

# RUGGABLE

## Strategic Operations Manager Case Study – Pillow Co.

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# Benefits and draw-backs of our DTC and made-to-order model

Model allows for *greater control* of all aspects of the business— including brand and customer reach, product innovation, and profitability, however there are significant *cost challenges* due to customer demands, efficiencies and capacity.

## Marketing and Customer



- \*Direct customer reach via **e-commerce** and **social media**
- \*Use **in-house data** to drive decision making and **tailor approach**
- \***Sales management** and controlling message and campaigns
- \***Total brand control** (marketing to customer service)



- \*Customer **concentration** (direct to thousands vs. millions via few retailers)
- \*Customer **gratification**- longer fulfillment time
- \*Capability/ bandwidth of smaller marketing team (extra focus on **effectively being in the right spaces**)

## Product and Production



- \***Flexibility** to change offerings (e.g. drop poorly performing products quickly)
- \***Innovation and customization**- able to bring new products to market quickly
- \*Control over ultimate **product quality** (not sitting at retailers)



- \*Production process may be haphazard (e.g. lags)
- \*Employee base **stretched thin**
- \*Potential **lack of initial capacity** needed to meet demand
- \***Inefficiencies may arise** (e.g. switching between production of products often)

## Profitability and Costs



- \***Pricing** set by Pillow Co.
- \***Margin control** – no mark up for intermediary retailers
- \***Control of discounts and offers** made to customers
- \***Low to no inventory** “just-in-time” efficiency keeps inventory costs minimal



- \*Customization **process costly**
- \***Higher breakeven** for specific offerings
- \*Responsible for **servicing all aspects of business** (e.g. customer service not handled by retailers)
- \*Input **cost volatility**

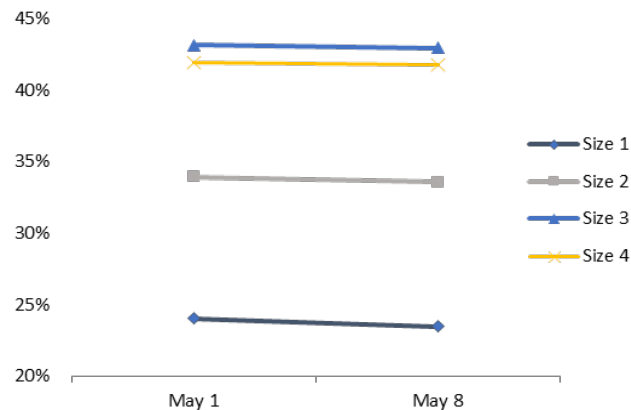
**Key takeaway:** model allows for **quick and sustainable growth during scale-up** through controlling what matters: profit margins, product innovation and targeted customer reach. We can **mitigate the risks** through focus on production and cost efficiencies and using in-house data to improve capabilities.

# Contribution margin overview

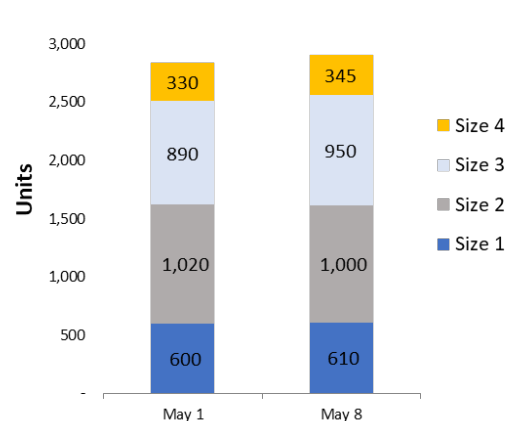
Contribution margin ("CM") is analyzed by size due to differences in product mix, pricing and discounts, and COGS inputs. These variations highlight the need to *optimize sales mix, re-evaluate pricing and focus on minimizing costs*.

**① Sizes 3 and 4 are top contributors; production up for all but Size 2**

CM % by Size Offering



Units by Size Offering



**② Sales mix drives overall profitability**

**\*Total profitability increased by 2.9%**, from \$66.5k to \$68.4, due to increased sales of higher CM products (sizes 3 and 4).

**Higher CM products offset the decline** of lower CM products (e.g. size 2).

**Strategy:** Work with marketing team on **optimizing sales mix** and maximizing sales, especially of higher CM products.

We can overcome shortfalls of Size 1's lower CM and make more profitable overall through **focus on increasing sales volume**.

**③ Discounts affect CM and have no effect on sales volume- signals need to evaluate product pricing**

**\*Size 3 appears well-priced--** has the lowest discount, the highest CM and strong unit sales.

Size 1 is the second highest discounted, lowest priced product with the second lowest unit sales.

**Strategy:** Meet with **pricing and marketing teams to evaluate** promotions, pricing sensitivity and strategies. Focus on minimizing discounts which directly impact net sales denominator of CM calc.

**④ Rising costs, specifically labor, show CM% sensitivity of lower priced products**

**\*Labor hours per unit increased by 3.4%**, which drove **labor cost per unit up by 3.7% or \$0.18** in the two week period.

e.g. rising prices of raw materials, which are ~50% of total COGS, would negatively impact CM % of all products.

**Strategy:** Meet with **production team to understand drivers** of increase. Work with **supply chain team to negotiate** input prices.

While labor variances are currently small, inefficiencies over time will be more damaging as we scale and grow.

# Contribution margin by size offering

*Contribution margin decreased across all products. Differences are driven by top-line and cost of goods sold ("COGS").*

| CM by Size | May 1  | May 8  | % Change |
|------------|--------|--------|----------|
| Size 1     | 24.06% | 23.48% | -0.58%   |
| Size 2     | 33.93% | 33.57% | -0.36%   |
| Size 3     | 43.15% | 42.92% | -0.23%   |
| Size 4     | 41.93% | 41.76% | -0.17%   |

| May 1 - 7  | Sales Price | Discount % | Per Unit Contrib. \$ | COGS    | COGS as % of Net Sales |
|------------|-------------|------------|----------------------|---------|------------------------|
| Size 1     | \$ 35       | 11.0%      | \$ 7.5               | \$ 23.7 | 75.9%                  |
| Size 2     | \$ 55       | 10.0%      | \$ 16.8              | \$ 32.7 | 66.1%                  |
| Size 3     | \$ 85       | 8.0%       | \$ 33.7              | \$ 44.5 | 56.8%                  |
| Size 4     | \$ 125      | 14.0%      | \$ 45.1              | \$ 62.4 | 58.1%                  |
| May 8 - 14 |             |            |                      |         |                        |
| Size 1     | \$ 35       | 11.0%      | \$ 7.3               | \$ 23.8 | 76.5%                  |
| Size 2     | \$ 55       | 10.0%      | \$ 16.6              | \$ 32.9 | 66.4%                  |
| Size 3     | \$ 85       | 8.0%       | \$ 33.6              | \$ 44.6 | 57.1%                  |
| Size 4     | \$ 125      | 14.0%      | \$ 44.9              | \$ 62.6 | 58.2%                  |



## Contribution Margin decreased for all sizes

Sales price remained the same and COGS increased.



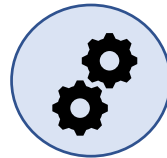
## Pricing differentiates CM for all sizes

Lower priced products tend to have lower CM and vice versa as the starting point is lower.



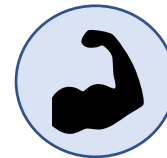
## Discounts vary between sizes

Higher discounts can negatively affect CM % by decreasing net sales base and vice versa- indicating need for optimized pricing. **Size 3 has the lowest discount and the highest CM %.**



## Costs are “absorbed” more by high priced products

COGS composition comprises of 75.9% of Size 1 net sales versus 56.8% of Size 3.



## Labor increase drives overall decrease in CM %

All sizes have the **same labor hours input** and labor cost per unit which hurts lower priced products (e.g. labor as a % of net sales is 16% of Size 1 COGS compared to 5% of Size 4 COGS)

# Meeting production goals through estimating total labor hours

*High-level labor estimation model calculates labor hours needed per **production step** and **product size** based on target production units to arrive at a total labor estimate for the week.*

## 3 step approach

### 1. Target production units by product size

Use production target data from Sales team  
Include defect/ error rate to mitigate fulfillment issues

### 2. Estimate input hours per unit

Use historical data averages as a base  
Adjust for complexity between sizes (more labor intensive) and labor efficiencies in production steps

### 3. Calculate total hours by product size and in total

Use in conjunction with historical data to note variances and continuously update for best estimates

Updates from historical performance

Feedback from key players

## Putting estimates to action

- **Use initial estimates as target goal for production plants**  
Communicate estimates to production managers and supervisors as goal and **set up regular update touchpoints** to understand real-time performance
- **Gather raw data**  
Use 3-4 weeks of raw historical data to **compare actual results to estimates** for variances
- **Hold formal meetings**  
Set up opportunities to speak with both supervisors and floor employees to get **feedback on results**, feasibility of estimates, any issues they ran into and discuss potential solutions
- **Continuous improvement and open feedback loop**  
Update model and estimates regularly as new information becomes available and **maintain open communication** with key players in the production process in order to continue best practices and address needs/opportunities in production

# Improving production operations through strategic initiatives

Focus on identifying opportunities that establish “best practices” with *high-impact* on the business and culture and have a *measurable desired outcome*. Initiatives implemented early on promote *short and long-term growth and profitability as we scale up*.

| Performance Productivity                                                                                                                                                                                                                                                                                                                             | Cost Productivity                                                                                                                                                                                                                                                                                                                                                                         | Quality                                                                                                                                                                                                                                                                                                                                                                                                  | Safety                                                                                                                                                                                                                                                                                                                                                                                              |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Goal: Lower production hours and improve efficiency</p> <ol style="list-style-type: none"><li>1 Create standardized processes, defined labor targets and create production schedules with supervisors to mitigate inefficiencies</li><li>2 Roll-out recognition award program for employees that meet standards and goals (% compliant)</li></ol> | <p>Goal: Lower product and production costs</p> <ol style="list-style-type: none"><li>1 Further automate steps in process (e.g. can sewing be more automated?)</li><li>2 Identify parts of production that can be outsourced/offshored as we scale (cost savings %)</li><li>3 Outsource projects/processes in SG&amp;A if resources are low (e.g. payroll, marketing analytics)</li></ol> | <p>Goal: Improve product quality</p> <ol style="list-style-type: none"><li>1 Create standardized process and quality guidelines (% compliant)</li><li>2 Add regular quality checks (QC) at each step in process (% defects)</li><li>3 Create customer surveys for quality satisfaction and feedback</li><li>4 Organize production “teams” of employees to share best practices and peer review</li></ol> | <p>Goal: Maintain and promote safety standards and culture</p> <ol style="list-style-type: none"><li>1 Create standardized trainings, checklists and incident response protocols with supervisors</li><li>2 Hold regular touchpoints and feedback meetings with team (# of complaints)</li><li>3 Add technology/ automation where possible as safeguard (# of injuries/incidents reduced)</li></ol> |

## Prioritizing process:

1. **Evaluate** each initiative/ opportunity individually as part of short-term, long-term strategy or both. What need or deficiency does this address? What is the magnitude of impact?
2. **Identify resources** needed to implement: financial, time, human capital (“HC”)
3. **Meet** with applicable team/function to **understand need** from their perspective
4. **Compare opportunities** within the group and seek possibility of combining initiatives
5. **Meet** with and present findings to operations team for feedback

## Planning and executing:

1. **Meet with stakeholders** and key players that benefit from executed initiative for feedback and to outline process and desired outcome
2. **Create** budget, evaluate measurable financial outcome (if any), decide **how we define success** of the initiative (e.g. 10% decrease in costs); create initial execution plan
3. **Identify** resources (\$, HC, time) and expertise needed for each phase; build team & refine execution plan based on team feedback
4. **Continually check in** with team and stakeholders; **evaluate process** and definition of outcome
5. **Evaluate success** at the end and look for **opportunities to improve**