

# [Crop case study](https://assignbuster.com/crop-case-study/)

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This practice has differentiated CROP room their competitors also providing the opportunity to conserve their finite resources. A wide commitment was also towards the quality of their outdoor furniture, providing its customers with the best quality products in a variety of colors. Ay building these quality products, time was compromised but customers were Milling to wait a bit longer for quality goods and to build repeat business. Rhea four generic performance dimensions of Crap’s products are as listed: Quality: CROP maintains the quality of its products because they control every aspect of the production process.

This includes the control of color and stability to ultraviolet addition. Time: Delivery delays of Crap’s product grew longer, and estimated times Nerve less reliable.

The company is unable to keep up with demand because it has reached maximum capacity on borrowing resources. This resulted in the increase of Crap’s finances. Flexibility: With its self-controlled operations, flexibility is almost Introit limits. The unique material allows its product line to include different types of outdoor furniture and in various colors. Costs: Raw materials cost are $1.

0 per pound and labor costs are $10 per hour. CROP Product’s business strategy is developed in three steps: analysis, integration and implementation. In the analysis step of their business strategy several methods are used to analyze a firm’s market, resources, obstacles to success and specific advantages. In strategic analysis, the goal is to identify what a business wants to accomplish. In this case, Blatantly would have to determine what equipment was needed over the next three weeks in order to ensure that it was delivered and installed before the peak season.

Bailey concluded that CROP did not have the financing available for both the new equipment needed to make its unique design of outdoor furniture and the seasonal working capital required to support inventory ND accounts receivable.

Therefore, the sales could not grow faster than the business’s financing. However, these strengths can assist us in accomplishing the goal and weaknesses that need to be addressed prior to integration and Implementation.

Strategic assessment methodologies can include evaluating the business environment, gaming various competitive scenarios, determining what market forces are at work and rating competitors, among others. Rhea process flow of CROP Products is illustrated below: Importation and System Capacity Rhea Bottleneck is a special type of a constraint that relates to the capacity shortage of recess, and is defined as any resource whose available capacity limits the organization’s ability to meet the service or product volume, product mix, or fluctuating requirements demanded by the marketplace.

In the third stage the production planning, Crap’s existing plan for 2011 was to run all machinery at full capacity during a single eight-hour shift in the off-season from September to March and use 3 shifts in the busy summer season from April to August. Also in the peak season, 3 staff could produce enough parts for 1 chair every 3 minutes and it is come to 7.

5 (60/8) chairs per hour. On the other hand, in the off- season the number of operators was reduced to two and the production of Adirondack chair parts slowed to 1 chair every 11 minutes and it is come to 5. 5 160/1 1) chairs per hour. Rhea final stage is to partially assemble the products and package them for shipping. Before 2010, one employee is to package 3 chairs per hour.

Since 2010, three employees were to package 14 chairs per hour. Prior to 2010 individual operators did this process manually and assemble and package 3 chairs per hour. At this time, step 4 was the bottleneck. In 2010 CROP purchased an automated assembly cell, which required two operators to load and unload the machine and a third operator to package the partially assembled chairs. E purchase of the automated cell in 2010 increased this stations processing capacity to 14 chairs/hour. Currently, the bottleneck is station 3, at a capacity of only 7.

5 chairs/ hour in the on-season, and 5. 5 chairs/hour in the off-season. Theory of Constraints Rhea theory of constraints (TCO) is a systematic management approach that focuses on actively managing those constraints that impede a firm’s progress toward its goal of maximizing profits and effectively using its resources. One of the constraints in P products is that as the company grows, so does the need tort resources required o finance equipment, inventory and receivables.

Unfortunately, sales could not grow faster than their business’s financing.

CROP had to borrow the maximum available resource from its lenders, because the company is unable to keep up with their demand and customers had expressed frustration over shipment delays. Expanding capacity will help overcome the constraint. In applying the Theory of Constraints, we have identified the bottleneck, as stage 3, milling. The next step is to exploit the bottleneck. It is important that the CNN machines are utilized consistently and with little or no down time.

One option is to ensure that the bottleneck works on the highest priority, such as the Adirondack chair.

CROP could dedicate an extra machine solely to this or other top selling products. Breaks for this machine should be minimized, and/or have the machine operate longer hours than the other machines. CROP could ensure that at the end of the workday, there are extruded parts immediately ready to go into the CNN machine first thing the following day. They could even reduce the set of milled parts to reduce Nor-in-process storage. Rhea next step requires the coordination of all other stations to facilitate the bottleneck.

For example, removing resources from other stations to invest in the bottleneck such as adding extra shifts on the CNN Milling machine.

Another option Mould be to reduce set up time in extruding by producing larger batches of each color. Next, to elevate the bottleneck, CROP would have to consider adding an extra CNN machine and more staff to work on this station. They could perhaps look into implementing better or faster machines, perhaps if there was a way to trade in their old machines for new ones. If there were any other way to invest in improving the process, this would need to be considered as well.

Lastly, CROP must continue to re evaluate the system and capacity of workstations, in order to identify new bottlenecks and to keep the system flowing smoothly.

Another problem I think is that in their plant layout, every time the milled parts are stacked in bins and stored in work-in-process (WHIP) storage, and they have 4 WHIP in the plant layout, the problem is the capacity of the storage is kind of small and in terms of their sales grow faster, they need to change or relocate the storage and build a large one or distribute different places near the WHIP in order to increase the speed of assembly line and shipping.