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A REVIEW OF CHANNELS EXERCISES AND THE DESCRIPTION OF A NEW ALTERNATIVE

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ABSTRACT

This paper discusses a new channels game and then contrasts it with existing games. The new Drock World game is basically a computerized version of the Burns (1977) game. While the games cover different aspects of the marketing mix, all of them do provide an experience with channel conflict.

OVERVIEW OF CHANNEL GAMES

A series of channels exercises (Burns 1977; Frazer 1977; Keyt and Cadotte 1981; Lewison 1977) have been developed in the past few years for use in the presentation of concepts such as channels operations and channel conflict. This paper will briefly review the nature of these games and then compare them to a new alternative (Gentry and Pickett 1981).

Scope of the Games

All of the games mentioned above are intended to be introductory in nature, and thus involve a limited amount of class time (the longest duration Is under one month). The shorter duration of these games is in direct contrast to most simulation games, which often last for much of the semester. For example, a game used in a related area--DeHayes and Suelflow's (1971) LOGSIMX game used in logistics classes-is designed to be used for a 10 to 16 week period. Further, the shorter duration reflects a related characteristic of the games, that they are intended to be simpler. Most of the games have fewer decisions involved than are found typically in batch simulation games.

Another characteristic that differentiates these channels games from most other simulations is that they all involve direct negotiations. Most simulation games, whether policy oriented or operations oriented, do not allow (much less require) contractual relations among the firms in the game.

Further, these channels games stress the need for <u>cooperation</u> among members of the channel as well as <u>competition</u> among firms at the same level. In contrast, most simulation games stress competition to the relative exclusion of cooperation. A common occurrence in the play of the various games has been the reluctance on the part of students to adapt to the cooperative stance needed for the long run stability of the channel. While examples of cooperation (more aptly referred to as conclusion) are found in more traditional simulation games, the competitive nature of simulation games has posed no similar problem for students.

Objectives of the Games

The games cited earlier were all developed by different people at different geographical locations at different points in time. However, the similarities in the game scopes discussed in the previous section indicate that some common objectives existed in the development of the games. Lewison (1977, pp. 127-128) provides the most detailed discussion of the objectives of a channels game:

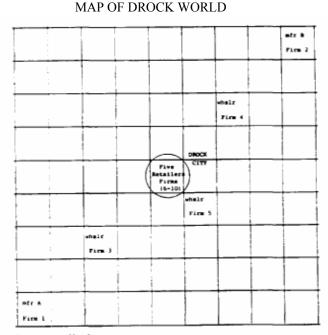
- Skill Objectives of a channels game: Skill Objectives: to develop and improve the student's capabilities in (1) the making of decisions, (2) the analyzing of information, (3) the planning of strategies, (4) resolving of conflicts, and (5) the bargaining of negotiations.
- Content Objectives: to acquaint the student with (1) the causes and consequences for channel cooperation and control, (2) the needs and strategies for channel cooperation and control, (3) the potential channel impact from different goals and policies of various channel members, and (4) some of the basic strategies of merchandising.

While the various authors would disagree as the relative importance of the various objectives, the objectives do appear to be common to all of the games discussed earlier.

A BRIEF INTRODUCTION TO DROCK WORLD

While coverage of the other channels games is available in past ABSEL Proceedings, the Gentry and Pickett (1981) game is a new exercise. The game does have strong similarities to the one proposed by Burns (1977). Like the Burns game, Drock World is designed for 10 teams (two manufacturers, three wholesalers, and five retailers). A map of Drock World is shown in Figure 1.

FIGURE 1



Each square = 50 miles Movement is permitted only horizontally or vertically.

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The students are informed as to the traditional levels of business (manufacture: sales of 500 unites per period @ \$40; wholesaler: sales of 333 units per period @ \$60; retailer: sales of 200 limits per period at \$100). If the current equilibrium is maintained, each firm will gross approximately \$20,000 per period. Overall demand is increasing in the short run and it is affected by the total amount of advertising in the industry as well as the average industry price. Consumer demand also varies according to (1) the brand (due to the amount of advertising by that particular manufacturer), (2) the retail price, and (3) the retail outlet (due to the amount of retail advertising). After the first period, firms have the capability of negotiating cooperative advertising to use in addition (or in place of) unshared advertising.

The shipper is responsible for paying transportation costs. The manufacturer is faced with volume requirements; a vehicle load is 300 units. Shipments of less- than-vehicleload volume cost more on a per unit basis and take two weeks to arrive, whereas vehicle-load shipments arrive in one week. All transportation rates depend on distance as well as volume. No such volume restrictions are faced by wholesalers, as it is assumed that they will be able to pool shipments of the product (Drocks) with other goods.

Manufacturers also face production costs, overhead, and inventory tarrying costs, while the resellers face selling costs, overhead, and inventory carrying costs. The facility sizes for the manufacturers and wholesalers are fixed, but retailers have a choice of a 8000f or a 12000f facility. Retail selling and inventory carrying costs are lower for the larger facility, but the fixed costs are higher.

The first game play saw the manufacturers dominating the channel as the resellers perceived that they might not be able to get enough inventory. Consequently, much of the negotiation process took place at the manufacturers' plants. In order to make the game more realistic (and to make the services of wholesalers more attractive), the rules were changed so that resellers could negotiate with suppliers only in the resellers' own location. After the first week, long term contracts were allowable. Further details about the game are available in the player's manual and in the instructor's manual, which are available from the authors.

GAME COMPARISONS

Table 1 attempts to summarize the games discussed earlier. In order to avoid unnecessary verbage, these games will be cited by referring to their author (or the first author if there is more than one). Thus, the games will be referred to as Frazer (Frazer 1977), Lewison (DeLozier, Lewison, and Woodside 1977; Lewison 1977), Burns (Burns 1977), Keyt (Keyt and Cadotte 1981), and our game (Gentry and Pickett 1981).

Only two of the games (Frazer and ours) are computerized. The primary benefit of the computerization is to determine financial statements for the firms involved. While the calculations involved are not particularly complicated, the use of a tested computer program does remove a source of human error. Further, the computer routine in our game is used to check for conflicting decisions by teams. While most of the incorrect inputs are unintentional, some conflicts result due to one firm's attempt to back out of negotiations. Whatever the cause, deviations from one's expected sales pattern is an obvious source of channel conflict. The Keyt game apparently overcomes this possible problem by the actual movement of product (poker chips) through the channel. Any discrepancy in the level of the transaction for the buyer's and the seller's viewpoint would thus be quickly detected. The other games apparently have no such mechanism for detecting discrepancies in the decisions of buyers and sellers.

All of the games are similar in that they are designed to be played for only a few class periods at most. Our game needs to be played a minimum of six game periods (which may mean up to six class periods being involved). Two periods of game play were feasible for a 75-minute class period, but only one period of game play was feasible in a SO-minute class. Our first game play only lasted four periods, and the manufacturers' early unwillingness to compromise for the best of the system was just beginning to result in serious problems

Came Name	Author(s)	Computerized	Perioda of Game Play	Class Time Allocated	Negotistions	<pre>+ of Firms in Typical Game Flay</pre>	<pre># of Students in Typical Game Play</pre>	Arbitration Possible	Froduct	Trànapor= Lation			Produc- tion	Competing Brend	Varjabi Consume Demand Presen
Manufacturers 6 Retailers	Fraser	7==	12 Quarters	2 persoda	Mfr-Wilr	6 2 Mfra 4 Rt1e	Not Clear	No	AR-00-CAR Borna	жo	7	10	80	**	144
Channel Conflict Cooperation 6 Control Exercise	i Lewison	No	1 Decision (7 Stages)	Not Clear 1 Period (7)	Mfe-Bele	2 1 Mřr 1 Ptlr	10 (7)	Yes	leisure Suitm	7==	Yes	T++	80	Te s	*
Unnamed.	But no	No	Not Clear	Not Clear (Several Perioda)	Mfr-Whelr Mfr-Ftlr Whelr-Htlr	10 2 Mfrs 3 Whelrs 5 Rtlrs	Not Clear	¥==	Nypothetical	¥0	Yes	Yee	7	748	74.0
CHIPS	Keyt and Cadotte	No	,	7 Perióda	Mfr-Whalr Whalf-Rtlr Mfr-Carrier	16 4 Mfre 3 Mhelre 6 Rtire 2 Cerriere 1 Bank	50-125	T	Poker Chips	7++		Ro	¥	744	Yes
Drock World	Gentry and Pickett	748	e	6** Periode	Mfr-Wheir Mfr-Rtir Wheir-Rtir	10 2 Mfre 3 Wheire 5 Rtice	10-50	¥	Drocks (Hypothetical)	*	¥	T==		700	***

TABLE 1 COMPARISON OF CHANNELS GAME

""Freduction" indicates that the production decision leads sales, and thus involves elements of undertainty.

""In the revised version.

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for them. For example, manufacturers in two of the three sections chose not to produce at all in the fourth and last period due to an abundance of inventory. The revised version of the game penalizes a zero-production decision with plant shutdown costs of \$20,000.

All of the games involved negotiations among channel members. To some extent, the channels games are experiential exercises as well as simulation games. In our game some of the students became quite hostile toward other members of the channel due to their failure to follow through with the negotiation process, to their offering better terms to competitors, or to their paperwork errors which resulted in a reduction in a shipment or in the amount of cooperative advertising. Given the emphasis on channel conflict in the games' objectives, the negotiation process is clearly necessary. Its presence requires the instructor to debrief the students as to their emotions as well as to cover the decision making aspects of the simulation game.

The type of negotiations allowed does vary across the games. The Frazer and Lewison games have only negotiations between manufacturers and retailers, while the other games allow negotiation across all three levels. The possibility of manufacturer-retailer negotiations can place a manufacturer in competition with a wholesaler, thus increasing the possibility for channel conflict.

The games involved a variety of consumer products (Frazer: AH-OO-GAH horns; Lewison: leisure suits; Burns: hypothetical; Keyt: poker chips; our game: Drocks--a hypothetical product with a name). Unlike more sophisticated batch games which have used more realistic products (for instance, soft drinks, cars, radios, and skis), the channels games authors have apparently downplayed the importance of the product itself in order to place more emphasis on the channels aspects.

Despite this admitted emphasis on the Place function, several, other marketing mix variables are incorporated into the games' structures. Only the Keyt game formally deals with the selection of carriers, but the Burns game, the Lewison game, and our game incorporate several aspects of transportation costs into the game structure. All of the games involve pricing decisions at the retail level, and all of them except the Frazer game involve more than one brand. The Burns game, the Lewison game and our game also currently involve advertising decisions, and Keyt indicated that they intended to add some advertising aspects to this game when he made his presentation at last year's ABSEL Conference. Unlike the other games, the Frazer and Lewison games do not provide the manufacturer with the power to set production levels. Finally, all of the games except the Lewison game involve a consumer response function. The Lewison game does provide access to past sales data.

CONCLUSIONS

This paper has reviewed the channels games presented at past ABSEL conferences (and to the authors' knowledge, the only channels games available) and has discussed a new alternative. In summary, the games are very similar in some important aspects: they are designed to be short-duration games as opposed to semester-long games and they differ from most simulation games in that they require interaction among firms in order to arrive at the decisions. To some extent, these games have aspects common to experiential exercises and aspects common to simulation games.

All of the games offer students new insights into the phenomenon of channel conflict. This construct appears to he a difficult one to get across through the traditional teaching modes. Indications are that all of the channels exercises discussed in this paper have been successful in terms of having the student experience channel conflict in an applied setting.

REFERENCES

Burns, Alvin C., A Simplified, Noncomputerized Marketing Channels Game," <u>ABSEL Proceedings</u>, Wichita, 1977, pp. 301-308.

DeHayes, Daniel W., Jr. and James E. Suelflow, <u>Logistics</u> <u>Simulation Exercise (LOGSIMX)</u>, Unpublished Game Manual, Indiana University, 1971.

DeLozier, M. Wayne, Dale ?'1. Lewison, and Arch G. Woodside, <u>Experimental Exercises in Marketing</u> (Santa Monica: Goodyear Publishing, 1977).

Frazer, J. Ronald, Manufacturers and Retailers: A Negotiation Game for Beginning Management Students," <u>ABSEL Proceedings</u>, Wichita, 1977, pp. 309-314.

Gentry, James W. and Gregory M. Pickett, "Drock World," Unpublished Game Manual, Oklahoma State University, 1981.

Keyt, John C. and Ernest R. Cadotte, "CHIPS: A Marketing Channels Management Game," <u>ABSEL Proceedings</u>, Orlando, 1981, pp. 242-246.

Lewison, Dale K., Channel Conflict, Cooperation, and Control: An Experiential Learning Exercise, <u>ABSEL</u> <u>Proceedings</u>, Wichita, 1977, pp. 127134.