

# [Blue ridge manufacturing company – assignment](https://assignbuster.com/blue-ridge-manufacturing-company-assignment/)

Blue Ridge Manufacturing is one of a dozen companies that produces and sells towels for the U. S. “ sports towel” market. A “ sports towel” is a towel that has the promotion of an event or a logo printed on it. They’re called sports towels because their most popular use is for distribution in connection with major sporting events such as the Super Bowl, NCAA Final Four, Augusta National Golf Tournament and the U. S. Open Tennis Tournament.

Towels with college, NBA and NFL team logos, and promotions for commercial products such as soft drinks, beer, fast food chains, etc. , are also big sellers. The firm designs, knits, prints and embroiders towels. The firm knits all the towels it sells and tracks costs for towel production separately from the cost to customize the towels. Seventy-five percent of its orders include logo design, while the balance are print only and require the payment of a license fee for the logo used. However, about 15% of its orders include embroidery. Towels are made in three sizes: regular (18″ x 30″), hand (12″ x 20″) and mid-range (15″x 24″).

The normal production cycle for an order of white towels is three days. If a customer wants a colored towel, the basic white towel made by Blue Ridge is sent to a dyeing firm, which extends the production cycle of an order by three days. Also, occasionally, customers order towels in sizes other than the three standard sizes. These towels are called “ special”. The firm now produces a “ medium” quality towel. They have had some difficulty with the “ staying power” of the material printed on these towels, which is attributed to the towel quality, the ink and the printing process.

Customers have complained that the ink “ lays on the surface” and it cracks and peels off. Blue Ridge recently made a break-through in developing an ink that soaks into the towel, won’t wash out and is non-toxic. A big advantage of this ink is that it avoids EPA disposal requirements because is can be “ washed down the drain”. Due to these characteristics of its new ink, Blue Ridge is considering upgrading the quality of the basic towel it produces because it will “ take” the ink better, both the towel and the ink will last longer and the product will sell at a higher price.

If it takes this step, the company will evaluate expanding its marketing and sales area with the objective of “ going national”. CUSTOMERS: Except for a few non-regional chains, Blue Ridge’s sales are predominantly in the southeastern states. The company sells its products to 986 different customers. These customers differ primarily in the volume of their purchases, so management classifies each customer in one of three groups: large (8 customers), medium (154 customers) and small (824 customers).

Large customers are primarily national chains, small customers are single store operations (including pro shops at golf courses) and medium-sized customers are small chains, large single stores or licensing agents for professional sports teams and manufacturers of consumer products. Table 1 gives the product and customer size statistics for 2001. Blue Ridge has a different approach to customers in each of its three categories. A small group of in-house sales people sell directly to buyers in the large customer category.

Independent manufacturer representatives, on commission, call on the license holder or the manager of a store in the medium customer category. Ads placed in regional and national magazines and newspapers target customers primarily in the small-customer segment, who call or mail in their orders. Blue Ridge does not give discounts and it ships all orders free on board (FOB) point of origin, i. e. , customers pay their freight costs. MANUFACTURING: Blue Ridge has a modern knitting and printing plant in the foothills of North Carolina’s Blue Ridge Mountains.

Upgrading the facilities over recent years was accompanied by the introduction of an activity-based costing (ABC) system to determine product costs. The cost accounting system is fairly sophisticated and management has confidence in the accuracy of the manufacturing cost figures for each product line. Table 2 shows the firm’s unit costs for various items. Company management is committed to adopting advanced manufacturing techniques such as benchmarking and just-in-time (JIT). The corporate culture necessary for the success of such techniques is evolving and worker empowerment is already a major program.

In addition, workers are allowed several hours away from regular work assignments each week for training programs conferring on budgets and work improvements and applying the ABC system. PERFORMANCE: The company is profitable. However, management has become concerned about the profitability of the customers in its three customer-size categories—large, medium and small. Different customers demand different levels of support. Management has no basis for identifying customers that generate high profits or to drop those that do not generate enough revenues to cover the expenses to support them.

Under the previous accounting system, it wasn’t possible to determine the costs of supporting individual customers. With the introduction of ABC, it now may be possible to determine customer profitability. Table 3 shows how the administrative and selling costs are assigned and re-assigned between various functions within the selling and marketing areas and to sub-activities in the selling and marketing areas. Table 4 provides a list of selling and marketing activities and the activity base to use in assigning costs to each. TABLE 1 BLUE RIDGE MANUFACTURING

Sales Information Product and Customer Size StatisticsSales in Units by Customer Account Size LargeMediumSmallTotal Towel: Regular27, 25016, 60010, 55054, 400 Mid-Size36, 64018, 55210, 30865, 500 Hand 35, 880 19, 96695, 954151, 800 Special4803, 4265944, 500 Number of Units Sold100, 250 58, 544117, 406276, 200 Number of Units Embroidered5, 9596, 49029, 39441, 842 Number of Units Dyed 20, 5369, 93512, 32842, 798 Sales Volume Revenue$308, 762$183, 744$318, 024$810, 530 Number of Orders Received133845 5, 1306, 108 Number of Shipments Made1479235, 4316, 501 Number of Invoices Sent1127544, 737 5, 603

Accounts with Balance > 60 Days111122134 TABLE 2 BLUE RIDGE MANUFACTURING Unit Cost Information Line 1 Direct Manufacturing Costs Per Unit QuantitySales PriceMaterialLaborOverheadUnit Cost Towels: Regular54, 400$3. 60$0. 60$0. 37$0. 22$1. 19 Mid-Size65, 5003. 200. 500. 330. 201. 03 Hand151, 8002. 550. 390. 310. 190. 89 Special4, 5004. 000. 670. 480. 291. 44 Line 2 Direct Costs of Customizing Per Unit QuantityCostMaterialLaborOverheadTotal Inking (based on passes)552, 400—$0. 0030$0. 0045$0. 0742$0. 0817 Dyeing42, 798$0. 11——0. 00000. 1100 Embroidery41, 842—0. 00260. 17501. 09941. 770 Direct Labor Wage Rate: $9. 00 (Including Fringes) Inking requires one pass for each color used; average two colors per towel (i. e. , 2 per unit), and is used on all towels. TABLE 3 BLUE RIDGE MANUFACTURING Selling and Administrative Costs and Activities Costs Incurred in Each Function (Shipping, Sales, Marketing) Directly Assigned To: TotalShippingSalesMarketingOtherTotal AssignedUnassigned Administration$170, 000$? 17, 000$? 37, 400$20, 400$56, 100$130, 900$39, 100\* Selling? 155, 000?? 15, 500? 117, 800?? 9, 30012, 400? 155, 000 $325, 000$ 32, 500$155, 200$29, 700$68, 500$285, 900$39, 100

Each function is used for the Following ActivitiesPercentage of: Selling and Administrative Activities: ShippingSalesMarketingOther Entering Purchase Orders? 55? 10 Commissions? 10 Shipping Activities? 65? 15 Invoicing? 20 Cost to Make Sales Calls? 30? 10 Checking Credit? 10 Samples, Catalog Info.?? 5? 10 Special Handling Charges?? 5?? 5 Distribution Management? 10? 10 Marketing, by Customer Type?? 5 Advertising/Promotion? 30 Marketing? 15? 50?? 5 Administrative Office Support? 20 Licenses, Fees?? 5 100100100100 \* Note that $39, 100 of the SG&A cost was not directly assigned.

This amount represents the facility-sustaining activity cost. TABLE 4 BLUE RIDGE MANUFACTURING Activities and Cost drivers Cost Drivers for Allocating Costs of Activities to Customer Groups (Large, Medium, Small) ActivityCost Driver Entering Purchase OrdersNumber of Orders CommissionsSales Dollars from Medium Customers Shipping ActivitiesNumber of Shipments InvoicingNumber of Invoices Cost to Make Sales CallsSales Dollars from Large Customers Checking CreditNumber of Accounts > 60 Days Samples, Catalog Info. Sales Dollars Special Handling ChargesManagement Estimate1 Distribution ManagementSales Dollars

Marketing, by Customer TypeSales Dollars Advertising/PromotionManagement Estimate2 MarketingNumber of Units Sold3 Administrative Office SupportNumber of Units Sold4 Licenses, FeesSales Dollars from Medium Customers 120% to medium-sized customers; 80% to small-sized customers. 225% to medium-sized customers; 75% to small-sized customers. 3Excluding Specials 4Excluding Specials REQUIRED: 1. Download and install the OROS Quick® ABC/M program (as a WinZip file) from the Jr. Core Managerial Blackboard site within the Projects folder. (The program is also available at the textbook website: www. mhhe. om/blocher3e under Premium Content. ) 2. Download the OROS Quick® Tutorial (an Adobe Acrobat file) from the Projects folder. (Also available at the text website: www. mhhe. com/blocher3e under Premium Content. ) 3. Work through the OROS tutorial (you can skip the sections on attributes and on the balanced scorecard). As you work through the tutorial, you’ll notice that there are shortcut buttons on the menu bar that will save some menu dropdown steps. You may also want to experiment with right-clicks on your mouse to see if the program will provide shortcuts to desired operations. 4. Create a folder labeled “ Blue Ridge. You will save the ABC model you create within that folder. 5. Use the information in the Blue Ridge Manufacturing Company Case and in the Tutorial to complete an ABC costing application using OROS. Determine the ABC-based unit costs for Blue Ridge’s three customer groups. (Important! You’re not establishing costs for the towel products, but for the towel customers! ) 6. Create a unit (i. e. , customer group) cost report for Blue Ridge by simply printing out the cost object module in OROS. Be sure to expand each customer group account to display the individual cost elements of small, medium, and large customers.

Adjust the columns if needed in order to see the labels. 7. Note that the ABC analysis just completed is focused solely on the selling, general, and administrative costs associated with customers. Combine those costs with the production costs provided in the case (Tables 1 and 2) to do an analysis of customer profitability (do this quickly in Excel). Assume that the production costs are accurate as provided. 8. Comment briefly on what management insights are created for Blue Ridge with the ABC analysis of customer profitability.