**Mini Case: The Shiny Furniture Company**

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Sally Wood, one of the partners of the Shiny Furniture Company, has called you in to help analyze a situation and make recommendations. She and her partner, Carl Cushion, started the company a few years ago, and it started to quickly grow and make a profit. They bought a second large warehouse, and Carl went around the world, mainly China, looking for good deals on furniture that they could buy and then sell it locally in Atlanta. He relied on his intuition to buy the items he thought would be in demand. As they grew, they added several employees, and lately they noticed their profits have dwindled.

Sally tells you that right now the problem is how much furniture they should stock up on for the next quarter beginning in three months – the decision has to be made soon, since it takes about three months for the shipment to reach their warehouse. They can buy from manufacturers a “bundle” of 500 pieces of furniture (that includes a mix of different items determined by the supplier) or 1000 pieces at a discount, or they can order specific pieces to create their own mix (minimum 500 pieces overall), but that would cost more and cut down on the margin. They are not sure what exactly they have in inventory currently, since they grew quite fast and do not have an inventory management system in place. There is a possibility that they might accidentally purchase too many of items they already have in stock. She believes that the market can fluctuate based on the economy as well as people’s tastes in furniture. If the next quarter turns out as expected, they can hope to sell about 800 pieces. If the demand is good, they could sell up to 1200 pieces of furniture, and if the demand falls, they might only sell about 400. The probabilities of the low, medium and high demand levels are estimated by her to be 0.30, 0.50, and 0.20, respectively. The profit contributions (in thousands of dollars) of each scenario are shown in the table below:

|  |  |  |  |
| --- | --- | --- | --- |
|  | Low Demand | Medium Demand | High Demand |
| Buy 500 Bundle | 200 | 300 | 300 |
| Buy 1000 Bundle | -400 | 400 | 1400 |
| Custom order 500 | 100 | 250 | 250 |
| Custom order 800 | -500 | 200 | 1000 |

With some more talking with various people, you discover that Carl wants to expand the business more, selling more items and exploring selling online, while Sally wants to focus on a smaller set of items and do well in that. The lower profits are creating tension, and Carl routinely berates his employees for anything he sees as a small mistake on their part. They are getting some customer complaints too, about not having items in stock that they had ordered and were told were available.

What course of action would you suggest?