Behr Paint Company manufactures and sells multiple lines of paints in various colors. Recently, with the introduction of a number of new products, management has sensed that some cost characteristics of the production process have changed. First, some of the new products require more set up time between production runs. Certain colors of paints also have different requirements to ensure a quality product. As an example, for red color paints, the production equipment must go through a thorough cleaning process to ensure all paint from prior production runs has been removed. For black color paints, the cleaning requirements are minimal since any remaining ink will blend in with the black ink. Demand is also different for some of the new products. While a higher price can be charged for some of the more exotic colors, there is less demand than for traditional black and blue color paints. Behr’s traditional cost system does not show much difference in the costs allocated to different product lines (see table below), however, management intuitively believes that the more exotic colored paints inherently cost more to produce than traditional color paints. Behr has asked you, their management accountant, to propose tools that will help provide more accurate information for determining which product lines are more profitable.

**Product Margins for Behr (Traditional Costing Approach)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Blue** | **Black** | **Red** | **Purple** | *Total* |
| Units | 50,000 | 40,000 | 9,000 | 1,000 | 100,000 |
| Price | $ 4.50 | $ 4.50 | $ 4.65 | $ 4.95 |  |
| Sales | $225,000 | $180,000 | $41,850 | $4,950 | $451,800 |
| Material | 75,000 | 60,000 | 14,040 | 1,650 | 150,690 |
| Labor | 30,000 | 24,000 | 5,400 | 600 | 60,000 |
| Overhead (plant-wide allocation rate based on machine hours) | 90,000 | 72,000 | 16,200 | 1,800 | 180,000 |
| Total Mfg. Expenses | 195,000 | 156,000 | 35,640 | 4,050 | 390,690 |
| Product Margin | $ 30,000 | $ 24,000 | $ 6,210 | $ 900 | $ 61,110 |
| P.M. % | 13.3% | 13.3% | 14.8% | 18.2% | 13.5% |

While discussing the project, Behr’s production manager also told you he would like to have better tools for his entire business cycle (planning, motivating and directing, and controlling) but was unsure what would be the best tools to implement. Through the course of the conversation with the production manager, you discovered that production quantities have historically been determined by the production manager using prior year production quantities and adding a percentage based on historic growth rates. Conflict inevitably arises between the production manager and the sales and marketing department when quantities produced differ significantly from the sales orders. Also, the production manager stated that he had heard that the morale of the production and sales staffs was low. Bonuses have not been paid out the past two years and the production manager thinks it might be related to how the production process has changed (by implementing metric driven management techniques) but incentive compensation programs have not. Bonuses have historically been paid out based on sales volumes and total profitability.

**Required:**

Your job is to take the information provided above and make recommendations for tools and systems that would improve Behr’s management accounting system capabilities. Come up with at least one tool or suggestion for all three business cycle components (planning, motivating and directing, and controlling). Describe the key inputs and outputs of these tools and how they will be used to help improve Behr’s decision making capabilities and operational performance.