  
World Future Society Bulletin, Vol. XV, No. 2, March/April, 1981,  
pp. 4-11.

This article includes a bibliography.