

Jersey Wallpaper Company

Introduction

Jersey Wallpaper Company (JWC) is a privately owned company that designs, markets and manufactures wallpaper. The company's products are shipped nationwide under the Jersey Wallpaper brand. In addition to the company's own labeled products, JWC also manufactures and distributes licensed designs and private-label brands. Last year, JWC had an annual sales revenue of approximately \$250M.

Henry Rutgers is the CEO of JWC, and he has become increasingly concerned about the company's performance. Financial performance metrics are suffering, inventory levels are increasing, and customers are not satisfied with the current level of service. His concerns were validated when he received a disturbing letter from his largest customer last week **(See Exhibit 1)**. The customer letter suggests that all their business is in jeopardy if there are no substantial improvements in inventory turnover, markdown funding for non-productive inventory, and order fulfillment service levels. Losing Jersey's largest customer would only exacerbate the ongoing trend of decreasing net income **(See Exhibit 2)**. Therefore, **Mr. Rutgers has hired the BL&T Consulting Company (i.e., your group) to review the JWC supply chain and recommend appropriate actions.**

Industry Overview

The retail wallpaper industry includes about 8,000 stores with a combined annual revenue of \$500M. The industry is concentrated, with the top ten retailers accounting for about 90% of sales. Retail outlets include home centers, hardware stores, mass merchandisers, and direct online sellers. Home Depot, Lowe's, Sherwin Williams, Amazon, Target, Pottery Barn, and 1-800-Wallpaper have substantial market shares.

The number of wallpaper manufacturers has significantly decreased over the past few decades. During the '70s, when the popularity of wallpaper peaked, there were dozens of manufacturers. Today, there are less than ten manufacturers. **Competition is intense as the manufacturers fight for the remaining market share, and consumer preferences and purchasing patterns are impacted by other types of wall coverings such as paint, stucco, stenciling, and other textured surfaces.**

Home construction, remodeling trends, and interior decorating preferences drive demand in this industry. The profitability of individual manufacturers depends on effective merchandising and developing fashionable new items at reasonable costs. According to the Paint and Decorating Retailers Association, the average retail price for a single wallpaper roll is \$35. Initial retail margins in this industry are close to 45%, but markdowns of old, discontinued patterns frequently result in losses for retailers and manufacturers.

Mass Merchants

Several mass merchants have been growing increasingly critical of the wallpaper category and the level of customer service they receive from all wallpaper manufacturers. Mass merchants, such as Home Depot and Lowes, represent nearly 80% of Jersey's business. Retailers have questioned the inventory productivity of the assortment and the wallpaper manufacturers' ability to respond to customer demands. The high level of customer dissatisfaction shown in a letter from The Home Depot is consistent with ongoing complaints from other large business customers. **(See Exhibit 1)**

The retailers have three primary complaints. First, inventory turnover at the store level is unacceptably low, and the inventory carrying costs on wallpaper can be as high as 50%. In general, inventory turnover

in the stores for the wallpaper assortment ranges from one-and-a-half to two turns per year. The retailers would like to see that figure nearly double to meet their productivity standards, or they will give the space to other categories like paint. Although some items meet this turnover standard, most wallpaper items do not. The top 20% of items have turns of about five-to-six times per year. The following 30% of items have turns of two times per year. The bottom 50% of items have well below one turn per year.

The second major complaint from the retailers is related to service. When JWC introduces a successful pattern, it cannot meet demand. The retailers watch new items closely, and if sales patterns begin to exceed the originally forecasted quantities, they increase orders to keep up with consumer demands. Unfortunately, JWC cannot keep up with the order increases within the agreed-upon order fulfillment lead time of ten days. Consequently, the retailers are out-of-stock on the best-selling items for four to six weeks. Jersey's answer to this problem has been to increase the initial store set quantities from sixteen rolls to twenty-four rolls on all items so that they have time to manufacture more wallpaper without creating stock-outs. Retailers have not been willing to take this approach.

The third major complaint from the retailers is the amount of unproductive and obsolete wallpaper inventory that requires substantial markdowns to sell. Although the retailers agree that new wallpaper patterns must be introduced every four months to stay current with fashion trends, most new items do not perform well. They must be marked down at least 75% to sell through the discontinued inventory. The unproductive inventory in the wallpaper assortment often exceeds 50% of the overall category inventory budget. In the past, the retailers have been willing to share this markdown cost with Jersey, but they are now asking Jersey to either fund all markdown money or only introduce top-selling new SKUs. JWC and all other manufacturers maintain that forecasting new item sales is impossible to do accurately in the fashion industry and are considering absorbing all markdown funding as a cost of doing business. To cover these costs, JWC, and the retailers are considering several cost-saving options, like consolidating orders, cross-docking all wallpaper SKUs, longer production runs, and increasing order minimums.

Consumer Behavior

Although mass merchants like Home Depot and Lowe's are the immediate business customers for JWC, sales trends in the industry are ultimately determined by individual customers who buy wallpaper from retailers. Therefore, it is essential to understand consumer behavior trends in the wallpaper industry. Consumers select wallpaper by browsing through sample books from various manufacturers. Consumers want a wide variety of patterns and styles to review for ideas. Retailers may employ designers to help consumers make appropriate selections. Typical customers include contractors, home builders, do-it-yourselfers (DIYers), architects, and interior designers.

Research consistently shows that consumers make wallpaper-buying decisions based on two primary factors. First and foremost, the style and appeal of the individual wallpaper designs drive buying behavior. Therefore, manufacturers introduce new products approximately every four months to keep their assortments on the leading edge of fashion trends. Because wallpaper manufacturers constantly introduce new patterns and discontinue old patterns, retailers attempt to maintain low inventories, place orders according to customer demand, and expect quick order fulfillment from manufacturers.

The second important factor that impacts consumer behavior is in-stock availability. The product must be available in sufficient quantities to complete a job, or consumers will look elsewhere. Depending on the size of a home, it typically takes three rolls of wallpaper to complete a room. Over 90% of wallpaper projects involve one room (e.g., kitchen, bathroom, bedroom, etc.) in a home.

Demand for wallpaper varies by region within the country. Traditionally, areas like the Midwest and the Northeast have utilized wallpaper as a primary wall covering throughout multiple rooms in a home. In addition to the geographic variability of overall wallpaper demand, demand for individual patterns varies tremendously by region. Coastal areas have seen a resurgence in wallpaper demand, with specific beach and ocean patterns gaining popularity. Colors and styles that are popular in Florida usually differ from patterns popular in Indiana. Due to the broad range of product preferences, JWC offers thousands of different types of SKUs.

Manufacturing (See Exhibit 3 and Exhibit 4)

The JWC manufacturing process consists of four distinct and separate steps. All steps are performed in their New Jersey manufacturing location. First, the substrate material needs to be prepared. This step consists of acquiring raw materials, measuring and mixing these materials, pressing the materials into long sheets, rolling the final substrate material, and allowing the substrate time to dry. This first step in the manufacturing process usually takes about three to four weeks.

The second manufacturing step involves applying the paste to the wallpaper substrate material. JWC only sells pre-pasted wallpaper; all its items use the same basic paste. The substrate rolls are processed through a calendaring operation that applies a skim coat of paste to the substrate and then runs the pre-pasted substrate through a series of blowers to dry the paste before re-rolling the substrate. Pre-pasting the substrate takes approximately one day.

The third manufacturing step involves printing the wallpaper pattern or design. The pre-pasted rolls of the substrate are processed through a printing process like newspaper production. Colors and patterns are printed or embossed onto the substrate through a series of rollers. After printing, blowers are used to dry the ink, and then the large rolls are run through a series of cutters to create the individual wallpaper rolls. Printing, drying, and cutting take approximately two days. However, changing a line from one pattern to another can take up to two hours. **Therefore, JWC tries to minimize these changeover costs and produce the forecasted quarterly demand for an item in one batch run.**

The final manufacturing step involves packaging. All individual wallpaper rolls are inserted into clear plastic sleeves. From there, separate labeling is applied to meet the needs of each retailer or channel partner. The labeling requirements vary by customer, even for identical wallpaper patterns. This labeling requirement exists because each retailer wants unique packaging to differentiate its brands and product offerings from competitors. For example, "Coral Blue" is a common pattern carried by twenty-five different retail chains. Although the wallpaper roll is identical for all twenty-five retail chains, the packaging varies for each customer. This requires JWC to assign and manage twenty-five separate SKUs for the "Coral Blue" pattern, resulting in additional inventory levels. Packaging and labeling take less than one day in total.

Overall, JWC has enough manufacturing capacity to meet the total annual demand for wallpaper. However, they do not have the flexibility in their current process to respond quickly to spikes in demand on specific patterns. Consequently, JWC typically has problems fulfilling orders from retailers on popular new patterns within standard lead times. Given the financial difficulties the company is experiencing (See Exhibit 2: Income Statement), cash is not available to make significant capital investments in manufacturing.

Distribution

JWC runs five typical wallpaper distribution centers (DCs) that distribute approximately 10,000 SKUs to various customer segments. The DCs are in California, Nebraska, New Jersey, Tennessee, and Texas. With these locations, all business customers are within a two-day transit time for order deliveries. The New Jersey DC is co-located with the manufacturing facility in a low-cost, non-union area. This distribution network is the result of mergers and acquisitions over the past twenty years as the industry consolidated. Capacity utilization has some variation throughout the year, but on average, the network utilizes approximately 75% of the available capacity and has plenty of room for additional storage. Owners of JWC are comfortable with the network because all the facilities are company-owned and already completely paid off.

Individual rolls of wallpaper are placed in a master carton quantity of eight rolls. With the introduction of new items, stores typically receive two master cartons or sixteen rolls of wallpaper for each SKU. If the product is available, replenishment can occur within forty-eight hours through retailer DCs via individual master cartons (i.e., eight rolls of wallpaper at a time). Some big-box retailers have asked why the master carton size is eight. JWC has maintained that its research has shown the product needs to be on the shelf to complete a job; otherwise, a customer will not purchase the pattern.

Consulting Challenge

Your BL&T group has been hired as the consulting firm for the Jersey Wallpaper Company. Mr. Rutgers would like to know the following:

1. Identify and describe the issues currently facing Jersey Wallpaper Company (JWC) specifically, e.g., within the industry, with customers, in terms of manufacturing, distribution, inventory, demand, product line, costs, profits, etc.
2. What strategies could JWC use to help solve some of its issues? What JWC processes specifically have to be changed to use these strategies, and how would the strategies help solve JWC's issues?
3. How would JWC implement your recommendations, and how would these recommended changes help solve JWC's issues?
4. What are the significant (actual or potential) constraints or downsides to your group's recommendations? Are there any negative impacts your recommendations may have on any of JWC's resources, processes, personnel, customers, suppliers, or business in general?

Deliverable:

Each team will give a 20 minutes presentation (or less, strict time limit) to a panel of industry and academic experts. There will be 10 minutes for Q&A from the panel. Each team will be scored according to the 2024 NJC4 Judging Rubric (defined below). Presentation materials should be sent to Kathy Wagner at wagnerka@business.rutgers.edu no later than Friday March 29, 2024. Live case presentations will take place April 5th.

Exhibit 1



February 1, 2024

Mr. Henry Rutgers
Chief Executive Officer
Jersey Wallpaper Company
Piscataway, NJ 08854

Dear Mr. Rutgers

I am writing to you about the performance of the wallpaper category at Home Depot. As we have discussed before, your products are not meeting our budget expectations.

If there are no dramatic improvements in inventory turnover, markdown funding, and customer service by the next seasonal rotation, I will remove your wallpaper from the stores and replace it with more productive assortments.

As the category leader in wallpaper, I expect you to take the lead and determine how we can reduce the amount of non-productive inventory, reduce the number of markdowns that erode our margins, and stay in stock on our best-selling items. Home Depot has a world-class supply chain. We have regional distribution centers strategically located throughout the country, and we can replenish any store in our network within 24 hours. We lead the industry in terms of customer service and inventory productivity. There is no reason that wallpaper should be causing problems.

In short, fix this immediately or plan on losing your largest customer.

Sincerely,

John Deaton
Executive Vice President – Supply Chain & Product Development
The Home Depot, Inc.
Atlanta, GA 30339

Exhibit 2

ANNUAL INCOME STATEMENT

YEAR	2020	2021	2022	2023
REVENUE	247,500,000	250,024,500	249,886,986	252,110,981
EXPENSES				
Advertising	1,500,446	1,515,751	1,514,918	1,528,400
Insurance	937,654	947,218	946,696	955,123
Legal & Professional Services	1,234,455	1,247,046	1,246,360	1,257,454
Employee Compensation	69,098,204	69,803,005	69,764,614	70,385,519
Manufacturing & Operations Costs	137,875,874	139,282,208	139,205,603	140,444,533
Markdown Money for Retailers	5,400,000	7,793,750	9,862,511	15,000,563
Operating Supplies	569,151	574,956	574,640	579,755
Rent & Utilities	12,793,424	12,923,916	12,916,809	13,031,768
Total Expenses	229,409,208	234,087,850	236,032,150	243,183,113
INCOME	18,090,793	15,936,650	13,854,836	8,927,869
	7.3%	6.4%	5.5%	3.5%

Exhibit 3

Jersey Wallpaper Company Supply Chain Flow Diagram

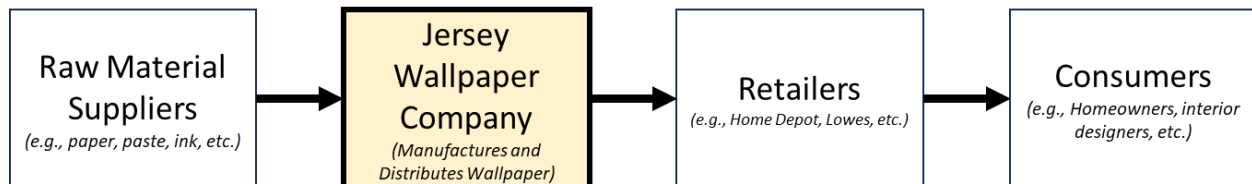


Exhibit 4

Jersey Wallpaper Company Manufacturing Process

	Manufacturing Process	Lead Time
STEP #1 Preparing the Substrate Material	A. Acquire the raw materials B. Measure and mix the raw materials C. Press the materials into long sheets D. Roll the final substrate material E. Allow the substrate time to dry	3 to 4 Weeks
STEP #2 Pre-Pasting the Substrate	A. Apply a skim coat of paste to the substrate B. Dry the paste	1 Day
STEP #3 Printing the Pattern or Design	A. Print or emboss colors and patterns onto the substrate B. Dry the ink C. Cut printed substrate into individual wallpaper rolls	2 Days
STEP #4 Packaging and Labeling	A. Insert individual wallpaper rolls into clear plastic sleeves B. Label each packaged wallpaper roll according to each channel partner's requirement.	< 1 Day

All of the above steps are currently being performed by Jersey Wallpaper Company in their company-owned facilities.

2024 NJC4 Judging Rubric

Scoring Area 1: Viability

Viability: Could the plan be implemented successfully?

The plan surpasses expectations for a professional consultant	The plan could be successfully implemented without modification	The plan could be implemented but some modifications are needed	The plan could be implemented but major modifications would be needed	The plan could not actually be implemented
5	4	3	2	1

Scoring Area 2: Deliverables and Depth of Research

Deliverables: were all of the challenges (demand management, marketing, customer relations, financials) in the case description addressed.

Every challenge currently facing the business was effectively addressed	Most of the challenges facing the business were effectively addressed	Approximately half of the challenges facing the business were effectively addressed	A few of the challenges facing the business were addressed	None of the challenges facing the business were addressed
5	4	3	2	1

Research: how extensive was the research that was used to develop the action plan.

The consulting team clearly did thorough research and seemed like experts	The consulting team did ample research to know what they were talking about	The consulting team's research was adequate	There were information gaps and more research was needed	The consulting team did not appear to have done much research, or the research was not relevant
5	4	3	2	1

Scoring Area 3: Presentation Effectiveness and Visuals

Presentation: was the presentation clear, concise, and informative, and did the team present well?

The presentation was very well organized and presented in a manner resembling the work of	The presentation was organized and presented in an effective and fluid manner.	The presentation was mostly organized and presented adequately.	The presentation was somewhat disorganized and there was room for improvement in the delivery and description of deliverables	The presentation lacked structure and was poorly executed
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professionals in an authentic role.				
5	4	3	2	1

Visuals: Were the supporting visuals clear, concise, relevant, and informative?

The team used visual aids in an efficient manner that allowed for effective dissemination of knowledge and enhanced the overall presentation	The team used visual aids in a generally efficient manner that allows for the dissemination of knowledge without overwhelming the audience.	The team used visual aids in a manner that disseminated knowledge, but could have been better organized or more effectively presented.	The team used visual aids ineffectively or in a way that was occasionally superfluous	The team used visual aids that were distracting, irrelevant, or lacked aids completely.
5	4	3	2	1