

A LEARNING GAME FOR PROSPECTIVE B2B MANAGERS AND SALES ENGINEERS

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A SHORT DESCRIPTION OF THE SIMULATION VALUE

If you teach a B2B course in a business school or if you teach Industrial Engineering and expect your students to take positions in engineering sales, you should adopt the simulation VALUE. This game simulates a simplified model of the Numerical Controlled (NC) Vertical Milling Machine industry. Vertical Milling machines make up one of the largest selling categories in the B2B market place.

Each buying firm releases a “request for bid” (RFB) document at the start of each round. This RFB contains a set of 5 characteristics that become the minimum acceptable requirements for a winning bid. Each firm’s RFB specifies the number of NC milling machines the firm wants to purchase. All firms will accept bids that meet or exceed their minimum requirements, but will accept only the lowest priced bid. At the opening round there are 25 buying firms submitting RFBs. The buying firms are not made-up of people. Each buying firm’s demand and specifications for NC milling machines are determined by an algorithm.

Each selling firm is composed of one or up to a maximum of five students or trainees. (The authors suggest 3 persons per team.) Each selling firm may tender up to five bids per round and are constrained to only produce one specific model with its set of 5 characteristics during a single round, but each selling firm may alter the machine characteristics to better fit the potential demand at the beginning of each round after they receive all of the buying firms’ RFBs. Thus, each selling firm configures its offering to best suit their subset of potential buyers. Each of the 5 machine characteristics has 3 levels; somewhat similar to the concept of good, better and best. These 3 levels for each characteristic have different costs.

Since this simulation’s machine tools are “Made to order,” each buying firm may be charged a different price, even though the products being sold to different buying firms are identical.

This game simulates a closed bidding process and only the winning bids are released to all the players after each round of play.

If a potential buying firm does not receive a single acceptable bid, that firm drops out of the market and the number of buying firms gets smaller. If all buying firms receive at least one acceptable bid, the market place grows by 2 new firms in the next round.

VALUE may be configured to have between 15 to 50 buying firms and between 3 to 8 selling firms and the maximum number of bid submitted allowed for each selling firm may also be submitted.

VALUE identifies each buying firm has a unique name and address and these names and addresses may be changed at the game master’s discretion in order to make the game reflect local conditions. In addition, the currency may be changed to be whatever the game master desires, again to localize the game’s environment (i.e. US Dollars, UK Pounds Sterling, Japanese Yen, etc.).

Many firms are in markets where closed bidding is an everyday occurrence. Firms selling to private business with very large projects and /or firms purchasing machinery, tools and computers, architecture firms building large complexes, airlines purchasing aircraft and fuel as well as all levels of governments and not for profits. The simulation game reproduces a high level of uncertainty and provides players the opportunity to discover strategies to reduce the level of uncertainty when facing bid markets.

We expect to play about 3 rounds during our session.

THE LEARNING OBJECTIVES

A competitive bidding simulation has been largely omitted from the stable of possible business games for business schools, engineering and training programs. While closed bidding is a widely used practice of selling goods in non-consumer markets, it seldom gets an airing except B2B marketing and even there, few bidding simulations are used. The game VALUE will expose the participants to uncertainty in a direct way. It provides the opportunity to discover strategies that reduce uncertainty. Debriefing should be used at the end of every round to maximize the learning to be gleaned from this game.

If you are interested in teaching to the B2B market, you should be in the short workshop.