

Case Study 1

KU Consulting

KU Consulting has been asked to bid on a large consulting job with Albatross Anchor. In order to win the contract for this consulting job a well written, logical, and highly organized proposal must be written. It is your task/challenge to write the proposal for re-vamping Albatross Anchors Operations systems so that KU Consulting may win the \$50,000 contract.

Using the **mandatory template** (found in Doc Sharing) prepare your proposal by answering (in detail) all of the questions posed below.



Your answers must demonstrate your understanding of the concepts and principles identified within the textbook, course information, and activities, but also from independent academic quality research to solve these challenges.

While it is acceptable to use the textbook as foundational material you must conduct independent research, as well, using the Kaplan virtual library and the Internet to find information that supports your findings and conclusions. A **minimum of four academic resources, in addition to the textbook**, is required for each section of the proposal.

Please note: Quotations should make up no more than 10% of your proposal.

Requirements for successful completion of each section of the proposal include:

- Prepared using the **mandatory template** for each section of the proposal (the templates for each section can be found in Doc Sharing of this virtual classroom). Failure to use the mandatory template will result in an automatic reduction of one grade level.
- Proposal Cover Page
- APA style reference page.
- The body of the paper must be 4 full pages long (this does not include the cover or reference pages).
- Body of the paper must be double-spaced (this includes spacing between paragraphs and before/after headings).

- One inch margins on all four sides of the page.
- Times New Roman 12-font only.
- Indent the first sentence of each new paragraph ½ inch (this is already set in MS Word as the first "Tab" setting")
- Grammatically and mechanically sound.
- Introductory and concluding paragraph(s).
- A minimum of four academic quality research sources in addition to the textbook.
- Citations, within the body of the paper, identifying source materials, and in APA format are required along with corresponding reference page listings.

The following documents are in Doc Sharing.

- MT435 Case Study 1.pdf
- MT435 Case Study 1 Template.doc (Template is required)

Please note*

1. Do not use Wikipedia, wikis, Answers.com, Ask.com, online dictionaries, or online encyclopedias for this project. As a senior level student you are responsible for independent research and for veracity of source.
2. A search engine is not a source but a tool used to find a resource. For information on APA referencing of Internet-based information use the information on APA formatting contained within the Kaplan Writing Center for more information or you may use the Kaplan Guide to Successful Writing that is located in the Doc Sharing area of this virtual classroom.

Albatross Anchor Case Study 1 (Note: This is not a real company)

Introduction

Albatross Anchor is a small family owned business that began in 1976 with four family members. Albatross anchor has grown exponentially and now employs 130 people. This one location/facility is situated on 12 acres located in a rural suburb of Smalltown, USA (Please note* the building and facilities for Albatross Anchor are landlocked).

The plant* and the administrative offices are located in the same building.

(***Note:** The plant includes: manufacturing, the shipping department, the receiving department, raw materials storage, finished product storage, and the foundry).

The administrative offices are in the front of the building and the plant is located directly behind the administrative offices (see diagram). The administrative offices have issues because they are somewhat shabby, disorganized, and run inefficiently.

The plant is antiquated, worn, dirty, and technology-deprived and it no longer meets all U.S. safety and environmental standards.

The owners of this small business have added on various processes as needs arose; within the limited space of the plant. When Albatross Anchor first opened its doors their expertise was in the manufacturing of bell/mushroom anchors (using a foundry process). In 1989, in response to international competition, the owners of Albatross Anchor made the decision to expand the product line to include fabricated snag hook anchors.

Customers

Albatross Anchor is a manufacturing factory that sells only at the wholesale level.

Albatross Anchors sales their products in two ways:

(01) Distributors that act as the middleman. The distributor accepts bulk delivery of anchors at their large distribution centers. At the distribution center the bulk shipment of anchors is broken up into smaller batches and shipped to individual retail locations.

(02) OEM customers that purchase anchors in large batches to be used as a component in the manufacture of boats.

Albatross Anchor does not sell retail. They are strictly a wholesale organization.

Products

The bell anchor is manufactured primarily through a foundry process in which ore is transformed into a liquid state and then poured into molds as part of the production process. The bell anchor is used primarily by *freshwater* marine craft.

The snag hook anchor is fabricated through the bending and welding of iron rods and flat iron into a hook design. The hook design is best when used in *saltwater*. This hook design snags bedrock and seaweed which holds the marine craft at anchor. The snag hook anchor is used primarily for small to medium sized saltwater marine craft.

Each anchor is produced in multiple sizes to accommodate the type of watercraft, the size of the watercraft and the place where the anchor will be used (saltwater or freshwater).

Manufacturing

Each anchor type requires its own unique equipment and manufacturing process. Yet, both manufacturing areas share the same shipping area, receiving area, warehouse area, and administration offices.

The manufacturing area of the plant has had to change to accommodate the manufacture of the two separate types of anchors. As each anchor requires its own manufacturing challenges the manufacturing line must be *completely changed over* each time the anchor type is changed. The time to switch over from one manufacturing process/operation to the other manufacturing process/operation is 36 hours.

The plant space is at a premium and warehousing space for raw materials and finished product is limited and located at the far south end of the building.

Plant antiquation and safety issues result in small batch production only. As a result of this limitation, lead time for exceptionally large bulk orders is 3 to 4 weeks.

Costs

Current manufacturing costs are \$8.00 per pound for mushroom/bell anchors and \$11.00 per pound for snag hook anchors. Albatross Anchor charges the same per unit as their competitors. However, the profit margin can sometimes be as much as 35% less (on some of the anchors) because of operations inefficiencies.

Shipping challenges

Outgoing freight

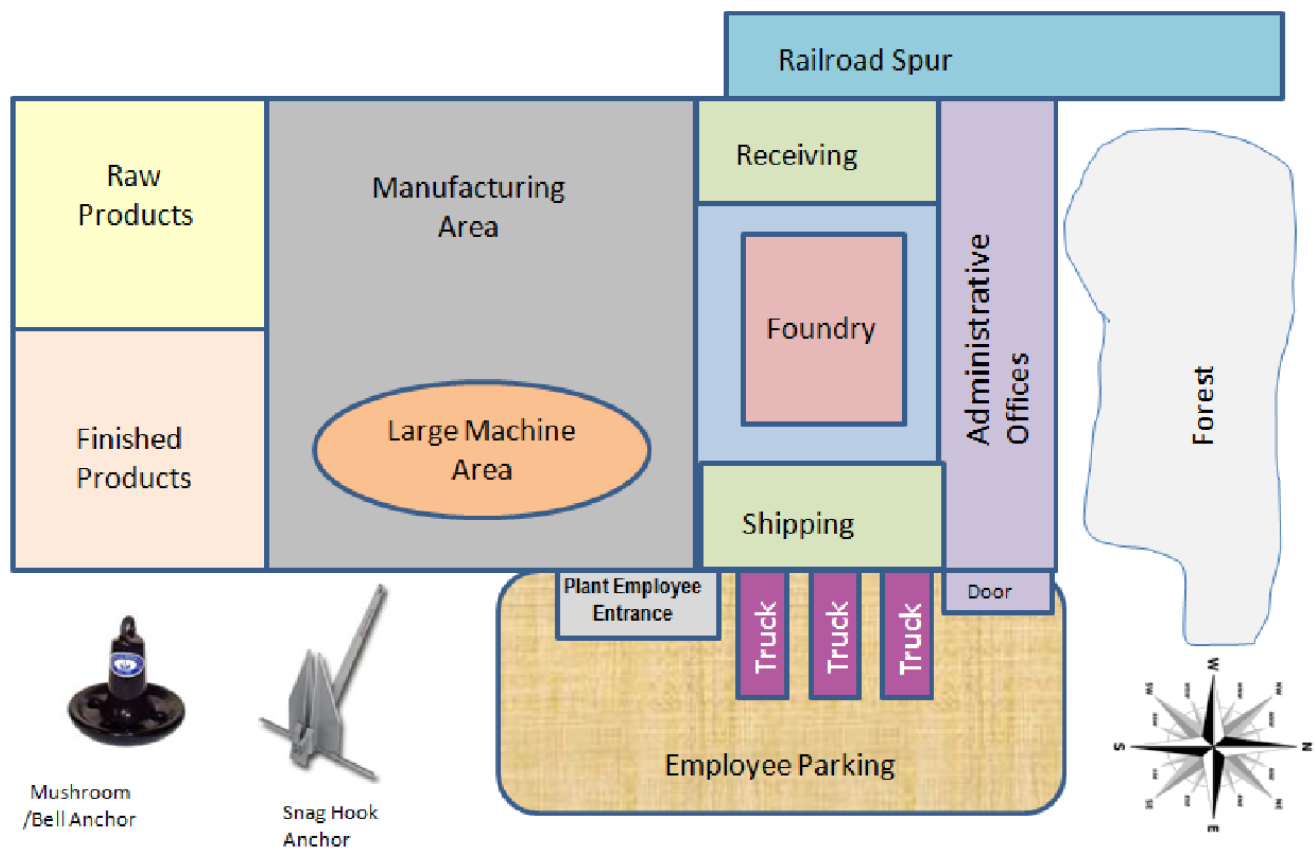
Product size, bulk, and weight and maximum load limits require that the anchors be shipped by large truck, rail, or large ocean-going freighter. Domestic orders are usually shipped by large truck. International orders are shipped by rail and ultimately by large ocean-going freighters. These are the only two methods of product shipment.

Incoming freight

Receipt of raw materials is by rail. Prior to the sale of anchors into the international market all shipments of finished product went out completely by truck and therefore all shipping activities were limited to the east side of the building.

Now, because of the limitation of shipping product into the international marketplace, all product shipments for international delivery go out of the receiving dock for the initial leg of shipment by rail. Prior to expansion into the international marketplace shipping had been limited to the shipping department and receiving was limited to the receiving area. However, with this change in international shipping the receiving area must now do double duty – shipping of international orders as well as receipt of all incoming raw materials.

Please view the below representation of the current building/facility set up.



Case Study 1

Question 1

Based on the information presented in the scenario/case study discuss Albatross Anchor's competitiveness in relation to:

- (a) Cost (i.e., consider cost of production, economies of scale in material purchasing, cost of raw materials, and finished goods sitting idle in the warehouse).
- (b) Speed of manufacturing process from order to finished product.
- (c) Flexibility in filling order(s)
- (d) Technology
- (e) Capacity and facilities. The current floor plan is inefficient. Please tell what about the current floor plan makes it inefficient and give recommendations for improvement. What type of factory would be best for mixed model manufacturing?
- (f) Service to customers (what types of services would an anchor company provide to marine wholesalers?)

Be sure to address all items in the list (above) and provide support for your conclusions.

Question 2

There are many ways that mushroom/bell anchors may be manufactured. Albatross Anchor is considering two new manufacturing processes (Process A and Process B) to reduce costs. From the available information below determine which process has the lowest breakeven point (this validates the process is more cost effective) and report your analysis and supporting conclusion.

For each process the following fixed costs and variable costs are identified below:

Anchor and Process	Process A	Process B
Sale price per anchor	\$45.00	\$45.00
Total Fixed cost	\$650,000.00	\$950,000.00
Variable cost per anchor	\$36.00	\$29.99

Based on the above information identify:

- (a) The total fixed costs per anchor for Process A and Process B
- (b) The total number of anchors needed to break even for Process A and for Process B.

Enter your answers into the chart below.

Anchor and Process	Process A	Process B
(a) Fixed costs per anchor		
(b) The total number of anchors to attain break-even point for Process A and Process B		

- (c) From your calculations identify whether you would recommend Process A or Process B for adoption (select only one). Please make sure to explain how you arrived at your conclusion.