

Development In Business Simulation & Experiential Exercises, Volume 18, 1991

THE NEW BUDGET GAME

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ABSTRACT

The New Budget Game is an experiential exercise requiring decision-makings under conditions of conflict in a funding reduction situation. It involves the participants in a dynamic role-oriented environment which requires the use of a number of important management skills: strategic thinking, decision-making, interpersonal interaction, communications dealing with stress, power and authority, creativity, amid negotiations.

The exercise has application in both university and corporate settings. The exercise may be used at the beginning of a course (or seminar; to help establish a common framework for application of the various management skills. It can be used at the end of a course to help the participants integrate the various management skills and concepts that were discussed. It can also be used to observe the participant's performance in real-world-like decision-making situations or for research on group decision-making.

After a brief introduction all participants are divided into groups of six. Each group must negotiate and decide how to allocate reduced funds between five projects. A Research Director oversees the negotiations between five project managers whose projects require \$1.8 million to complete the year but only have \$1.0 million budgeted by senior management. This exercise, including debriefing and feedback is usually run in a two-hour period but it can also be fit into two 50-minute class sessions.

Theoretical Framework

Experiential learning tools that integrate OB concepts and decision-making skills in a realistic environment can be profitably used in the classroom to either: (1) establish a common framework to which future course materials can be related; (2) provide a capstone experience which will help the participants integrate what they were supposed to have learned; or (3) provide a real-world like situation in which the participant's performance can be observed.

An effective experiential learning tool should enable the participants to integrate various facets of organizational and cognitive behavior which are generally treated during a course of study as relatively isolated theoretical issues. These include: strategic thinking, decision-making, interpersonal interaction, group dynamics, leadership

skills, communications, dealing with stress, power, and authority, and negotiations. There is significant literature relating to these issues and its coverage is beyond the scope of this paper.

Feedback is critical for proper learning to take place after an experience. The debriefing session is crucial to this activity. Debriefing should involve the participants describing their perceptions as well as having the instructor put things in a broader perspective. This feedback should focus on the decision process used rather than on the outcome resulting from the experience. The natural tendency for most groups is to focus on the outcomes because they are easier to measure in their effort to establish who "won" and who "lost". Competition is usually not discouraged by the instructor because it does motivate the participants and adds a real-world dimension to the experience. However, the real learning comes from describing and analyzing the processes used; and from the successful internalization of the resulting rules, skills and behavior.

Presented here is a role play which enables the participants to integrate and apply a spectrum of organizational behavior and cognitive skills in a realistic situation involving conflict and reduction in funding both of which tend to encourage suboptimization.

It is much easier to make mutually acceptable decisions in an expanding or growth situation. The reducing situation is not only much more difficult to deal with, it is also more realistic -- especially in the early 1990s. In this role play, some projects are on schedule and some are behind schedule and each project manager has an explanation for his/her situation and why their project should receive adequate funding.

One of the advantages of this exercise is that it requires minimal preparation by both the instructor and the participants, and yet encourages considerable real-world type interaction. It can be fit into a two-hour span of time, or into two 50-minute class periods. This exercise has been used with success in a variety of management courses in both college and business environments.

Development In Business Simulation & Experiential Exercises, Volume 18, 1991

Description of Exercise

The participants are divided into groups of six people each. The groups are independent of each other with each group using role playing and operates as if it is the Project Management Organization with a Director and five Project Managers for Scientific Associates, Inc. It is the Director's practice to review the progress of the various projects quarterly and to reapportion resources as appropriate.

This review is the third such meeting this year. Original funding was \$5,500,000. To date, \$4,200,000 has been spent. The various project managers are requesting a total of \$1,800,000 to complete the year. Top management has reduced the annual funding to \$5,200,000. Business has been a little slow and Scientific Associates' sales and profits are below target, so everyone feels fortunate to receive this amount of funding. Thus, current available funding is \$5,200,000 less \$4,200,000 or \$1,000,000. The problem is how to best allocate the \$1,000,000 among the projects which are requesting a total of \$1,800,000.

Process

1. The exercise may be initiated with or without theory discussions, depending upon the instructors' objectives.
2. Divide the participants into groups of six people each and give a copy of the Appendix to each participant. They will play the roles of the Director of Project Management (RD) and five Project Managers (CV, BD, FC, SS, and PG) as described in the Fact Sheet and the Special Instructions.
3. The groups may choose who will play which role, or the roles may be assigned by the instructor.
4. Each group should be told that they may proceed however they desire to come up with a new budget for the balance of the year.
5. Everyone should read the Introduction and the Fact Sheets and the Special Instructions that define their role. Give the individuals time to review this material and encourage the Project Managers to add other ideas to their Special Instructions to support their arguments.
6. Have each group of six interact within the context of their roles for about 20 minutes as they try to work out their solution.
7. Regroup according to role, i.e., all those playing RD are in one group, all CV'S in another group, so forth. For about ten minutes the individuals should share their supporting ideas and experiences as they played the same role. What was their approach to the Solution? How did they interact with the others? What supporting ideas did they generate? etc. During this step the instructor may need to encourage the RDs to think about corporate mission, goals, priorities and strategic thinking.
8. Ask everyone to return to their original groups and work through to a Solution. Allow about 20 minutes for this part.
9. Finally, reconvene all of the participants for a debriefing session; first, with feedback from the participants, then by any observers and then by the instructor. Debriefing may take from fifteen to sixty minutes.

Variation

1. If the number of class members is not a multiple of six, assign the extra people to serve as observers, or have some Project Managers play two roles. It is important that everyone participate.
2. If two hours are available for this exercise, go through steps 1-9 as described. When two 50-minute sessions are available, run through steps 1-7 in the first session; and run through steps 8 and 9 in the second session.
3. It is helpful to use name cards or tags for each participant-list their role play name and project, e.g., Cold Vaccine.
4. Additional pressure can be exerted by any, or a combination of, the following: Move up the deadline for step 8; reduce the budget figure allocated for the balance of the year during step 8; introduce some policy statement (like giving a high priority to one of the projects) during the negotiations; interchange some of the RDs or Project Managers during negotiations; or have one or more of the participants take a prearranged stand with regard to the allocation of funding.

Debriefing

As mentioned earlier, feedback is critical for proper learning to take place after an experience. This exchange should occur during the debriefing session, and may take from 15 to 60 minutes depending upon the depth of the discussion and the number of groups.

Development In Business Simulation & Experiential Exercises, Volume 18, 1991

Initially, every group will want to find out how they did with respect to the others. It is usually advisable to take some time to do this, and to record the various decisions on a flip-chart or blackboard. Once this is out of the way, the process issues can, and should, be made the center of focus.

Debriefing may use one or a combination of the following:

1. Unprompted discussion by each group of their process.
2. Groups responding to questions, such as: Did you establish and agree upon a corporate mission and an appropriate strategy? What was the general environment in the process, i.e., was it dominated by RD or anyone else? Was there true consensus? How do each of you feel about the process and about the results?
3. Analyze using tools like:
 - Johari Window Analysis -- Size of Arena, Blind-Spot, Facade and Unknown?
 - Managerial Grid Analysis--What management styles did the participants use (9,9 55,9,1, etc.) ?
 - Communication Patterns--Who talked to whom and how often?

Typical Group Scenario

The decision-making approach taken by the different groups varies.

At one extreme, groups, especially those exposed to the ideas of team work, mutual goal setting, and strategic thinking, will systematically establish a common goal interchange information, make tradeoffs and come to an allocation decision. However due to the built-in conflict, the final decision is usually not totally acceptable to everyone.

At the other extreme, groups have a difficult time. The participants generally perceive the situation as involving "winners" and "losers," so they usually jump right into a discussion of alternatives from their individual perspectives. They do not view the situation as a corporate problem, rather, each Project Manager pushes his/her position without really listening to the others. This tendency seems to become even stronger amongst the Project Managers after they meet with the people from the other groups playing the same role (step 7). After step 7, the RD's usually begin to realize that to arrive at an acceptable solution they must focus their groups on the corporate mission and goals, and develop strategies and priorities for accomplishing them. The groups then try to negotiate and interchange information. Seldom is everyone happy with the decision, even though they may not disagree with the process used. Sometimes two of

the Project Managers will gang up on the others in order to get their way. In many cases PD, after trying to arrive at a true consensus, due to a combination of frustration and time pressure, make the final set of decisions somewhat arbitrarily. The personality of RD and of the Project Managers seems to have a significant influence on the decision. Some are better negotiators than others. Some present their situation better. Some do a better job influencing the others. Some have more overpowering personalities.

Overall, the entire experience has a "real world feel" for the participants. It usually establishes an environment that encourages further class discussion and interaction and hopefully causes some change in thinking and action regarding group decision-making.

As a final note, since this exercise can be reasonably controlled, it seems reasonable that it could be used for research purposes regarding group decision-making. It can also be used to observe a participant's performance in a real world-like situation.

APPENDIX

SCIENTIFIC ASSOCIATES, INC.

MATERIALS TO CONDUCT EXERCISE

Introduction

This is a role playing situation. You are employees of Scientific Associates, Inc. SA was founded as a basic research organization to support the medical field. Recently, it has diversified into related fields that appear to offer sales opportunities--especially those that will lead to unique production situations.

RD is the Director of Research and the others are project leaders. Each of you is vitally interested in your project and want to see it continued to what you feel is a logical conclusion. It is RD's practice to get all of the project leaders together every three months for a hard look at each project and to reapportion funds if necessary.

This meeting is the third such meeting this year and unfortunately, top management has reduced your research budget \$5,200K for this year. Business has been a little slow and your sales and profit are below target so you feel fortunate to get this amount.

The original budget was \$5,500K and you have expended \$4,200K against it. So you now have \$100K to cover the last three months of activity. See summary.

Development In Business Simulation & Experiential Exercises, Volume 18, 1991

Your task is to determine what should be done as a consequence of the reported progress and the new funding situation.

Any reductions in project funds will require people to be laid off.

Each project is defined by the "fact sheet," which includes information known to all participants; and by the "special instructions" which should only be read by the designated project manager. The project managers should expand these instructions by coming up with additional ideas that will support their recommendations.

SS: Sugar Substitute Project

Developing a sugar substitute which is high in vitamin C. It looks, tastes, and reacts like sugar, but has no calories. When perfected, this product would have a large market and replace the sugar substitutes now available. This deviates from the corporate image, but should be a real money maker. Original budget is \$800K/year and it was scheduled for 24 months. It is in its 22nd month.

Name	Project	Original 12-Month Budget	Funds Used To Date	Current Estimate of Funds Req'd To Year End	Time
CV	Cold Vaccine	\$1,000,000	\$1,000,000	\$300,000	9/12
BID	Blood Disease		750,000	250,000	33/cont.
FC	Fuel Cell			600,000	2/12
SS	Sugar Substitute	800,000	600,000	400,000	21/24
PT	Pancreas Treatment	1,200,000	750,000	250,000	33/36
		<hr/>	<hr/>	<hr/>	
		\$5,000,000	4,200,000	1,800,000	

New Research Budget is \$5200 for this year.

SCIENTIFIC ASSOCIATES, INC.

Fact Sheet

Should be read by all participants

CV: Cold Vaccine Project

Original Budget. 12 months and \$100K. If this could be developed, it could become a major product line for the corporation and provide a large amount of sales and profit. It is in the 10th month.

BD: Blood Disease Project

This has been a continuing project for the past three years at an annual expenditure of \$1000K. This project has yielded information useful to several of the companies' programs but has no particular end product in view. It is in its 34th month. With the new computer analysis techniques this field is growing rapidly in importance--especially as other more obvious medical problems are being solved.

FC: Fuel Cell Research Project

Original Budget \$1500K for a one-year literature research and the development of a research model of a high efficiency organic fuel cell. This project deviates from the corporate image, but management believes that this is a field which has great potential, and offers a good opportunity for diversification in its tenth month.

PT: Pancreas Treatment Project

It is well known that diabetes could be cured by rejuvenating or replacing the pancreas gland. Several of your customers are working in this field and SA feels that its research will enable SA to better serve these customers and perhaps come up with a solution or technique for solving this problem. Budget is \$1200K per year for three years. It is in its 34th month.

RD: Research Director

You are delegated the responsibility for determining individual project allocations as long as they support the corporate mission.

SCIENTIFIC ASSOCIATIONS, INC.

Special Instructions

To be read only by the designated Project Manager.

CV: Cold Vaccine Project

You have been trying to develop a cold vaccine. You submitted your original budget for 12 months as \$1000K, because you felt that the Research Director would be willing to fund that amount, and you were confident that you could show enough results to get more financing when needed. Recently you came up with a possible breakthrough that has shown great

Development In Business Simulation & Experiential Exercises, Volume 18, 1991

promise in initial tests. But it must be exploited soon before the competition gets up to speed. You feel sure that given a little more money and time, you will be successful. You need \$300K for the next 3 months.

BD: Blood Disease Project

You have been investigating various blood diseases. You have not exceeded your funding for the past three years and your work has added to the company's profits. You have a good team that is highly respected and it would be very difficult to replace. You do not want it disrupted by a reduction in funding. Your project is not glamorous, but it is a consistent producer of useful information, revenue and techniques. You need \$250K to complete the year.

FC: Fuel Cell Research Project

Your project has now been running for nine months and you feel that it is providing much useful information and the research model is nearly complete. You need \$600K for the next three months to allow you to get some very important laboratory testing started. You feel sure that it will lead to several very profitable products, with particular application to space age electrical power requirements; and possibly an alternative power supply for automobiles, because it would not emit harmful hydrocarbons. and it would not depend upon the availability of petroleum. General Motors and Ford have shown some interest, as has EPA and NASA.

SS: Sugar Substitute Project

Your project is in the 22nd month and on budget, and success appears imminent. However, to properly continue your project you need about \$200K worth of additional laboratory equipment. You are on your budget. so you need \$400K to complete the year. You already have tentative approval by the FDA. Both Coca Cola and Pepsi are very interested.

PT: Pancreas Treatment Project

Your project is in its 3rd year and has proved very valuable in helping SA provide service to its customers. You are under budget, and expect to spend only \$1000K this year. You feel that in a year or so SA could be leading the field in this area of research, and if this work were to be stopped at SA. you would go where you could continue with it. You would like authorization for an additional 3 years At \$1000K per year. You need \$250K to complete this year. This project is currently under consideration for a Nobel Prize.

RD: Research Director

You believe that all of the projects support SA's broader mission, and are very worthwhile. However, some hard decisions must be made. You are concerned about their impact on employee morale, and the future of SA. You know that any reduction in project funding will result in the layoff of key people. You realize that the worst possible solution would be an 'across-the-board cut. " You would like to have a consensus amongst the project managers on the allocation decision that is made.