

Our solution gives a clear answer to the question "How many ski jackets should a small, promising company Egress release to maximize its profits?" For the most accurate answer, we used the assumptions of employees of this company, as well as tests and methods that strengthen our arguments.

To make the right decision, we tested all our assumptions. When searching for a suitable distribution of demand, we tested the data given to us on several well-known tests, simulated 1000 possible outcomes for demand and each time counted the profit, used what-if analysis and probability theory to take into account all possible risks. We also decided to go beyond the information given to us in order to make our observations even more perfect.

So, after our calculations, we came to the conclusion that the best solution for the company would be to manufacture 10,000 jackets. And since the company is not yet big enough to take such risks and 12,000 or 11,000 jackets will not bring us such profits as 10,000 jackets in most cases, we decided to stop at exactly 10,000. With that number, the most likely profit is \$100,000.

To get more accurate information, the company should better know the general information about their rivals, so that they would better know their market and the tendencies. Based on this, Egress also can change their production depending on the small or big features that are in trend of these seasons.

To get more exact information in numbers, i.e. how many production to release and how much profit it will bring, we suggest them to collect the data about the sales in the previous seasons. Based on this information, we can know the approximate probabilities of different numbers of demand so that we can make the decisions about production with more sure.

Exploring of the weather forecast can be useful since people are more likely to buy ski jackets if the winter is going to be cold and snowy. It also would be important to have statistics about time when people actually buy ski jackets. According to the information beyond case, people rent hotels at ski resorts in spring for next winter. In this time we can provide them "early-birds" discounts.

Furthermore, we suggest company make family ski jackets which will cost less than if we sold these jackets separately. According to Telegraph, the most popular ski resorts are in France so it would be useful to deeply explore French market. For getting clients' loyalty we create 100 expensive jackets, every ten of them will have absolutely unique design. Analyzing the preferences of professional skiers, we found out that they love uniqueness and are ready to pay for it. Moreover, we can let them create their own ski jackets with their own design and patterns.

In conclusion, we recommend Egress to produce 10 000 jackets because this number is the most optimal for the different assumptions of the demand. This sum of production is less likely to have the loss in profit in comparison with the average one.

The niche of Egress is competitive but there are much more people who like winter sports. So, they will have customers always. The question is whether they found them or whether they did everything for customers to find them. If their brand is unique and differs from others with its design and idea, the sales will only grow from year to year.