

ADMN 580 - CASE 03

Zhou Bicycle Company

TEXTBOOK CASE

Zhou Bicycle Company (ZBC), located in Seattle, is a wholesale distributor of bicycles and bicycle parts. Formed in 1981 by University of Washington Professor Yong-Pin Zhou, the firm's primary retail outlets are located within a 400-mile radius of the distribution center. These retail outlets receive the order from ZBC within 2 days after notifying the distribution center, provided that the stock is available. However, if an order is not fulfilled by the company, no backorder is placed; the retailers arrange to get their shipment from other distributors, and ZBC loses that amount of business.

The company distributes a wide variety of bicycles. The most popular model, and the major source of revenue to the company, is the AirWing. ZBC receives all the models from a single manufacturer in China, and shipment takes as long as 4 weeks from the time an order is placed. With the cost of communication, paperwork, and customs clearance included, ZBC estimates that each time an order is placed, it incurs a cost of \$65. The purchase price paid by ZBC, per bicycle, is roughly 60% of the suggested retail price for all the styles available, and the inventory carrying cost is 1% per month (12% per year) of the purchase price paid by ZBC. The retail price (paid by the customers) for the AirWing is \$170 per bicycle.

ZBC is interested in making an inventory plan for 2019. The firm wants to maintain a 95% service level with its customers to minimize the losses on the lost orders. The data collected for the past 2 years are summarized in the following table. A forecast for AirWing model sales in 2019 has been developed and will be used to make an inventory plan for ZBC.

Demands For Airwing Model

MONTH	2017	2018	FORECAST FOR 2019
January	6	7	8
February	12	14	15
March	24	27	31
April	46	53	59
May	75	86	97
June	47	54	60
July	30	34	39
August	18	21	24
September	13	15	16
October	12	13	15
November	22	25	28
December	38	42	47
Total	343	391	439

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ADDITIONAL INFO (FROM YOUR INSTRUCTOR)

Your team is a consulting group that helps small-to-medium sized businesses implement optimal inventory management strategies. Assume it is December 2018 – and you are competing with another consulting firm to win ZBC’s business. As part of the selection process, the ZBC management team has asked you to conduct an initial assessment of their current demand, review their inventory strategy and mock-up an Excel model that can be used in planning an inventory strategy for 2019. This presentation will give you the opportunity to demonstrate your team’s understanding of the client’s issues, your ability to conduct a logical quantitative analysis, and your strategic approach to problem solving.

ZBC has asked your team to include the following deliverables in your presentation (at a minimum).

1. AN ANALYSIS OF PAST DEMAND AND FUTURE FORECAST FOR THE AIRWING BICYCLE

The ZBC team knows that focusing on managing orders and on-hand-inventory is critical to meeting their customer’s needs and controlling costs. To do this, ZBC knows they need to understand their past demand patterns as well as their future forecasts. With that in mind, ZBC has asked your team to help them better understand demand for their AirWing Bicycle. In your presentation – please include a clear, concise “data visualization” of demand for the Airwing - and use that graphic as the basis for an informed discussion of observed demand patterns.

2. A BASIC INVENTORY MANAGEMENT MODEL (IN EXCEL)

As mentioned in the textbook case, ZBC wants your help in developing an inventory plan for 2019. Specifically, your client has asked you to mock-up a flexible Excel model that can respond to changes in forecasted demand and calculate the following for the Airwing Bicycle.

- Economic Order Quantity (EOQ)
- Re-Order Point (ROP)
- Safety Stock (SS)

Your Excel model should take into account ZBC’s **95% Customer Service Policy** and also calculate a bottom-line **Total Cost** associated with a given ordering scenario. By building a flexible model that can quickly calculate total cost, your team can help ZBC respond to changes in forecasted demand in real-time.

You interviewed Geoff Smith, the procurement manager at ZBC – and he shared the following insights . . . *“I know our demand is seasonal, but I really want to get a handle on what is happening month-to-month. We have the option of setting EOQ, ROP, and SS in January and then riding out the rest of the year at those fixed levels - or - we could adjust ordering and inventory levels quarterly. I am hoping your team can help me understand the cost differential between those two options, as well as provide any other suggestions to help us optimize our business process.”*

ADVICE: Use the data provided in the textbook case as baseline inputs for your Excel model. Once the model is built, use it to try out different ordering scenarios (aka

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recalculate EOQ, ROP, and SS over different time periods as Geoff requested). Remember, the goal is to minimize total cost, while still meeting demand (at a 95% customer service level).

3. **PROVIDE OTHER INVENTORY MANAGEMENT RECOMMENDATIONS**

In addition to the more quantitative analysis in parts one and two (above), Geoff and the team at ZBC are interested in hearing about any other suggestions that might help them better manage their inventory, control costs, and serve their customers. Feel free to research and highlight any industry best practices related to inventory management and/or propose specific initiatives that could help ZBC in this area.

Please feel free to check in with the CEO of your consulting firm (aka your instructor) if you have any questions about how to engage with this client, conduct the required analysis, or prepare your presentation. And, please be sure to read the appendix of this document for more information on how to prepare for your presentation.

GOOD LUCK!

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APPENDIX

TEAM CASE COMPETITION:

Students will be placed on one of eight teams (of three to five members). Each team will be assigned a case/company from the textbook to present and will act as consultants advising the subject company on the issues presented in the case. We will cover four cases in this course. For each case, two of the teams will compete by presenting their recommendations in an attempt to win the client's business. Your instructor will score the teams' performance and select the winning team.

NOTE: Your team should NOT simply answer the questions posed in the textbook – but present a cohesive analysis of the issue at hand along with an operational strategy for the subject company. The presentation should:

- Provide background on the business situation to baseline understanding with the client
- Summarize the current situation (issues, challenges, opportunities)
- Highlight associated client questions if applicable
- Highlight applicable industry best practices (do a bit of light supporting research for this)
- Summarize your analysis approach and results (briefly and effectively)
- Cover strategic initiatives to help the client with their operational situation
- Note risks to implementation (if any) and associated mitigation actions
- Note any key action items to drive successful implementation of the strategic initiatives
- Close strong with a clear call to action to your client (the final sales pitch)

After each consultant team presents, there will be a brief Q&A session with the company management team (aka the rest of the class and the instructor) to discuss approaches, findings and recommendations. The consultant case presentations should take approximately 15 minutes followed by ~5 to 10 minutes of Q&A.

Each team shall post the final version of their presentation file to Canvas PRIOR TO presenting in class.

TIPS FOR SUCCESS:

Each team is required to meet at least once with their instructor (outside of class) to discuss their approach to the case. Teams are responsible for proactively scheduling this meeting at least two weeks prior to their scheduled presentation date.

Leading up to your presentation make sure you have practiced presenting as a team to make sure your story is clear, and your hand-offs are smooth. On the day of the presentation arrive to class early and make sure your slides work.

Take this presentation seriously. Be professional in the way you prepare and present. Use this as an opportunity to practice presentation skills for the real-world. Make sure you introduce yourselves clearly, be confident in what you are presenting, and be sure to end strong with a clear conclusion and call to action for your client. Dress code for teams presenting is business casual.

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SCORING RUBRIC:

Following is the rubric that will be used to score all the case presentations this term.

COMPONENT	WEIGHT	GREAT TO EXCELLENT	ACCEPTABLE TO GOOD	FAIR TO POOR
Introduction / Overview	10%	Introduction stating purpose, with concise overview of the situation / problem. Provide relevant background info. Highlight critical client "pain points" if any.	Somewhat clear purpose, with general overview of the situation / problem. Provide some background info. Highlight some client "pain points" if any.	No clear purpose, limited information on the situation / problem. Provide little to no background info. Not sure what client pain points are.
Analysis	30%	Identify and clearly summarize key operational issues. Assumptions and analysis are logical. Calculations (if any) are correct. Relevant outside research conducted to support analysis (if applicable).	Some info on key operational issues. Assumptions and analysis are somewhat logical. Calculations (if any) are correct. Limited outside research conducted to support analysis (if applicable).	Little to no discussion of operational issues. Assumptions and analysis are not logical Calculations (if any) are incorrect. No outside research conducted to support analysis (if applicable).
Strategy / Recommendations	30%	Strategy logically follows from analysis. Recommendations are valid and "doable". Provide clear implementation plan (key next steps).	Strategy somewhat linked from analysis. Recommendations are valid. Provide some actionable next steps.	Strategy not directly linked to analysis. Recommendations do not make sense Provide no actionable next steps.
Presentation / Q&A (Defense)	30%	Confidently and enthusiastically presented material. Smooth presentation flow. Strong opening and closing. Spoke clearly and held attention of audience throughout. Presented materials concise and informative. Demonstrated full knowledge of topic by answering questions and facilitating class discussion. Able to strongly defend position. "Off book" - no notes required.	Effectively presented material. Acceptable presentation flow. Solid opening and/or closing. Spoke clearly most of time - held attention of audience for most of the time. Presented materials included good information but may have lacked conciseness (or detail) Demonstrated some knowledge of topic by answering questions effectively. Defended position appropriately. Referred to notes periodically.	Lacked enthusiasm Presentation lacked flow. Weak opening and/or closing. Did not speak clearly and lost attention of audience. Presented materials not concise and/or lacked professional look. Demonstrated lack of knowledge of topic by not answering questions effectively. Unable to defend position appropriately. Read from notes.

Original Case from **Operations Management: Sustainability and Supply Chain Management** by Heizer, Render, and Munson
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