Team 80: Jacobs Consulting

BRIGHT MEALS

Serving a fresh new take on frozen food
# TABLE OF CONTENTS

- Cover Page ......................................................................................................................................3
- Table of Contents ...........................................................................................................................4
- List of Figures .................................................................................................................................6
- Executive Summary .......................................................................................................................7
- Management ...................................................................................................................................12
  - Building a Better Organization .................................................................................................13
  - Labor Forecasting ......................................................................................................................13
  - Production Supervisor KSAO’s ...............................................................................................14
  - Tools for the Hiring Process .....................................................................................................15
  - Performance Evaluations .........................................................................................................17
  - New Compensation Structure for Production Supervisors .......................................................20
  - Motivation in Production Workers ............................................................................................21
  - Bright Meal’s Core Values .........................................................................................................23
  - Bright Meal’s Culture ..................................................................................................................27
  - Change .......................................................................................................................................28
  - Follow Lewin’s Three Step Model of Organizational Change ..................................................30
  - Management Appendix ............................................................................................................32
- Marketing .......................................................................................................................................39
  - Bright Meal’s Current Position in Frozen Food Industry .............................................................40
  - Introducing Bright Meals+ ..........................................................................................................40
  - Comparing Market Shares ........................................................................................................42
  - Emerging Trend of Health Foods and New Targeted Customers .............................................42
  - A New Segmentation – The Health-Conscious Millennial Male .................................................42
  - Evaluating the Segment 40A Great Target ..................................................................................43
  - Impacts on the Purchasing Pattern of Millennial Males .............................................................44
  - “More for More” Aimed for “Winning” .....................................................................................46
  - A Winning Positioning Statement for Bright Meals+ .................................................................47
  - Hardy + Healthy Stands Out .......................................................................................................48
  - Product Positioning Map ............................................................................................................49
<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Broker Sales Approach and Bright Meals’ Own Sales Force Approach</td>
<td>50</td>
</tr>
<tr>
<td>Retailers Matter</td>
<td>52</td>
</tr>
<tr>
<td>Skimming Strategy Illuminates</td>
<td>54</td>
</tr>
<tr>
<td>“If Brands are Built Over Years” Analysis</td>
<td>56</td>
</tr>
<tr>
<td>“How to Stop Customers from Fixating on Price” Analysis</td>
<td>57</td>
</tr>
<tr>
<td>Developing the IMC Plan</td>
<td>59</td>
</tr>
<tr>
<td>Building Our Communication Strategy</td>
<td>62</td>
</tr>
<tr>
<td>A New Website: Interactive, Informational, and Inspiring</td>
<td>63</td>
</tr>
<tr>
<td>Mass Media and Direct Marketing</td>
<td>65</td>
</tr>
<tr>
<td>Social Media</td>
<td>66</td>
</tr>
<tr>
<td>Embracing the Change</td>
<td>67</td>
</tr>
<tr>
<td>Marketing Appendix</td>
<td>69</td>
</tr>
<tr>
<td>Operations</td>
<td>72</td>
</tr>
<tr>
<td>Operations: From Inception to Shelves</td>
<td>73</td>
</tr>
<tr>
<td>Crating a Project Schedule</td>
<td>73</td>
</tr>
<tr>
<td>Making an Equipment Decision</td>
<td>74</td>
</tr>
<tr>
<td>Evaluating Suppliers</td>
<td>76</td>
</tr>
<tr>
<td>Supplier Quality</td>
<td>79</td>
</tr>
<tr>
<td>Operational Characteristics</td>
<td>92</td>
</tr>
<tr>
<td>Key Stakeholders</td>
<td>83</td>
</tr>
<tr>
<td>Six Sigma Quality</td>
<td>85</td>
</tr>
<tr>
<td>Dimensions of Quality</td>
<td>85</td>
</tr>
<tr>
<td>Putting it All Together</td>
<td>89</td>
</tr>
<tr>
<td>Operations Appendix</td>
<td>90</td>
</tr>
<tr>
<td>Finance</td>
<td>101</td>
</tr>
<tr>
<td>Making it All Happen</td>
<td>102</td>
</tr>
<tr>
<td>Cost of Capital</td>
<td>102</td>
</tr>
<tr>
<td>Incremental Cash Flows</td>
<td>104</td>
</tr>
<tr>
<td>Analyzing NPV for Different Periods</td>
<td>106</td>
</tr>
<tr>
<td>Finance Appendix</td>
<td>107</td>
</tr>
<tr>
<td>Figure Title</td>
<td>Page</td>
</tr>
<tr>
<td>------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>Chicken Dinner</td>
<td>1</td>
</tr>
<tr>
<td>Trading Graph</td>
<td>7</td>
</tr>
<tr>
<td>Work Community</td>
<td>10</td>
</tr>
<tr>
<td>Team Diversity</td>
<td>12</td>
</tr>
<tr>
<td>Employees</td>
<td>13</td>
</tr>
<tr>
<td>Female Executive</td>
<td>16</td>
</tr>
<tr>
<td>Team Conflict</td>
<td>18</td>
</tr>
<tr>
<td>Construction Worker</td>
<td>20</td>
</tr>
<tr>
<td>Values</td>
<td>23</td>
</tr>
<tr>
<td>Time for Change</td>
<td>24</td>
</tr>
<tr>
<td>Lewin's 3-Step Model</td>
<td>30</td>
</tr>
<tr>
<td>Grocery Store</td>
<td>39</td>
</tr>
<tr>
<td>BrightMeals Logo</td>
<td>41</td>
</tr>
<tr>
<td>Millennial Male</td>
<td>43</td>
</tr>
<tr>
<td>Excited Team</td>
<td>45</td>
</tr>
<tr>
<td>Fresh Ingredients</td>
<td>48</td>
</tr>
<tr>
<td>Securing a Deal</td>
<td>51</td>
</tr>
<tr>
<td>Shopping Cart</td>
<td>53</td>
</tr>
<tr>
<td>Growing Financially</td>
<td>55</td>
</tr>
<tr>
<td>Barcode</td>
<td>56</td>
</tr>
<tr>
<td>Thought Cloud</td>
<td>58</td>
</tr>
<tr>
<td>Business Lecture</td>
<td>61</td>
</tr>
<tr>
<td>Bright Meals+ Logo</td>
<td>63</td>
</tr>
<tr>
<td>Millennial on Tablet</td>
<td>65</td>
</tr>
<tr>
<td>Social Media</td>
<td>67</td>
</tr>
<tr>
<td>Heavy Machinery</td>
<td>72</td>
</tr>
<tr>
<td>Calendar</td>
<td>73</td>
</tr>
<tr>
<td>Gears</td>
<td>75</td>
</tr>
<tr>
<td>Cauliflower</td>
<td>78</td>
</tr>
<tr>
<td>Tractor</td>
<td>79</td>
</tr>
<tr>
<td>Black and White Business Team</td>
<td>83</td>
</tr>
<tr>
<td>DMAIC Puzzle</td>
<td>86</td>
</tr>
<tr>
<td>Puzzle Pieces</td>
<td>89</td>
</tr>
<tr>
<td>Calculator</td>
<td>101</td>
</tr>
<tr>
<td>Stock Analysis</td>
<td>103</td>
</tr>
</tbody>
</table>
EXECUTIVE SUMMARY

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A Brief Overview
The Problem

For the past 26 years, Bright Meals has brought America home-cooked meals without the hassle. Bright Meals has become a household name, being in the lives of families while also easily identifiable with red, white, and blue packaging. The company is known for personal portions of 9.5-oz with a low price. All of the products come with a protein, a vegetable, and potatoes. In the past, Bright Meals has played it “safe” when it comes to product development and new markets. Yet, in 2013, the industry changed and playing it “safe” was no longer an option. Consumers grew weary of the ingredients in their products. Housewives began to feel guilty about buying products with high cholesterol and sodium for their families. Fad diets became popular, from paleo to veganism. The world was no longer a place for a company like Bright Meals. However, in 2018, frozen foods saw a resurgence by an unlikely consumer – millennial males. Currently, we are not prepared to target such a demographic and must make many changes in order to do so.

The Solution

Bright Meals is no stranger to the implementation of new products. However, we are going to implement a product line that will revolutionize the company: Bright Meals+. Bright Meals+ will use non-GMO, organic ingredients. We will add green to our beloved color palette and implement it in our packaging, our new website, our Bright Meals+ logo, and everywhere in between. Bright Meals+ will be offered in 14-oz containers with a protein and 8-oz of a low carb alternative. Our first product in the line: “Spicy Nashville Style Hot Chicken with Cauli Rice.” Through the success of our first product, we will have the opportunity to expand into new products, ushering in a different age for Bright Meals.

A New Customer

A fast-paced lifestyle and a new healthier mindset define the health-conscious millennial male. They demand for a filling, protein-packed/low-carb meal. Bright Meals’ “Spicy Nashville Style Hot Chicken with Cauli Rice” is the solution for them. As a demographic that is largely untargeted due to various reasons, Bright Meals+...
will become their sole provider of hardy and healthy meals. We currently operate in the second tier of the frozen food market, trailing behind Stouffer’s and Marie Callender’s -two all-encompassing brands. The second tier is much more niche and we must find our footing. Currently, there is no one on the market providing quality ingredients with larger portions. In our highly saturated market, Healthy Choice and Lean Cuisine aim to serve healthier meals but in smaller portions. Hungry Man, on the other hand, serves unhealthy meals with larger portions, sometimes up to 4000 calories per meal. Bright Meals+ will be positioned comfortably between the two alternatives.

**A Fresh Promise**

We will also launch “The Hardy + Healthy Promise” campaign with integrated marketing communications ranging from a new commercial featuring New England Patriots tight-end Rob “Gronk” Gronkowski to a complete overhaul of our social media. The key to the success of the Bright Meals+ line is the continuation of our current products and lines. By offering the two distinct package sizes and quality of ingredients, will allow our customers to see the benefit in Bright Meals+; thus, making them more inclined to pay the premium price. Moreover, having strong partnerships with effective types of retailers and employing a skimming strategy will enable Bright Meals to target millennial males, as well as acquire potential customers that are normally out of reach.

**An Innovative Process**

A product launch of this caliber is going to require a 19-week project schedule in order to “go to market” in time for peak sales. We must purchase all brand-new equipment in order to develop the 14-oz packages. The switch to non-GMO, organic produce will warrant us utilizing new suppliers, and we will have to start considering spoilage to a higher degree than ever before. Going forth, we will implement Six Sigma to ensure quality in all of our products; thus, reducing costs in the long-term. We have developed a process plan that should broadly encompass all of the necessary steps of this project launch. The operations department will require an effective team of employees in order to “go to market” in time for peak sales.

**A Strong Community**

Bright Meals’ production facilities currently have many problems such as high employee turnover rates, inadequate performance management systems, and poor hiring methods. We must begin by hiring in order to
maintain a stable workforce with consistent levels of work output. Bright Meals will hire one Production Supervisor per plant. Employing a Production Supervisor will be beneficial to the training of new employees during the implementation of Bright Meals+. It is critical for the supervisor selected to have four important skills: active listening, critical thinking, monitoring, and oral expression. Production employees must receive developmental feedback from supervisors in order to ensure high levels of motivation. Creating a sense of value, within the production facilities, will allow Bright Meals to decrease the high turnover rate that we are currently plagued with and ensure the success of the Bright Meals+ going forth.

**Financial Considerations**

The addition of the “Nashville Style Hot Chicken with Cauli Rice” has a varied financial impact in both the short and long-term of Bright Meals. Along with any other project, one of the most important aspects to consider is whether or not incremental value is being created. Fortunately, our six-year project provides us with a positive NPV of $2,973,516 which, in turn, creates value for shareholders, as well as increases in the stock price. Prior to the sixth year, the internal rate of return will be less than the external rate of return of our project, causing our NPV to be negative and value to be destroyed. Given that this is the case, Jacobs Consulting recommends Bright Meals to run this project for a duration of at least six years or more.
Also, Bright Meals faced a decision to go between Buying or Leasing decision, which is very common for any production facility around the world. Option with the lowest present value should be selected to minimize costs at Bright Meals. After analyzing the data, Jacobs Consulting recommends purchasing Asset D given that it has a significantly lower present value of $2,933,867. Purchasing allows us to still complete our project within 19 weeks while also opening us to the opportunity of increased capacity and introducing new products. The Operating Lease offered from the current equipment salesperson will not be effective in minimizing costs and would need to be renegotiated to be taken into consideration.

**Going Forth**

The Bright Meals+ line provides an answer for the long-term by creating a bridge for Bright Meals to become a healthier, more transparent frozen food producer. Bright Meals+ will offer convenient, healthy meals and allow Bright Meals to capitalize on the increasingly fast-growing market of health-conscious consumers. Additionally, Bright Meals+ offers an opportunity to foster growth within the organization, as we continue to expand upon the core foundation that was established 26 years ago.
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MANAGEMENT

Building a Better Organization
Building a Better Organization

At Jacobs Consulting, we understand that Bright Meals is currently in a pivotal situation by introducing the new “Spicy Nashville Style Hot Chicken with Cauli Rice” through the potential Bright Meals+ line, as to be discussed later. It is essential that management implements several changes to ensure business success in the future. We would like to suggest a variety of different options that we believe can solve many of Bright Meals current problems such as high employee turnover rates, inadequate performance management systems, and poor selection methods. It is important that many of our human resource practices become standardized immediately to allow us to move forward successfully. This report will thoroughly outline the suggestions we would like to implement at Bright Meals.

Labor Forecasting

After reviewing the forecasted sales from Finance and production numbers from Operations, we project that the launch of the “Spicy Nashville Style Hot Chicken with Cauli Rice” will result in a 26.25% total increase in production over 5 years. When deriving this projection (Figure Z1), we assumed that by maintaining a stable workforce with consistent levels of work output, our production level would match the annual demand each year. Our team assumed that the current turnover levels of 24% and productivity levels would remain constant over this period. Additionally, we assumed that since there are currently 155 full-time equivalent workers, working over a total of 5 projects, that each project is allotted an average of 31 FTE workers. Thus, to begin this new project, 31 full-time workers would need to be hired to meet production and demand in the first year. In conclusion, we found that the total full time equivalent (FTE’s) employees needed to be hired over the first five years of the project will be 74. The number of FTE’s that will needed to be hired each year can be found in the appendix, Figure Z1.
**Production Supervisor KSAO’s**

Bright Meals has struggled in recent years due to a lack of direct supervision, resources, and talent. The addition of a new Production Supervisor position can be very beneficial for Bright Meals, only if the ideal candidate is selected. This new role will carry a great deal of responsibility and we would like to suggest several KSAO’s (Knowledge, Skills, Abilities, and Other Characteristics) that we find necessary for the selection process.

**Active Listening**

First, it is crucial that the person being selected for this position has strong active listening skills. Active listening is an important skill to possess, as the Production Supervisor will not only need to provide their full attention to the complaints or requests of the production workers. They will also be required to carefully listen to directions from superiors, such as plant managers or the Director of Human Resources, Adrianna. Active listeners are more inclined to ask questions when appropriate, which, in return, can help them gather more information and ensure they are meeting their job requirements efficiently.

**Critical Thinking**

A critical thinker will have the ability to identify the strengths and weaknesses in the current processes at Bright Meals, and provide potential solutions or unique approaches to solve problems. A candidate high in critical thinking will allow Bright Meals to gain a new perspective on the current processes and provide insight on ways to improve complex problems within the organization: such as, the high production worker turnover.

**Monitoring**

Additionally, our team would also like to suggest that the Production Supervisor has thoroughly developed monitoring skills. This skill is important as the Production Supervisor must make sure that all production workers are taking the necessary precautions to stay safe while working. Having monitoring as a skill will also allow them to administer thorough performance evaluations to employees and reports to their plant managers. These evaluations can then be used to assess performance and make improvements or implement corrective actions when needed.
Oral Expression

The final ability that is necessary for effective performance in the Production Supervisor position is oral expression. The ability to communicate information in words so that others will understand them is one of the most important aspects of this position. The Production Supervisor must communicate with production workers, plant managers, and Adrianna about a variety of different scenarios, including personnel-related issues.

Tools for the Hiring Process

Screening Tools

Bright Meals must develop a strong selection system that prioritizes the necessary KSAOs to ensure the new Production Supervisor is successful. It is in our best interest to begin the selection system with a screening tool to assist in narrowing down the applicant pool immediately. The screening process should begin with an overview of applicants’ resumes and cover letters. This will allow individuals at Bright Meals to eliminate any applicants who do not possess the necessary minimum requirements, such as an associate’s degree and/or equivalent experience. Effective screening tools have also been shown to save time and money.

Evaluative Tools

After the initial applicant pool has been narrowed down from the resume and cover letter screenings, it is important to incorporate multiple evaluative tools to examine the remaining applicants in order to make a determination on who to hire. The first evaluative tool that we will highlight is the cognitive ability test. The test will measure an applicant’s ability to learn, process, and apply information rapidly. It is also useful for providing an indication on his/her general intelligence and how easily he/she can receive training. The cognitive ability test has a relatively high average validity measure of .51 (Figure Z3), compared to other evaluative methods. A simple test that can be implemented to measure the cognitive ability of applicants is the Wonderlic. This test generally receives “OK” reactions from applicants, have both low development and administration costs, and is easy to use. It will be extremely useful for measuring important skills such as critical thinking, which production supervisors must be strong in.

Next, we will look into structured interviews. Structured interviews are an effective way to learn more about our applicants by using both behavioral and situational questions. As an industry-standard, behavioral interviews help employers to determine how employees will behave in the future, based on their past. For example,
we could ask an interviewee to explain a time when they had to deal with mitigating conflict between employees. Similarly, situational interviews attempt to paint a picture of an employee's thought process. In a situational interview, we could ask the interviewee what they would do if two production workers had a disagreement. By utilizing both of these, Bright Meals will be able to analyze the important KSAO's that have been prioritized above. The structured interview method has a variety of different benefits including the highest average validity method, an overall “good” reaction from applicants, and moderate levels of usability. Although the development and administration costs may be high for these interviews, they are a worth-while investment to include in the selection system due to their ability to predict future behavior and understand employee mindsets. The high costs will most likely be balanced out by the low costs found in the cognitive ability tests.

**Contingent Tools**

To conclude, the selection process our team suggests the implementation of a contingent tool to perform a final check before employment. The contingent assessment method that we believe will be most effective is a background and social media check. A final background check will ensure that the applicant does not have a criminal history or a lifestyle that does not align with Bright Meals company values, as explained in detail later on. After applying all the necessary selection methods to each applicant, hiring new production supervisors will be an efficient and successful process.
Performance Evaluations

In addition to selecting the right people, we need to make sure our current employees are performing at their best. The absolute performance evaluation approach known as the Behaviorally Anchored Rating Scale (BARS) (Figure Z4) is excellent for increasing inter-rater reliability, as to be explained. The approach provides specific behavioral anchors and actions that allow for consistent scoring among participants. The BARS method will prevent raters from using their personal discretion when evaluating production supervisors.

Since this is a new position at Bright Meals that will be evaluated from individuals within the organization, it is critical to incorporate the inter-rater method to determine reliability. This method is best to use when scores are being provided from several individuals. Each individual will provide a score for the Production Supervisor and the inter-rater reliability can be determined by observing the consistency of scores between raters. If the scores across multiple raters are consistent and have a reliability coefficient value greater than .70, Bright Meals can infer that this evaluation method is reliable and adequate for selection needs.

For determining the validity of this evaluation method, it is best to use three methods known as content-related, construct-related, and criterion-related validity. The content-related validity ensures that the test is measuring the things that are actually done on the job, for example monitoring. Construct-related validity is often difficult for many companies and deals directly with the way the evaluation method is constructed - the test must actually assess the things that it claims to measure. For example, if we are seeking to measure intelligence, we must ensure that the method used, in this case the Wonderlic test, is indeed designed to measure intelligence. Finally, the predictive criterion-related method showcases the correlation between the participants score on the evaluation system and their actual performance on the job. Since the Production Supervisor position is new at Bright Meals, we will use the predictive method. The predictive method allows us to track the scores of applicants during the selection process, and then wait and compare those scores to their performance on the job. It is important that we see a strong correlation between high scores on the selection method and high performance on the job. All three of these methods are important for determining the validity of the Behaviorally Anchored Rating Scale to ensure that our selection system is successful. We have discussed the hiring process, now we must work towards retaining our employees.

Job Satisfaction

A key part of retaining employees is job satisfaction. Job Satisfaction is the positive attitude that our employees bring to work each day. Satisfaction allows employees to perform work that is consistent with their values.
and meets their expectations of what a good job should be. These employees like their job and want to perform well at it. High job satisfaction results in an increase of customer satisfaction, job performance, and organizational citizenship behaviors. Low satisfaction results in absenteeism, high turnover rates, and workplace deviance. Outlined below are two pitfalls we believe production supervisors could fall into without proper job satisfaction.

**Pitfall One: Task Conflict**

The main purpose of the new Production Supervisor is to partner with the Plant Manager and help form a connection between production employees. Through our company analysis, we have noticed that the tasks required by a production supervisor appear broad and similar to those of a manager. This similarity could lead to a confusion of power between the two parties. Production supervisors are asked to be the employee's voice in order to help managers better understand dissatisfaction. They are also required to participate in developing HR policies moving forward. At the beginning of the Production Supervisor implementation, there could be a task conflict with the Plant Manager. Since this position is new to the company, there will be confusion about what tasks the Production Supervisor can and cannot perform. This task conflict could potentially end in competition over who completes which tasks between the two parties, since the importance of relationship is not very strong during implementation. Although this problem could be a holdup to Bright Meals’ end goal, task conflict is usually functional. Functional conflict is a positive disagreement that occurs within work groups. This conflict is a constructive argument which results in creating a better product.

In order to help prevent competition in the facilities, Jacobs Consulting believes that Bright Meals should mirror what was done at the Lima Tire Plant. According to the Treadway Tire Company Case, when managers introduced occasional social events after work, foreman appreciated the gesture. Which led to improvement in their relationship (Skinner and Beckham p. 2-6). Similarly, we recommend plant managers at Bright Meals should hold these kinds of social gatherings for production supervisors, that will help increase the importance
of the relationship. With preexisting high importance of issue and now increased importance of relationship all conflicts between them can be handled in a collaborating manner. Instead of competing against each other, parties use collaboration to come up with a final result that is considered a win-win situation. Win-win situations appeal to both parties since all participants collaborate on how they can benefit from the decision being made. This collaboration will remove competition by clarifying who is required to accomplish certain tasks.

**Pitfall Two: Lack of Motivation**

At this time, Bright Meals production facilities are unorganized and are in need of a major renovation. Many of the problems are coming from employee dissatisfaction and unheard opinions due to a lack of communication. The main goal of the production supervisor is to help close the gap between management and production workers. In the early months of implementation. Motivation during this busy period will be a result of profit sharing and intrinsic motivation, as to be discussed. However, intrinsic motivation could disappear once the changes to performance management have been made. Production supervisors will lose the control of developing HR policies, thus lowering their self-determination. The supervisor’s excitement will slowly deteriorate and cause a lack of self-efficacy which is needed for motivation.

Although this seems like an unavoidable conflict, we believe this pitfall could be evaded by offering the Production Supervisor specific goals to reach for each quarter and offering satisfaction surveys. Satisfaction surveys will create a direct communication between the Production Supervisor and their employees. Production supervisors will constantly be making changes within the facility to meet the needs of their employees, creating constant work. Goal-setting is an intrinsic motivation theory that involves setting specific goals that are difficult to reach, yet attainable. These specific targets lead to higher performance by the employee, which is followed by positive organizational outcomes. In order to guarantee motivation, supervisors must be committed to these goals. Established goals must be specific and known to the public, so that supervisors know exactly what is being asked of them and can be held accountable. The ability to reach the goal must be in the control of the supervisor; who must understand that the outcome is based solely on their effort to achieve these targets. Finally, supervisors must be able to create a culture of collectivism across the production facilities. As mentioned earlier, production workers have very little motivation due to the repetitive work they must complete. One way to counter this repetition would be to create job rotations. Bright Meals should create daily schedules that require employees to perform multiple tasks throughout the day. This will allow workers to experience different environments opposed to the single station they are limited to now. However, we do not suggest Bright Meals to implement this strategy at
peak sales because job rotation slows productivity. Supervisors must involve employees in all aspects of production, as to ensure task identity, in order to have success reaching the goals set. Team success should become the main value in the production facilities at Bright Meals.

**New Compensation Structure for Production Supervisors**

Our new production supervisors will require a new compensation structure. Bright Meals currently uses a lead pay strategy for production personnel. We, at Jacobs Consulting, recommend that Bright Meals adopts a compensation plan that links pay to performance. The performance management system will be based on the BARS scale that is described in detail above. Each rating in the BARS will be linked to a bonus percentage of the base salary (Figure Z5). Bright Meals should follow a matching strategy for their base pay, so production supervisors will have an industry average base salary. Assuming that lead pay compensation is 20% above industry average, we believe that 20% of their base pay compensation will be at risk. Production supervisors will have the opportunity to receive lead pay. However it will not be guaranteed to the supervisors - they can only achieve it based on performance. The bonus pay above base salary will be in the form of a lump sum bonus which will not only be less expensive to Bright Meals, but also tie in elements of instrumentality. With high instrumentality, production supervisors will be incentivized to perform well so that they can potentially get a total compensation that is above industry average. We believe that 20% of their base pay is a certain percentage that will encourage supervisors to perform well. Lincoln Electric has followed this system and experienced immense success.
(PBSNews Hour). However, as shown in the Vitality Health Enterprises case, success of a performance-based pay strategy will depend on the reliability and validity of measurement methods (Bingham and Beer p. 3-7). The BARS scale we developed has the ability to guarantee reliability through the use of the inter-rater method and validity through the use of the content, construct, and criterion methods.

**Motivation in Production Workers**

In addition to our new position, we must also focus on current positions such as production workers. It is clear that the motivation of the current production worker job is limited for a variety of different reasons. In the current position, the production workers have extremely low skill variety, which, in return, is leading to reduced motivation. It becomes difficult for employees to remain motivated, if their work is extremely repetitive and does not cause them to use a number of different skills or talents. Another reason that could be potentially causing a lack of motivation, is the relatively low task identity and significance. The production workers at Bright Meals are unable to identify or connect with the outcomes of their work and because of this they do not find the work fulfilling. If the employees at Bright Meals do not find their work impactful, they are much less likely to be motivated. Along with low amounts of task identity and significance, there is also a problem with the amount of developmental feedback occurring; which is perhaps the largest contributor to the lack of motivational potential at Bright Meals. By compensating our employees more than the industry average through a lead pay strategy, Bright Meals has the ability to differentiate themselves from competitors and also attract higher quality employees. Which, in return, can contribute beneficial assets to the company such as innovative new products or exceptional customer service. The lead pay strategy is not the cause of high turnover rates or a lack in motivation and therefore should remain in place. Although the lead pay strategy is not causing any problems, it is not enough to resolve the current employee turnover problem and other actions must be taken.

**Improving Job Satisfaction**

After reviewing the current situation of high employee turnover for the production workers at Bright Meals, our team would like to suggest a few actionable solutions to fix this problem. We found that there are dissatisfied production workers who are voluntarily leaving our organization. To address this issue, the implementation of a job descriptive index will effectively measure the specific aspects of the job. A job descriptive index will allow Bright Meals to pin point the exact problems that are occurring within the organization, so they can be changed in the future. After these problems are brought to our attention, we can begin to improve job
satisfaction through a variety of different ways, such as: working alongside employees to develop their talents and skills, minimizing bureaucracy, or even changing up their work environment through job rotation, as detailed above. By increasing job satisfaction, we will not only see a reduction in turnover rates but also an increase in creative ideas contributed to the organization, employee productivity, and customer service.

**Restructuring Current Compensation**

Additionally, restructuring the current compensation procedures will incentivize production workers to perform, through the following direct compensation strategies: lump-sum bonuses and the continuation of the profit-sharing incentive plan. In the past, lump sum bonuses were based on seniority – leading to a lack of motivation. Performance based lump-sum bonuses will allow Bright Meals to enhance instrumentality for production workers by directly comparing their work to specific elements of performance, such as: a fixed amount of meals produced each quarter resulting in an increase in pay. Also, this method is less expensive to the Bright Meals company. Including both individual and group incentive programs will help increase overall worker productivity as a whole and ensure that our top performing workers are being paid the highest. Thus, reducing production worker turnover and directly address the worker complaint that, “the quality and work ethic of co-workers varies widely.”

**Introducing an Inclusive Culture**

The final solution our team would like to bring to your attention to help resolve this problem is the implementation of mentoring programs, affinity groups, and diversity training to create an inclusive culture at Bright Meals. Mentoring programs benefit all employees and create a thoroughly developed and engaged workforce. Affinity groups give employees a space where they can be their own unique self and engage in open conversations with others from similar and/or differing backgrounds. It allows employees to open up with their co-workers and relieve stress. Diversity training is important in fostering an inclusive culture because it teaches employees to understand differences between individual members of a group and views them as an asset. Implementing these programs will contribute in creating an inclusive culture at Bright Meals which will, in turn, help employees feel more valued, thus, reducing turnover and absenteeism. An inclusive culture can also lead to marketing and recruiting advantages, such as: a better understanding of our customer base and an increased company reputation. When our employees feel that they can be themselves at work every day, we will soon begin to notice that they find their work to be much more fulfilling, thus, increasing their productivity.
Bright Meal’s Core Values

Bright Meals is a company that has a strong trust in our employees to accomplish the work that needs to be done. Although this system has proven to be beneficial for the company, the high employee turnover rate shows that employees within the company do not receive the same fulfilment. This dissatisfaction could be linked back to the lack of motivation that these employees feel. Bright Meals is currently an adhocracy culture that values flexibility and discretion. We put much of our effort externally focusing on competitors and market demands instead of internally on our employees and facilities. Bright Meals is lacking strategic alignment between the values of their employees and higher organization. Values are not clear and do not seem to be reinforced throughout our company. Employees come to work day after day under a system that fails to allow progress in the company due to a lack of goals and feedback on performance. Bright Meals must realign our vision and craft compelling core values that could be resonated throughout the company to help increase employee satisfaction.

Realigning Values

Core values act as guiding principles that command certain behaviors, promote a shared final vision, and shape a company’s culture. Values help employees understand the job they are performing and gives them insight on the results that are needed in order to be successful. Effective core values build employee engagement which is one of Bright Meal’s largest problems in the production facilities. Engaged employees experience higher job satisfaction and organizational commitment which would decrease the problem of variation in quality of work and work ethic of co-workers. These employees would be inspired to produce at the highest quality since they realize their value in the company has greater meaning and is the reason for the company’s success. A company’s values should be something that each employee believes in. Employees at Bright Meals do not have any artifacts to stand behind because there is a lack of inclusion throughout the company. Jacobs Consulting believes that Bright Meals should meet with employees and realign the company’s values in a way that makes employees feel of value.

We have crafted a list of ideal core values that we believe Bright Meals should adopt:

- Optimize the Long Term
- Direct, Open, and Honest Communication
- Act with Integrity
- Daring to be Different
- Deliver our Best
- Socially and Environmentally Responsible
Core Value 1: Optimize the long term

Bright Meals employee turnover ratio could be linked to the employee’s short-term view about the work they are performing. Employees are not getting the fulfilment needed to stay at Bright Meal for long periods of time. Instead, they are more inclined to put minimal amount of effort into products while searching for different work options that could better suit their needs. This is costing the company capital that could be considered profit or used elsewhere. Bright Meal must establish a long-term mindset in all aspects of the company. These long-term actions will allow top management to build lasting success and stability, make any strategic transformations to the company, and plan overall targets. By planning future target goals, employees are able to see their jobs purpose and are able to build motivation in order to reach/exceed the determined objective. While planning for future targets, top management must communicate to their production employees about their wants and needs and incorporate them into the business’s long-term goal to ensure satisfaction.

Core Value 2: Direct, open, and honest communication

Communication in the production facilities needs to become more effective. At this time, Bright Meal’s facilities have poor administrative data, little developmental feedback, and motivational issues. All of these problems result from poor communication systems between management and their employees. Our current system does not allow employees’ voices to be heard and it is adversely affecting our work environment. Bright Meals
will never be able to engage our employees with poor communication systems. Communication as a core value will allow us to be direct with our employees and ask “What can we do to be better”. By asking our employees questions through a job descriptive index on a yearly basis, production workers will realize that the executives of Bright Meals want what is best for them. This index will allow us to compare our positive performance with our negative performance based off of employees’ responses. This will allow Bright Meals to shorten the communication distance between the two levels of the production facilities. Another outcome of a strong communication system is the ability for employees to receive feedback about how they are performing. Developmental information for employees will get rid of the current issue of only giving raises to seniority in the plant. Bright Meals will be able to tell who the top performers are and reward those who are worthy of recognition, instead of employees employed the longest. By emphasizing direct and honest communication as a core value throughout the company, Bright Meals will be able to obtain higher productivity with lower turnover rates from their employees.

**Core Value 3: Act with Integrity**

Integrity is an essential value that every company should look for while hiring a new position. A person who shows integrity is one with a strict adherence to moral and ethical principles. We would be able to trust an employee high in integrity with providing adequate information, accomplishing tasks, and being honest. Currently, plant managers do not have the time nor talent to make managing the people at each plant their priority. There is no mentor for employees to receive developmental feedback. An overall lack of trust has developed over time through poor performance management systems and is something that needs to be fixed during the implementation of the new system. A core value that highlights integrity would show that Bright Meals is a company that does not settle for less. Managers with integrity will be able to give criticism that is needed while still receiving full respect. They will be able to use their leadership skills to coach employees to perform at high levels and produce results that exceed expectations. A work force with integrity has a positive mindset about their work and can be relied on in any given situation. If Bright Meals plans on becoming more standardized, integrity is a strong value that needs to be expressed during the change. The Production Supervisor is a new position and is going to cause shock in the work environment. In order to achieve a more efficient and effective HR system, plant managers must have trust in their respective production supervisor. Trust will allow employees at Bright Meals to feel part of a community.
Core Value 4: Dare to be Different

“Dare to be different” is an ideology of creating a culture of innovation, within Bright Meals, that will promote an organic structure and ensure that it is always ready to accept changes happening in the dynamic industry. This culture means eradicating any structural and group inertia in the company and creating an environment for encouraging experiments and celebrating mistakes. Driving forces will be constantly created to encourage and provide motivation for change, and restraining forces will be lessened to decrease any friction. This will act in the long-term interest of company when Bright Meals expand to more products in + Line, they will need to have a lean culture to smoothly accommodate changes. Also, Bright Meals should reward employees that have strong organizational citizenship behaviors. OCB’s, the extra behaviors that go above and beyond the job description, will result in employees helping out more often, volunteering for overtime, and maintaining a positive attitude.

Core Value 5: Deliver the Best

Customer satisfaction should be the driving factor at every stage of production in our company. “Deliver the Best” is a broad term that could be used to drive motivation over a wide range of activities extending from delivery service to employee production. With this attitude, Bright Meals could always produce high quality products that give customers the most value. This value has a positive connotation that could hopefully be reciprocated with production workers and their attitude toward their daily production.

Core Value 6: Socially and Environmentally Responsible

Bright Meals has already established a corporate image as a friendly and sensible player in the marketplace. We also have decided to make a commitment to transparency and will promote healthy ingredients in our marketing communications. As a part of this addition, Bright Meals has agreed to share news articles and other relevant current events items on its social channels in order to promote the company as a home for those seeking healthy alternatives, as to be explained in our marketing section. We must also acknowledge that our business decisions affect the local environment. For example, when determining our suppliers, we must take into consideration how our emissions affect the environment, this will be explained in more detail in the operations section.
Bright Meal’s Culture

A strong work culture can allow a company to articulate and reinforce clear values that enact strategic choice. Strategic alignment encourages employees to perform in a way that helps the company achieve its goals. Once the company’s values are consistent, we can then reward and promote employees’ behaviors consistent with the values. Rewards and incentives will create motivation to achieve what is encouraged. Consistency within the company and employee behaviors allow a business to improve organizational performance. This increase would be a direct result of the new core values implemented by Bright Meals.

A Clan Culture

Jacobs Consulting believes that this implementation will be able to create a clan culture within the production facilities. A clan culture focuses on internal workings of the company and emphasizes collaboration. Clan cultures have loyal employees with high commitment to the organization. Due to the repetitive nature of work that must be performed, it is important to stress commitment while creating a culture. By highlighting commitment, employees at Bright Meals will be able to receive value through the work they perform causing a lower turnover rate. In order to lower turnover rates and create a strong culture, Bright Meals must begin hiring employees who have similar values as the company. These values are a determining factor while searching for future employees to work on the product expansion. Transparency will allow our company to encourage feedback and information to employees on how they could grow within the company. It will allow us to correct the varying quality and work ethic in our facilities by providing feedback on ways to improve. Along with feedback, Bright Meals must continue providing bonuses when profits of the company are strong. This will continue to support the motivation throughout the culture we are trying to build.

Security

Finally, we must keep our employees psychologically secure. This consists of creating a safe work environment in which people come to work without worrying about external factors that cause distress. For example, Bright Meals could stress job security and the ability to anonymously report claims of workplace harassment. Hiring workers with a strong value of integrity will create the community that is necessary. Jacobs Consulting expects the new clan culture will allow a smooth transition to the more centralized hiring system that Bright Meals is trying to implement.
Change

Jacobs Consulting has recommended a lot of changes to Bright Meals’ management for smoother introduction of the new product line, as well as improving the existing structure of the overall company, and more recommendations are to come. The recommended change initiatives that will be hardest to implement throughout the company are listed below.

Changing Bright Meals core culture and values

As outlined earlier in this section, the recommended core culture and values are directed to improve employee satisfaction in the company, as well as create a uniform mindset through each employee about Bright Meals. This will, in turn, help in alleviating the problems of turnover and absenteeism. A company used to structural and group inertia, as well as lacking in an organic structure will have a very tough time changing old employee ideology about the company and Bright Meals can potentially suffer the same problem.

Thorough implementation of new Six Sigma system

As to be detailed in the Operations section, the new Six Sigma process will help improve quality of the product, create efficiencies and reduce costs within Bright Meals. Without increased motivation, this change will cause production workers to build in extra scrutiny with their production for a job they do not feel excited about -thus making Six Sigma an ineffective effort.
Adding a New Role of Production Supervisor

As outlined earlier in this section, the new role of Production Supervisor will be introduced to share the existing responsibilities of a Plant Manager in handling all administrative issues associated with production workers. This can help with improving current performance management systems, selection methods, and better manage people within the company. However, this will involve some authorities of plant managers being transferred to the new role for better handling these responsibilities, which the manager might look at as a threat to his/her expertise and established power relationships. Thus, production supervisors in the new company may find tough to develop a cordial relationship with the plant manager, with problems like task conflict prone to occur.

The success of the above changes can only be ensured when people within the company know they will not be losing anything from it, but it will be a “win-win” situation for the firm and existing employees. To enforce this mentality, we are looking to strengthen or introduce the following human behaviors, simultaneously with all the recommended changes: **communication and fairness**.

Rigorous communication and participation

There is a dire need for supervisors to continuously communicate with each employee about these changes and address their concerns. Also, supervisors should include lower-level employees in their planning and decision-making process as these employees are the ones who will help implement these changes throughout the company. These behaviors will thus make employees feel included and create a strong foundation for enforcing these changes throughout the company.

Ensuring fairness and developing positive relationships

There should be fairness in the organization about the impact of every change implemented; for example, a Project Manager should not feel underpowered in directing lower-level employees due to the addition of the new Production Supervisor position, who administers the bonuses to the production workers. Also, an environment of authenticity should be developed so that the required changes will impact Bright Meals and our employees in a positive manner. These will influence employees to not only look forward to this change but also help implement it, thoroughly. The change of modifying company’s core culture and values can build up a lot of resistance and we suggest using the following strategies, that can help implement this change in the best manner that are outlined below.
Follow Lewin’s Three Step Model of Organizational Change

The three-step model dictates that change can be smoothly set in the people when it goes through the steps of Unfreeze-Move-Refreeze. “Unfreezing” involves breaking away existing employees’ old thoughts about the company and sparking new ideas. For example, currently, employees think of work as unfulfilling; they need to be encouraged and provided motivation for these new changes, bringing an end to their monotony in work and addressing their needs for achievement and task variety. “Move” will be a period when employees will feel anxiety and confusion; a good support and communication system has to be developed in order for all their questions to be answered in an appropriate manner. “Refreeze” should be a step taken by Bright Meals to freeze in the new ideology in the employees. This step will involve HR in developing a reward or a special bonus system to encourage desired new behaviors in employees. For example, our suggested core value of honest and direct communication through the job descriptive index can be strengthened for the long-term. If the employee bringing in developmental feedback for the firm can be provided a bonus for it, this will not only improve the company but also make employees feel more involved in bringing “real” change to the company.

Build an Innovative Culture

A growing organization like Bright Meals, that is dynamically implementing new strategies aligned with continuous changes in industry, will have to develop a culture of innovation. Our recommended value of “Dare to be Different” involves creating a lean structure within the company that continuously remains flexible for changes in the long-term. We recommend Bright Meals to encourage experiments, celebrate employee's mistakes, and reward them on both success and failure. This will lay a foundation of organic structure within the company and Bright Meals will always be ready to take in new changes for the long-term.
In order to launch our additional product line, Bright Meals must establish a more centralized and standardized hiring and evaluation of workers. We must incorporate these new methods while hiring the new employees needed for our project. The new production supervisors’ main job is to voice employees’ opinions to the Plant Manager to help increase motivation in the current sluggish culture. The culture in Bright Meals production facilities needs a major renovation due to the current lack of value spread throughout employees. We believe that by establishing the core values mentioned in the report, Bright Meals will be able to evolve the culture into a very inclusive community.
### Figure Z1: Labor Forecasting

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Job Description for Production Supervisor Position:

The Production Supervisor at Bright Meals will be responsible for monitoring all administrative issues associated with production workers such as scheduling, training, safety programs, performance evaluations, etc. Productionsupervisors will report directly to the Plant Manager and act as a representative at each location for the Director of Human Resources.

Tasks:

• Process, verify, and maintain personnel related documentation, including staffing, recruitment, training, grievances, performance evaluations, classifications, as well asemployee leaves of absence.
• Record data for eachproduction worker, including such information as addresses, weekly earnings, absences, amount of production, supervisory reports on performance, and dates of and reasons for terminations
• Direct and coordinate the activities of production workers engaged in the production or processing of frozen meals, such as inspectors, machine setters, or fabricators.
• Plan and establish work schedules, assignments, and production sequences to meet production goals.
• Serve as a link between plant managers and production workersby handling questions, interpreting and administering contracts and helping resolve work-related problems
• Conduct employee training for production workers in equipment operations or work and safety procedures, or assign employee training to experienced workers.
• Recommend or execute personnel actions, such as hiring, evaluations, discipline/termination,or promotions.
• Oversee the performance evaluation, classification, and rating of production workers.
Knowledge:

**Personnel and Human Resources**—Knowledge of principles and procedures for personnel recruitment, selection, training, compensation and benefits, labor relations and negotiation, and personnel information systems.

**Production and Processing**—Knowledge of raw materials, production processes, quality control, costs, and other techniques for maximizing the effective manufacture and distribution of goods.

Skills:

- **Management of Personnel Resources**—Motivating, developing, and directing production employees as they work, identifying the best candidates for the job.
- **Speaking**—Talking to others to convey information effectively.
- **Critical Thinking**—Using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems.
- **Systems Evaluation**—Identifying measures or indicators of system performance and the actions needed to improve or correct performance, relative to the goals of the system.
- **Monitoring**—Monitoring/Assessing performance of yourself, other individuals, or organizations to make improvements or take corrective action.
- **Social Perceptiveness**—Being aware of others’ reactions and understanding why they react as they do.
- **Time Management**—Managing one’s own time and the time of others.
- **Instructing**—Teaching others how to do something.
- **Coordination**—Adjusting actions in relation to others’ actions.
- **Judgment and Decision Making**—Considering the relative costs and benefits of potential actions to choose the most appropriate one.
- **Active Listening**—Giving full attention to what other people are saying, taking time to understand the points being made, asking questions as appropriate, and not interrupting at inappropriate times.
Abilities:

- **Oral Comprehension**—The ability to listen to and understand information and ideas presented through spoken words and sentences.
- **Oral Expression**—The ability to communicate information and ideas in speaking so others will understand.
- **Written Comprehension**—The ability to read and understand information and ideas presented in writing.
- **Written Expression**—The ability to communicate information and ideas in writing so others will understand.
- **Deductive Reasoning**—The ability to apply general rules to specific problems to produce answers that make sense.
- **Inductive Reasoning**—The ability to combine pieces of information to form general rules or conclusions (includes finding a relationship among seemingly unrelated events).
- **Problem Sensitivity**—The ability to tell when something is wrong or is likely to go wrong. It does not involve solving the problem, only recognizing there is a problem.
- **Originality**—The ability to come up with unusual or clever ideas about a given topic or situation, or to develop creative ways to solve a problem.

**Education:** Associate’s Degree or higher (and/or equivalent experience)
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Figure Z3: Evaluative tools
Figure Z4: Evaluative tools

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<tr>
<td>The supervisor is constantly monitoring the performance of themselves, others, and the organization as a whole. They immediately share any relevant information with managers in the organization to help quickly suggest improvements or necessary changes.</td>
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Figure Z5:

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NewsHour PBS. YouTube, YouTube, 13 July 2011, www.youtube.com/watch?v=kCGiB9heV6k

MARKETING
Creating Customer Value

Team 80: Jacobs Consulting
Bright Meals’ Competitive Position in Frozen Food Industry

Bright Meals currently competes in an exceedingly saturated market with many top-tier competitors within their own niche. Recently, the market has been in decline and Bright Meals must find its footing. Stouffer’s has many product lines and a majority of the market. Next, Marie Callender’s attempts to differentiate itself through family-sized portion, coining the phrase “Frozen Meals the Whole Family will Love.” Lean Cuisine is the highest earning competitor in the second-tier and tries to differentiate itself as the convenient, frozen meal provider for people attempting to live a healthier lifestyle, without giving up their favorites. Bright Meals has the next highest sales in the second-tier. Healthy Choice trails behind but is an industry leader in the use of healthier ingredients. Lastly, Hungry Man is the most niche of the competitors with their slogan “Eat like a Man.” The market shares given equated to 106% of the market. Discounting this as a simple mathematical error, we adjusted each of the market shares to be out of 100%. We found the following market shares for 2017: 31.13%, 24.53%, 15.09%, 13.21%, 8.49%, 7.55%, respectively.

When comparing Bright Meals to the top tier competitors such as Stouffer’s and Marie Callender’s, their annual sales are 2 and 1.5 times greater than ours, respectively. For this reason, we will primarily compete with the second-tier when drafting our positioning statement and corresponding map—which we will get into a bit later. Bright Meals, being the second biggest competitor in the second-tier, mainly needs to try to surpass Lean Cuisine. Lean Cuisine’s revenue market share is 14.98% of the 1.65 billion-dollar market. Bright Meals follows closely behind with a 13.42% stake, only a 1.56% difference. When comparing the competitors to the top earning competitor, Stouffer’s, Lean Cuisine was found to have a 48.48% relative market share and Bright Meals trailing close behind with 42.42%. Healthy Choice and Hungry Man are much farther off with a relative market share of 27.27% and 24.24%, respectively. However, they are not to be discredited from consideration, as they both currently serve niche markets that we hope to infiltrate with our new product line: Bright Meals+.

Introducing Bright Meals+

Bright Meals is not only looking to expand to a new product but also looking into a new product line launch. As Bright Meals has elected to move toward a healthier, more transparent image, a new product line will usher in a new age for the company. Jacobs Consulting recommends naming this new line Bright Meals+. Beginning with the “Spicy Nashville Style Hot Chicken with Cauli Rice”; Bright Meals will create this new product line. The goal is to demonstrate the new change, while also limiting cannibalization. In turn, this leaves opportunity for product line extension with the introduction of healthier products in the future.
Comparing Market Shares

This adds an additional layer of difficulty to our product launch as Bright Meals is already known in the consumer’s mindset and we want to try to move in an unfamiliar direction. Roughly 1 in 7 frozen meal purchases are Bright Meals, thus making us very sensitive to consumer perceptions. As long as, at least in the beginning, Bright Meals continues to offer original products that are known and loved by consumers, such as the “Midwestern Salisbury Steak” and “Grandma’s Pot Pies,” the addition of a new product line should be a seamless transition. For example, strategic sales promotion can aid in the transition for consumers that are already aware of our products into purchasing our new healthier options - we will speak more on this later. Bright Meals must remain aware that even though we are ready to innovate, many of our consumers are not. Larger market shares are proven to increase profitability. Bright Meals’ market share is nearly twice as much as Hungry Man’s, making us nearly twice the size.

Not to discredit Hungry Man, as they are the only competitor that is currently solely targeting the male demographic. Similarly, they are one of the few frozen food companies that has seen growing sales recently. However, our size can directly affect economies of scale – in which as we gain experience, our operations, marketing, management, etc. will become more effective, thus reducing costs. It is important to note that at a certain level, production may become too large and too specialized thus increasing costs and playing into diseconomies of scale. We believe that Bright Meals only has room to grow and the fear of becoming too specialized is not something that Bright Meals will have to worry about in the foreseeable future.

Another aspect of larger market shares and profitability is the quality of management. Generally speaking, corporations with large market shares run like a well-oiled machine. Effective managers are, generally, successful in achieving large shares of their markets, are skilled in minimizing and maintaining costs, as well as
maximizing productivity from their employees—all effective in making the business more profitable. Currently, Bright Meals’ management is plagued with high turnover rates, poor selection processes in hiring new recruits, and a general lack of developmental feedback for workers. Through Jacobs Consulting’s new strategy, we can improve our management process in order to hopefully increase our profitability, economies of scale, and consumer perceptions; thus, increasing our weight in the market and the success of the product line launch.

**Emerging Trend of Health Foods and New Targeted Customers**

For 26 years, Bright Meals has offered inexpensive, convenient meals to millions of Americans. However, consumer preferences began to steer away from frozen meals. More than ever before, health foods are the new trend. Nonetheless, frozen meals began to make a comeback as millennials with fast-paced lifestyles and starting wages craved the inexpensive and convenience of frozen meals, while simultaneously desiring healthier alternatives. To remain relevant and successfully launch the new product line, Bright Meals needs to change how they are perceived by consumers.

Consumer perceived value is defined as “the customer’s evaluation of the difference between all the benefits and all the costs of a market offering relative to those of competing offers.” Therefore, Bright Meals needs to define who will be the core customer for the shift to healthier options, specifically the “Spicy Nashville Style Hot Chicken with Cauli Rice”. The customer that will have the highest perceived value for this item is someone who is health-conscious but still wants a hearty, protein packed meal with limited carbohydrates. In addition, as will be discussed later, this person must be willing to pay a premium for a good value of high-quality ingredients with transparent backgrounds. Our team has identified that the segment that fits these qualifications are millennial men who are attentive to their health.

**A New Segment-The Health-Conscious Millennial Male**

The health-conscious millennial male is described as someone 20-40 (this is rounded figure given that millennials are ages 22–37) who has a fast-paced lifestyle and wants to remain fit. This is someone who may work an entry level job, long hours, and likely does not have the time nor the money to go out to eat and/or make their own meals. Similarly, he is someone who wants a high protein and low carb diet to maintain muscle mass and energy when he goes to the gym. It is important to note that our strategy does not wish to exclude women from using this product. At no point will the word “male” or “for men” be included in any marketing materials. We believe that women who seek a high protein/low carb diet will also be attracted to this product. However, we
want to emphasize the targeting of males, as they are a bigger part of the market and also a smaller portion of our current customer base. The strategies we will discuss later will demonstrate how our marketing strategy will be especially attractive to millennial men.

Evaluating the Segment

The health-conscious millennial male target customer is based-off segmentation due to demographic, psychographic, and benefits-sought criteria. Age (millennial) and gender (male) both belong to the idea of segmenting based on demographics. In addition, there are certain psychographic, or lifestyle factors, that are common amongst millennial men. The “millennial lifestyle” has been described as digitally-connected, socially-conscious, and fast-paced. Finally, health-conscientiousness belongs to the benefits-sought idea of segmentation. The health-conscious millennial male seeks the benefits of good nutrition that supports physical health.

A Great Target

In addition to meeting the qualifications above, millennial men make up approximately 28.83% of frozen entrée consumers. Similarly, the recent resurgence of frozen food consumption has been driven by a millennial audience. In addition, with the steady decline of the industry, one of the only companies that has seen yearly growth is Hungry Man, which targets a male consumer interested in large portions. However, Hungry Man
has calorie counts up to 4,000 for one meal. Bright Meals can also target a male demographic but hit a different segment by focusing on a younger, healthier audience. Finally, by targeting the health-conscious millennial male, we also limit the amount of cannibalization into our other products that have been traditionally targeted toward mother’s ages 28-42. There is also a synergy between these two segments as mothers and wives may buy additional Bright Meals products for their husbands and sons helping to boost Customer Lifetime Value.

**Impacts on the Purchasing Pattern of Millennial Males**

When thinking about how to market to the health-conscious millennial male, it is important to note what items influence their consumer behavior. Social and personal factors will heavily influence the consumer behavior of this group. For example, the personal influences such as being of a younger age, working longer hours, and having an entry level job will align with the need for a quick meal that is still healthy. Likewise, the economic situation of making an entry level salary can push these consumers toward cheaper frozen meals instead of going out to eat. The social factors, such as feeling pressured into male gender roles and the ideals of being muscular, tall, and strong, will also drive consumers to seek a high protein/low carbohydrate meal. In addition, to gender roles, there are numerous reference groups that millennial men may identify with socially. For example, some of these groups include sports teams, gyms, and fraternities. Similarly, social influences such as opinion leaders have an especially large pull with this audience because of the popular tactic of using influencers on social media. Common social influences for millennial males may be actors, athletes, and musicians. These social factors must be taken into account when marketing to this segment.

Finally, we want to introduce the idea of Bright Meals+, which we will continue to expand upon. The “Spicy Nashville Style Hot Chicken with Cauli Rice” will be the first of a new product line for Bright Meals, named Bright Meals+. This new product line can be expanded upon in the future to include lower carb, higher protein options in larger portion sizes. Bright Meals+ will appeal to the health-conscious millennial male by hitting on the above points with each new product offering. In addition, it is important to segment Bright Meals into a new product line to differentiate from current products. This will help to reduce cannibalization of sales as well as attract new customers who may have previously not chosen Bright Meals because of high calorie content meals. After the segmentation of our market into demographic, psychographic, and benefit-sought criteria, the health-conscious millennial male will aid us in our value proposition and positioning map.
“More for More” Aimed for “Winning”

A value proposition statement is described as, “the set of benefits or values, a product promises to deliver to consumers to satisfy their needs”. Bright Meals must determine its value proposition statement for the new product, as well as the potential new line launch because it helps customers decide why they should purchase Bright Meals+ frozen products over a competitor. Bright Meals should choose a “winning statement”, or a statement that will help differentiate and position their new product to have a competitive advantage and win over customers. Our team has elected that Bright Meals begin with a “More for More” value proposition with the possibility of adapting a “More for the Same” proposition in the future.

“More” Realized Benefits of Bright Meals+

The first aspect in a value proposition statement is to determine the benefits that Bright Meals+ will offer. The “Spicy Nashville Style Hot Chicken with Cauli Rice” is meant to initiate Bright Meals into an age of transparency and health consciousness. Therefore, consumers must understand that they will be receiving “more” benefits from our products than they normally would by purchasing through a competitor. A purchase from Bright Meals is a purchase for more transparent, healthier, and higher-quality ingredients. For example, when a customer is deciding between a Bright Meals+ option that offers non-GMO chicken with preservative free cauliflower, they will understand that they are receiving “more” than a regular Marie Callender’s meal without these benefits.
“More” Pricing Set for Bright Meals+

Next, we must analyze the pricing component of our value proposition statement. By choosing “More” for the benefits, we have the option of pricing at “More”, “The Same”, or “Less”. Our team felt that it was important to follow what the CMO, Molly Chang, believes is important in pricing. Molly said that a firm can start with a higher price and then easily lower it, if need be, as opposed to the contrary. We will get further into price specifics later, but for now we believe it is necessary to also adopt a “More” strategy for pricing. This allows for higher margins in addition to the option of being able to lower prices in the future. Similarly, prices are not set by Bright Meals but by the supermarkets themselves. While we can attempt to suggest prices, the price we planned may not necessarily be what the supermarket chooses. However, by starting at a higher price we can influence the supermarkets with promotions and discounts while still having a buffer on our margins.

Bringing it Together

Together, a “More for More” strategy will position the “Spicy Nashville Style Hot Chicken with Cauli Rice” and future Bright Meals+ options as a more upscale product that is worth the extra price. In addition, this strategy offers some prestige to buyers. For the millennial male that we are targeting, this will be especially attractive. As discussed earlier, social and personal factors will heavily influence the consumer behavior of this group. Although the price will be slightly higher than competitors, frozen meals are still often less expensive than eating out or making a full meal, fitting well with their personal influences. In addition, the social factors of conforming to a health-conscious and higher-end image will fit with the “More for More” strategy.

Future Potential

Lastly, the “More for More” strategy is flexible in that in the future it could potentially become a “More for the Same” proposition if Bright Meals chooses to lower prices. One concern with a “More for More” strategy is that it invites competitors who may imitate our quality with a lower price. In addition, a higher price can be more sensitive to times of economic turbulence. That is why, as Molly Chang stated, it is important to have the ability to easily lower price. Bright Meals could switch to a “More for the Same” strategy for the plus line, if it appears that more competitors are entering with a similar value proposition or that customers are becoming more sensitive to differences in price. This other proposition would allow Bright Meals to offer the same great benefits but at a lower expense. For example, if Healthy Choice comes out with a similar cauliflower product at the same price that is low carb, healthy, and the ingredients are transparent in their production, we will have to make some
changes. In order to gain a competitive advantage and boost sales, Bright Meals could lower prices but still offer the same great product and draw a bigger customer base. In the present, it is in Bright Meals’ best interest to offer more benefits for a higher price, however, with the possibility of lowering prices in the future.

**A Winning Positioning Statement for Bright Meals+**

In the past, Bright Meals has made a name for itself in the lives of housewives as a reliable, friendly, and convenient source of nutrition for families on the go. Today, Bright Meals is trying to appeal to the fastest growing frozen meal consumer, millennial males. In order to win over the demographic’s mindset, Bright Meals must develop a unique positioning statement that will help it stand alone from competitors. A positioning statement helps to summarize the company, brand, or product. Similar to a value proposition, a positioning statement is important because it differentiates away from competitors and helps the product to achieve a certain position within the consumers’ mind. In addition, unlike the value proposition, the positioning statement puts a company or product into a category to demonstrate similarities between products. However, once again, the positioning statement needs to describe what differentiates it from other products or companies in that category. Good positioning statements describe the target segment and need, the brand, the concept, and the point of difference. Jacobs Consulting recommends the following positioning statement for the new product,

“To busy millennials who want a protein-packed low-carb meal, Bright Meals+ “Spicy Nashville Style Hot Chicken with Cauli Rice” is sensible, convenient, and delicious, promising to satisfy your hunger with high-quality ingredients and added health benefits”

Our positioning statement is the best for this circumstance because it touches on each of the requirements of a good positioning statement, while being compact and memorable. With the target segment being busy millennials, notice, we did not include “for men” or “for males”. While this is indeed our target audience, we did not want to limit our customer base through specific wording in the positioning statement. Instead, we used a few key phrases that would appeal to a male audience. These statements include “protein-packed” and “satisfy your hunger”. In addition, the first part of the statement describes the consumer need in saying “who want a protein packed low-carb meal”. Similarly, we also chose not to use the words “health-conscious” although this is
once again an attribute of our target market. Instead, we wanted to use specifics, mentioning high protein and low carbohydrates. We feel that this is more appropriate because health-conscious can mean numerous things to different groups of people. The new product is not meant to be a weight loss tool but rather something that helps sustain and maintain health.

Next, the statement is effective because it mentions the brand and concept. Since the positioning statement is limited to the new product, it only mentions Bright Meals+ “Spicy Nashville Style Hot Chicken with Cauli Rice”. Our statement then goes on to explain the concept of both Bright Meals and the new product stating, “...is sensible, convenient, and delicious”. This goes back to satisfying the need of millennials who want a quick meal that also tastes good. Similarly, it relates back to those that are familiar with the current Bright Meals line. Our statement follows up on the current brand promise of Bright Meals to be convenient while also tasting great.

**Hardy + Healthy Stands Out**

Finally, our positioning statement is successful in that it explicitly states how this product is differentiated from other products in the category with the phrase, “... to satisfy your hunger with high-quality ingredients and added health benefits”. The first part of the phrase describing satisfying hunger is essential as it differentiates the product from the “light” meals that are popular in the frozen food section. Again, because this product is targeted towards males, it is important that they understand this is a full, hardy meal. Next, our positioning statement
describes the high-quality ingredients that will be used. Bright Meals would like to be more transparent about its ingredients by using less chemicals and preservatives. Again, this is a differentiating factor among the many products in the frozen food aisle that use preservatives and GMOs. Additionally, our positioning statement suggests health benefits that will come in the form of lower carbs and higher protein, another differentiator in the industry. It is important to note, as well, that this will also help differentiate the plus products from other Bright Meals products. We want to ensure that customers understand that the new product is different in its health benefits and portions. An effective positioning statement leads the way into developing a positioning map and truly understanding consumer perceptions of our product.

**Product Positioning Map**

Bright Meals operates in a highly-saturated market with multiple tiers. As stated above, Bright Meals falls in the second-tier amongst competitors. To begin to understand how our product line will be received, we must develop a product positioning map (Figure M1). A product positioning map is a tool created to show consumer perceptions of our brand versus competitors within the same category. These maps are important because they can demonstrate product differentiation as well as helping to identify what attributes may positioning the product within the consumers mind. Similarly, it helps to see where in the competitive landscape a product may fall. Our product positioning map is based off of two key attributes: the healthiness and portion size -the main qualities of our new product that are variable. The Bright Meals+ “Spicy Nashville Style Hot Chickewith Cauli Rice” will be a larger portion size as well as contain healthier ingredients.

**Springing Up amongst Competitors**

First, our product positioning map displays the difference in positioning between the current Bright Meals products and the new plus product as demonstrated by the altered logo, which will be explained later in the report. The new product will position itself as both a healthier and larger portion size option within consumers’ minds. It is important that the new product has a different positioning to differentiate from the current options. Together, this will help to decrease the amount of cannibalization of current sales while also changing the minds of consumers who previously thought of Bright Meals as solely producing unhealthy options.

**Lean Cuisine and Healthy Choice**

Next, our product positioning map is important for understanding how the new positioning differenti-
ates away from competitors. To start, let’s compare Bright Meals+ with Healthy Choice. Healthy Choice offers some of the healthiest frozen options on the market. However, Healthy Choice’s portion size is much smaller than our future 14 oz packages. This is similar to Lean Cuisine, where we offer a similar level of healthiness but will once again have a larger portion size. Our larger portions differentiate us from Healthy Choice and Lean Cuisine while also attracting a different type of consumer, someone that wants a full, satisfying meal.

**Hungry Man**

Now, we can look at Hungry Man, a company that offer very large portion sizes with high calorie contents, sometimes up to 4000 for one meal. Bright Meals+ will be comparable to Hungry Man in its portion size, although not quite as large. On the other hand, Bright Meals+ will differ in that the contents will be more health conscious. The use of Cauli Rice will help to bring down calorie and carbohydrate counts. This will help appeal to the health-conscious millennial male that Bright Meals+ will be targeting.

Altogether, our product positioning map identifies the key place Bright Meals+ will have within consumers perceptions. The “Spicy Nashville Style Hot Chicken with Cauli Rice” will be both a healthy and hardy meal. This will differentiate it from the competition as well as the other Bright Meals products. In conclusion, the new product and line will be positioned perfectly to attract the health-conscious millennial male.

Having a great product positioning map, however, is not everything. We, at Jacobs Consulting, have so far identified how Bright Meals+ will be influencing customer’s ways of perceiving the new product. Moreover, the distribution of the new product should also be taken into further consideration.

**Comparison Between Advantages and Disadvantages of Broker Sales Approach and Bright Meals’ Own Sales Force Approach**

The broker sales approach and the paradigm of Bright Meals’ own sales force are essential considerations when creating financial value. When employing the broker sales approach, Bright Meals is bound to outsource the sales function to an external sales firm. Which, in return, distributes and sells the products on behalf of Bright Meals, and then we pay them their respective brokerage fees after each sale. Conversely, the use of Bright Meals’ own sales force involves the direct burden of the sales function, rather than outsourcing the roles to external brokers. Both the broker sales approach and the use of the firm’s own sales force approach are industry-standards and efficient distribution strategies in various firms. However, despite the efficiency of the broker sales approach and the firm’s own sales force methods, both options exhibit various advantages and disadvantages.
Although, Bright Meals could employ different mechanisms to mitigate the disadvantages of either choice.

**Broker Sales Approach Advantages**

The broker sales approach fosters various advantages to Bright Meals outsourcing the functions. One of the benefits of using the broker sales approach is its affordability. For instance, Bright Meals will not have to spend funds setting up a sales and marketing department and there are no hidden costs in the payments made by Bright Meals to the broker. Moreover, in this approach, Bright Meals will be able to mitigate some of the expenses, such as insurance and penalty costs, to the brokerage firm.

**Broker Sales Approach Disadvantages**

On the contrary, despite its various advantages to Bright Meals, the use of the broker sales approach has several disadvantages. One of the downsides is that the Bright Meals will have a low degree of control of the distribution and sales of the new product. For instance, the broker might target a section of the market different from the intended target of Bright Meals: health-conscious millennial males. Besides, the broker might be selling products belonging to other competing companies at the same time. Additionally, a lack of exclusivity will lead to Bright Meals not getting the required attention and publicity on its introduction to millennial males.
Own Sales Force Approach Advantages

Similarly, if Bright Meals uses its own sales force, it will benefit from advantages such as a higher degree of control in the distribution and sales processes, such as sales targets and market segmentation. Another advantage is that Bright Meals will have a direct line of feedback from the market on the performance of its new product. In this regard, the customers can directly comment whether they were satisfied with the claimed purposes of the product and recommend the changes to the main components of the recipe of “Spicy Nashville Style Hot Chicken with Cauli Rice”. When comparing the two strategies, the broker sales approach pays for performance on a commission basis. The more sales made by the broker, the more he or she gets paid; thus, Bright Meals, by opting for the inhouse method, will get the full value of money.

Own Sales Force Approach Disadvantages

However, using our own sales force has disadvantages such as high costs needed for operations. Bright Meals will have to pay the salaries and employment benefits of the sales employees, distribution, storage, and transport fees. We will also face more difficulty in the expansion of sales since the approach will require the management team to recruit and train new employees.

Making Comparisons

Consequently, despite the efficiency of the broker sales approach and the Bright Meals’ own sales force distribution strategies, these approaches employ the details of various merits and demerits. The advantages of the broker sales approach indicate an easy scaling of sales operation and less risk for the producer, while the use of Bright Meals’ own sales force has merits such as complete control over the sales operations.

Retailers Matter

In the frozen meal industry, retailers are necessary, as most consumers and suppliers are unwilling to pay high shipping costs for frozen products. Opposed to a retailer, who purchases large quantities of frozen products for discounted, wholesaler prices. Choosing effective types of retailers is paramount for Bright Meals, if we aim at growing our market share. As such, analyzing the effective types of retailers in regard to distribution of “Spicy Nashville Style Hot Chicken with Cauli Rice” becomes important and essential.
Supermarkets

Supermarkets are one of the most optimal retailers for frozen food suppliers, as the business deals in a wide variety of products and has strong storage capabilities. As a result, it attracts large numbers of various groups of customers, who would normally be out of reach. Placing the new product in Supermarkets, such as Kroger, would highly increase the chances of the product being accessed by many potential buyers from different segmentations. Along with this, Bright Meals can leverage the relationships that have already been established with previous supermarkets in the past.

Convenience Stores

Another outlet to consider would be Convenience stores, which are more or less similar to supermarkets except that they take up less room and are convenient for people who live in residential areas. Convenience stores, such as 7-eleven, attract many customers since the store collectively deals in many markets: Pharmacy, food and grocery, lottery, etc. By offering the “Spicy Nashville Style Hot Chicken with Cauli Rice” in this type of retailer, Bright Meals will be increasing the rate of Reach and Frequency for both product lines.

Specialty Stores

Further analysis brings us to another type of retailer, Specialty Stores. Specialty Stores carry narrow product lines with deep varieties within said line. Whole Foods would qualify as a Specialty Store that mainly concen-
trates on organic products. The most advantageous feature about Specialty Stores is its niche. Many consumers who visit Specialty Stores have a certain type of product in mind and are more open to trying various products within that particular niche. Bringing it back to the Whole Foods example, if a consumer who primarily enjoys convenient, organic meals, and is willing to pay the price, will be more inclined to buy our “Spicy Nashville Style Hot Chicken with Cauli Rice” than a consumer who shops at a Kroger who just wants inexpensive, convenient meals.

### Pop-up Stores

Lastly, Pop-up Stores operate on a smaller scale, usually targeting people from the surrounding area. Pop-Up Stores are easily built, without taking much space, in busy areas, where many people pass through each and every day. Our Pop-Up Stores would mainly target those who have very limited time when purchasing food and tend to fall into the familiar. Additionally, those who do not have the tendency of visiting our other retailers, but are still potential buyers. For example, we could set up a Pop-Up Store that allows consumers to try our Bright Meals+ line without making a purchase. In turn, we can hope for name recognition and the allure of familiarity to induce purchases in the future. We will also be able to gain direct insights and analytics into our product line from hosting a Pop-Up Store.

The success of any business depends on profit. As such, the way Bright Meals approaches its distribution process matters in ensuring that more potential buyers are within reach. During the process of determining the channels that Bright Meals could use, it is imperative to evaluate how favorable they are in as far as increasing market share. If Bright Meals agrees to utilize Supermarkets, Convenience Stores, Specialty Stores, and Pop-Up Shops, we can expect to see increased consumer awareness, ease of purchase, and profits; thus, increasing our market potential.

### Skimming Strategy Illuminates

So far, our strategy has touched on various aspects of how we will bring the product to the consumer. However, we have yet to mention what detail consumers generally pay attention to most: price. We must thoroughly develop our price promotion strategy in order ensure exchange. The formula of exchange states that if the price floor, meaning our costs to produce one unit, is below the product’s price and the consumer's perceived value is above said price, then an exchange will occur. We will not look into specific numbers, but will develop a price promotion strategy that is on-par with our value proposition of “More for More.” Before we move on to the
importance of the overall price promotion strategy, our team would like to clarify a common misunderstanding. Price promotion does not necessarily equate to a sales promotion, such as “buy one get one free.” Instead, price promotion is an overall strategy for setting prices. A skimming strategy is favored by Molly, the CMO of Bright Meals, as well as our team.

When the new product line is launched, it is not likely for us to know the long-term certainty for sure, we can make assumptions for demand, but we will never be 100% certain. However, the best thing for Bright Meals to do in the short term is to inform customers about the new product line and encourage them to purchase. The future success of Bright Meals+ relies on the planning of the short-term time period in the first place.

Recall that our value proposition is “More for More.” Hence, offering a higher price for more benefits. By utilizing the skimming strategy, Bright Meals will send the message that the quality is unmatched and worth the premium price. Moreover, pursuing such a price promotion strategy allows Bright Meals to earn relatively more revenue in a limited volume in the short run. Admittedly, not every customer will be interested in the price promotion of the product line - they want discount and deals, no matter what. It would be immature for us to ignore such a demographic and conclude that they have no customer value at all. Free customers bring the network effects that will keep Bright Meals in business in the long-term. With more and more free customers subsidized by those paying customers, free customers are notorious for word-of-mouth and brand awareness. There is a direct correlation between the free customers acquired early and higher net present value of both nonpaying customers and paying customers combined for Bright Meals.
On a larger scale, when Bright Meals and retailers are simultaneously executing a skimming strategy, both parties have the possibility of earning a higher margin. In addition, Bright Meals’ skimming strategy has labeled the new Bright Meals+ product line a “premium product”. Premium products are successful in building the brand’s image. Customers who are willing to pay for the premium products appreciate what additional features they provide. Consequently, with more customer perceived value added and stronger customer loyalty, Bright Meals + will be more lucrative in the long term. By implementing a skimming strategy, Bright Meals will benefit the most by targeting millennial males who are health-conscious and who have a strong need for calorie management. This strategy will boost sales in the short-term and brand perceptions in the long-term.

Suffering from the slumping growth of sales of the frozen food industry, Bright Meals has decided to come up with “Spicy Nashville Style Hot Chicken with Cauli Rice”, a newly designed frozen meal, to bring up our sales, acquire new customers, and gain a larger share of wallet; thus, increasing market share. A seamless integration between the new product line, Bright Meals+, and a strategically developed pricing plan paves the way for Bright Meals to acquire more customers and maintain the customer retention rate, enabling Bright Meals to make bolder moves in the future.

“If Brands are Built Over Years, Why Are They Managed Over Quarters” Analysis

The “If Brands are Built Over Years, Why Are They Managed Over Quarters” article warned companies to not compete on price but on quality and consumer value perception. Bright Meals must make customers consider the features and quality that the product provides and what those features do for customers. One of the most important factors refers to the understanding of quantity premium and price premium. The top management of a successful company, with a well-established brand, embraces the importance of both a quantity premium and price premium.

We must build long-term customer loyalty by starting with a higher price - making it easier for us to tweak our pricing strategy later on. Thus, enabling Bright Meals with more flexibility of changing our price to resonate with corporate strategy. With a goal of smaller lift-over-baseline and higher baseline sales, Bright Meals can benefit from having less pressure when raising our price to achieve a quarterly sales goal and gaining more revenue during a time period with relatively low elasticity. Quantity premium refers to the willingness that a customer will buy more at a full price and price premium refers to less pressure of driving away existing customers, when facing a raise in price. It is imperative for Bright Meals to take both concepts into consideration because Quantity Premium and Price Premium indicate the brand’s long-term health.
In an information sharing era, the access to data is easier than ever. The cost of retaining data has dramatically decreased since the dot com boom, and, most importantly, the speed of spreading information is astonishingly fast. In order to avoid the side effects caused by an abundant amount of data, Bright Meals should not only think about the short-term sales data but also should be focusing mainly on the long-term data that resonates with building brand image and the consistency of the corporate strategy. Long-term metrics is one of the best ways of measuring and assessing the brand performance as a whole. Strategic business tweaking processes require the precise and forward-looking prognostication, which is based on the understanding of long-term data and selection of various marketing programs. The business decision making process could fail to achieve the goal of retaining a certain expected number of customers and annual sales, and it could also fail to inform the top management that if the decisions that they have made as well as the marketing programs that they have selected are still on the right track in terms of efficiency and profitability because of the paucity of long-term data. The article claims that a reduction in discounting, an increase in TV advertising, and a focus on a consistent long-term goal are the backbones of building a strong brand equity and increasing customer acquisition and maintaining customer retention.

“How to Stop Customers from Fixating on Price” Analysis

Bright Meals has come up with a new frozen meal, “Spicy Nashville Style Hot Chicken with Cauli Rice,” and has decided to charge retailers $2.20 per meal. However, this is not the price that customers are going to pay because the customer price is finalized by the retailer. Bright Meals will need to balance between the retailers’ strategy and Bright Meals’ corporate strategy in order to choose a strategy that best fits both parties.
The utilization of a well-designed price structure would be a great tool of calling attention to the value that the new product provides. While we are serving the existing 9.5-oz product, we are also serving another 14-oz new product “Spicy Nashville Style Hot Chicken with Cauli Rice” targeting different segmented customers. Providing these two products enables Bright Meals to effectively utilize the well-designed price structure, thus employing more options for various customers to choose from based on their needs.

Partitioning prices to emphasize the unnoticed dimensions that the product carries is an effective strategy in showcasing value. For example, Bright Meals could present the cost of the cauli rice that comes with the meal. Presenting different itemized costs might make it more likely that customers start to think about the value that the meal has and what features are in it. When customers are gradually exposed to the approach of charging individual itemized costs, it is very likely that they are going to start thinking about something that is more than just price.

“How is the cauliflower rice distinctive from other kinds of rice that I can find in other different types of meals? What part of the food do I need most?”

When customers start thinking about these questions, it is safe to say that they have already started changing their routine consumption behaviors.

Under no circumstances should Bright Meals ignore the value that a “willfully overpricing” strategy creates. The most important thing of willfully overpricing is that it can stimulate curiosity of customers. The skimming strategy requires Bright Meals to moderately increase the price premium of the product. This strategy could make customers think about what additional features this meal provides. Customers usually, subconsciously, pay less attention to the same features that same products carry, instead, they care about the additional features that most products do not carry.
One last implementation that Bright Meals should consider is customers’ personal relevance to an issue. For example, Bright Meals could charge slightly higher prices for buying the organic chicken from a local farm that has a good reputation and a reliable transparent background. Consumers will be able to read about our small farmers via our website, as to be explained later. The main focus of this strategy is to discover what kind of options suit customers with different needs best and make customers appreciate the values that the new product carries.

We have spoken about our current situation, the segmentation, position, and differentiation of our new product and product line, the target market, our distributors and retailers, as well as our price promotion. Now, we must develop an Integrated Marketing Communication plan to truly drive our market potential.

**Developing the IMC Plan**

Integrated Marketing Communication or “IMC” is defined as, “carefully integrating and coordinating the company’s many communications channels to deliver a clear, consistent, and compelling message about the organization and its products.” IMC is made up of a blend of tools in the promotion mix. These tools include advertising, personal selling, sales promotion, public relations, and direct marketing. Having integrated marketing communications is extremely important to the success of “Spicy Nashville Style Hot Chicken with Cauli Rice” and the Bright Meals+ line, as the digital and marketing world are constantly changing. All portions of the IMC are important for a successful campaign and will be touched on, however, the three most important, to us, are advertising, sales promotion, and public relations. Having a strong IMC will help Bright Meals to market to their target audience through multiple channels.

**Advertising**

To start, advertising will be one of the most important and costly promotion tools for Bright Meals. Advertising consists of medias such as television, radio, print, and digital ads. One of the biggest benefits of advertising is that while it comes at a high overall price, it has a low cost per exposure. With expected demand of 24.5 million units in the first year, Bright Meals needs to ensure it can reach a wide audience with low cost per exposure. In addition, an advertising plan will add to the legitimacy of the new product and the creation of the Bright Meals+ line. Advertising to a mass audience has the effect that consumers will believe a product is more successful and widely adopted. In turn, a large advertising campaign can bring in sales quickly and build up the Bright Meals+ image - this has current and future financial benefits. The advertising budget should be created through
the objective-and-task method, which estimates costs based on desired tasks and results. This is the right method to use because there are very specific objectives that need to be hit, such as the 24.5 million in unit sales. Therefore, advertising dollars need to be spent in a way that ensures this is accomplished.

**Sales Promotion**

Sales promotion will also be an important part of the success of this new product and the potentially new line. Sales promotion uses tools such as discounts and coupons to boost sales. This tactic will be important when “Spicy Nashville Style Hot Chicken with Cauli Rice” hits the shelves. For example, by offering a discount in price through a coupon, it can break down the barriers that may restrict new, skeptical customers from buying our product. In addition, we could use sales promotion in the form of a BOGO coupon for the new product. Imagine, Mary is a 32-year-old mom who frequently purchases Bright Meals for her family. If she receives a coupon introducing Bright Meals+, she may pick up “Spicy Nashville Style Hot Chicken with Cauli Rice” for her husband to bring to work for lunch. When her husband finds that he enjoys the meals, Mary will continue purchasing the regular Bright Meals items along with the new product line as well. In turn, minimizing the cannibalization of our other products.

**Public Relations**

Next, we believe that public relations will be essential to Bright Meals, as a whole, along with the new line. The part of public relations that will be especially important is press relations and product publicity. Bright Meals can use press relations to attract attention to the fact they are moving to a healthier and more transparent image with the beginning of their Bright Meals+ line. Bright Meals could come out with educational programs or special events that dictate the importance of organic food items and eating healthier. Similarly, Bright Meals can be more specific in their public relations with product publicity for the new “Spicy Nashville Style Hot Chicken with Cauli Rice”. Special events and launch day activities can attract good publicity from the press. A public relations campaign is essential as our target consumer, millennials, are especially sensitive to social justice. Seeing the change that Bright meals is making through the media would help to satisfy their interest in social good. We will speak later, in more depth, on how social media can help us achieve this.
Personal Selling and Direct Marketing

Finally, while not the primary focus, Bright Meals still cannot ignore the need for personal selling and direct marketing. Personal selling will be important in that our sales force must be educated on the new product. The sales team can then sell the new products or potentially new plus line to existing and new retailers. On the other hand, direct marketing could be used in the form of direct mailing or customized online ads to target customers as well. Although they are much smaller players in our strategy, personal selling and direct marketing have their benefits. However, for Bright Meals+, it is best we focus mostly on advertising, sales promotion, and public relations.

In the realm of advertising, we must develop a communication strategy – an essential aspect of a successful IMC. For a communication strategy to perform clearly and effectively, it needs to be memorable for consumers. The most successful strategies have used a combination of word hook, character hook, a repeatable theme, a distinct design layout, and/or a consistent brand layout. Using one or multiple of these strategies will help build up the brand image of Bright Meals and the future plus line, as well as drive high sales. Our team is recommending that Bright Meals use a combination of a character hook, word hook, and distinct design layout in the present time with the opportunity to bring in elements of a repeatable theme in the future. These strategies will be used in a variety of media outlets including outdoor, television, and online advertising.
Building our Communication Strategy

A New Commercial

Our communication strategy is built around a commercial we will launch. We have developed a mock-up for our first commercial: Imagine, the sun rises on a rural Bright Meals cauliflower farm. The bright green plants contrast well with the clear blue sky and rustic red barns. Rob Gronkowski or “Gronk”, the 6’6” 268 lb. tight end for the New England Patriots, walks out in full farm-work clothing to meet a group of hard-working farmers. The farmers find it comical to see such a big guy, usually found in a football uniform, looking uncomfortable in overalls and boots. They mention they will be putting him to work today helping to harvest the current cauliflower crop. The commercial flashes to different parts of the day, although Gronk is big and strong, he is exhausted. The other farmers joke around and lightly make fun of the football star for not being able to keep up with their daily work grind. The commercial flashes again to evening time, Gronk has just finished for the day and is absolutely exhausted. He retreats to the farm house where the other farmers pull out their “Spicy Nashville Style Hot Chicken with Cauli Rice” to taste their hard day’s work. The farmers mention their pride of growing fresh cauliflower for Bright Meals+ and believing in the Hardy + Healthy promise as it keeps them strong and satisfied, and Gronk mentions it tastes great too. The commercial flashes forward a final time, and Gronk is getting home after a big game, once again exhausted. He opens his freezer and pulls out “Spicy Nashville Style Hot Chicken with Cauli Rice” and smirks, reminiscing of his day on the farm.

Additionally, the concept of this commercial will be spread to multiple other forms of media and advertising, referencing the commercial. For example, there could be an outdoor billboard with Gronk in the same clothes standing with a farmer and bold letters stating “The Hardy + Healthy Promise”. A similar ad could appear on the banners of websites or through email distribution. Finally, there are opportunities to create new commercials and ads with Rob Gronkowski once again emphasizing the Hardy + Healthy promise.

A Strong Character

The combination of a character hook, word hook, repeatable theme, and distinct design layout, leads to believe that the ads will be very popular, if not viral. The character hook comes in the form of Rob Gronkowski. While the initial commercial only depicts Gronk in a certain situation. We believe there is potential to use him again and again in future advertisement making a true “hook”. For example, imagine “Chicken Parmesan” becomes the newest Bright Meals+ option. Gronk could be seen in an Italian kitchen learning to make fresh pasta from a sweet grandmother. Gronk makes an ideal character hook due to his connection to our target market.
the health-conscious millennial male. Athletes are strong opinion leaders for this audience, as well as have face and name recognition. In addition, Gronk exudes masculinity and fitness with his football career and 6’6” frame. Millennial men will look to him in terms of lifestyle and health choices, while also trusting his opinion.

**Emphasizing the Hardy + Healthy Promise**

Our communication strategy also includes a word hook, the “Hardy + Healthy Promise”. This hook will appear on anything from commercials, to billboards, to print, and packaging. We wanted the hook to first bring in the “+” signified by the proposed Bright Meals+ line. The word “Hardy” demonstrates that the meal is a satisfying, filling alternative to some of the other healthy frozen meal brands. Similarly, it is an attractive word to our target audience. Millennial men who are concerned about protein intake and building muscle will be attracted to a product that promises to be “Hardy”. Finally, we used the word “Healthy” to signify that even with the heavier portions, this is still a nutritious meal. This helps to differentiate from much of the high calorie content frozen foods, such as our competitor Hungry Man.

![Bright Meals](image)

**A Striking Design**

The distinct design layout we will be using will be prevalent in all forms of media used in our communication strategy. Currently, Bright Meals uses a red, white, and blue layout. While these are strong patriotic colors, we believe that adding green to the Bright Meals+ line will help signify the new move toward healthy and transparent ingredients. The health-conscious millennial male we are targeting will see green and instantly understand that this a healthier option. This design layout is visible in the commercial, as well, where the sky will be blue, fields will be green, and barns will be red. Similarly, these same three colors will appear on billboards, packaging, the website, and any other form of advertisement. The green will also help to create the distinction
between the current Bright Meals products and the new Bright Meals+ line.

Finally, looking forward, we believe the communication strategy has the potential of expanding into a repeatable theme. A repeatable theme consistently plays out a “situation”. The initial launch is limited to one character (Gronk), in one uncomfortable situation (Farm). We want to keep the opening communication strategy simple, strong, and in accordance with our limited budget. However, we believe that there is potential to further expand this idea into a repeatable theme by either changing out the character with different athletes and musicians, thus focusing less on the character hook, or changing the type of uncomfortable situations. For example, with a bigger budget, rap group “Migos” could be seen trying to learn how to make Nashville Hot Chicken in Nashville with a group of thick-accented southern men listening to country music. Migos would be obviously uncomfortable in a different environment. Additionally, Migos would be recognizable by the male millennial audience we are targeting.

A New Website: Interactive, Informational, and Inspiring

It is essential that Bright Meals begin the addition of “Spicy Nashville Style Hot Chicken with Cauli Rice” and the new Bright Meals+ line with a unique and recognizable communication strategy. It is also imperative that this strategy align with what it is important to our target market, the health-conscious millennial male. By combining a strong design layout, a recognizable and admired character, and a memorable word hook, we can perfectly target the needs and interests of this group (Figure M2).

To promote the new Bright Meals+ brand amongst the crowded frozen food section, a high-quality website is necessary so that consumers understand a holistic view of the new product as well as the new Bright Meals+ product line. Additionally, being that our target market is the health-conscious millennial male, it is important that the website aligns with the digitally in-touch millennials who crave social interaction. The previous audience of 28-40-year-old moms would desire different online content then our new target market. Our website is designed to be interactive, informational, and inspiring. In addition, we wanted to craft something that would be extremely eye catching. Sticking to our design aesthetic and including our logo helps to strengthen our brand identity.

Interactive

The first thing we were concerned about when crafting a website is interaction. Millennials have grown up in an age of constant interaction over online channels. When once food was simply a means of nutrition, it
has now grown to online recipe boards, the desire to post an attractive meal on Instagram, and endless reviews of restaurants and recipes. Therefore, it is imperative that Bright Meals+ emphasizes interaction. This interaction comes in the form of connection to social media, as well as through the website itself. We wanted to ensure that our customers could link the website to our social media pages where they can tag us in pictures or post reviews. Similarly, we wanted customers to feel connected through the website. Bright Meals+ can invoke consumer created media to allow customers to vote on flavors and feel that they are a key part of the company’s decision-making process.

**Informational**

Next, we wanted to ensure our site was informational. Tabs at the top of the page make it easier for customers to see where they can find Bright Meals+ entrees around them, as well as special offers. Similarly, they can find news about our products and processes. For example, Bright Meals can post articles to the site about environment sustainability or other trends within the frozen foods industry. Finally, customers can learn about our new product, the “Spicy Nashville Style Hot Chicken with Cauli Rice”. This could include nutritional information as well as ingredient lists. This is important to cater to our health-conscious audience who will want to know concrete facts about what they are eating.
Inspirational

Lastly, we wanted our website to be inspirational. This inspiration falls in the forms of stories of happy customers as well as farmers and workers. We included our character, “Gronk”, where we could post his commercial as well as a potential story about his experience on the farm. Similarly, we wanted to include the farmers that help grow our products along with their story. Finally, and most importantly, it is essential that our customers understand our story and promise as a brand. Discussing the company’s history, as well as our forward thinking in becoming more transparent, environmentally-friendly, and socially-conscious is key. Millennials are characterized by their sensitivity to environmental and social issues when compared with older generations. Sharing our story will help us to form a strong connection to our core customer.

Mass Media and Direct Marketing

In looking to change up from our traditional market of 28-40-year-old moms into the realm of health-conscious millennial males, Bright Meals needs to ensure its campaign can target the new audience. A great tool to provide a more specific approach is direct marketing. Direct marketing is defined as “targeting individual consumers to both obtain an immediate response and cultivate lasting customer relationships”. Direct marketing also provides more potent advertising by focusing on those in our target market. Recently, direct marketing has taken a non-traditional approach through viral and digital strategies. Similarly, companies have been skipping the use of mass media and instead choosing to launch advertisements only on digital platforms. It is important for us to take note of this recent and successful trend in order to remain competitive amongst advertisers.

Our team is focusing on blending the ideas of both mass media and direct marketing, otherwise known as broadcasting and narrowcasting. Mass media is still important to our marketing plan through traditional channels such as tv, because, as mentioned earlier, we have a high sales target we need to achieve. However, we can blend this with direct marketing and using non-traditional outlets to also put a stronger focus on the health-conscious millennial male.

Direct marketing through digital advertisements could be executed using targeted online advertisements. One example is the use of Google Ads. Based on previous searches, Google can identify key customer traits and interests. Then our ads can be pushed out to those that fit our target customer. For example, if someone has searched items like “Fantasy Football”, “Protein Powder”, and “Graduate Schools” we could identify them as potentially being part of our target market, health-conscious millennial males. This is an effective and cost saving
strategy as we would be paying per 1000 impressions instead of a nationwide flat price. Similarly, one of the primary advantages is that it would be more effective, as those being targeted would likely fit into our ideal customer description.

Similarly, we can also use non-traditional media in another ways. Recently, companies have been initially forgoing mass media to start new advertisement campaigns solely through digital platforms. For example, Heineken recently began a campaign with a commercial that debuted on YouTube and Facebook before hitting TV months later. Bright Meals could potentially use the “Gronk” commercial on Facebook, YouTube, and streaming services like Hulu before moving it to television. This has two advantages. First, it mitigates the risk of losing millions of dollars if the ad flops. By starting at a lower cost method, we can test our concept before fully launching. Next, this strategy is more in sync with millennial habits. As more millennials move toward streaming services, this tactic would have a better chance of catching their attention.

**Social Media**

With the addition of a new product line, Bright Meals must revitalize its social media. There are various social media strategies Bright Meals could incorporate effectively. We would like to focus primarily on utilizing YouTube, Instagram, and Twitter, as well as, Facebook. YouTube is particularly used to build brand image. The combination of audio and visual components with shareability makes product promotion and entertainment easier than ever. Above, we outlined just one way that our YouTube could be used to further our brand in the
consumers mindset, as well as test the market. For Bright Meals, Instagram’s primary use will community building. We’d like to primarily repost consumer’s photos of them enjoying our meals as well as run competitions, promotions, and share content in line with our Hardy + Healthy Promise. [Figure M3 and M4] Most of our social media engagement will happen through Twitter. Twitter is a social media platform that can either make or break a company. Many companies even take on elaborate personalities through their Twitter, such as Wendy’s. Twitter can be used to educate, address brand issues, share promotions, and engage the community. Management has already expressed interest in sharing news stories that, while not 100% relevant, impact our business—such as research and studies about organic, non-GMO ingredients, recycling your plastics, carbon footprints, as well as general nutritional information. If Bright Meals can mix education in with a sense of humor, we will be able to gain quite a following on Twitter. Again, we can use our Hardy + Healthy Promise commercials in various lights through: sneak peaks of upcoming commercials, behind the scenes, reaction gifs, and fun facts. Lastly in order to tailor our marketing, we would like to utilize Facebook. Facebook allows users to “like” our page, post reviews, stay updated on everything that’s happening across our various platforms, create communities, and share our posts. Much like the Google Ads example given above, Facebook Audience is a feature for sponsored posts where we can create our ideal “seed” audience based off of demographic and geographic details, as well as preferences. This will in turn make targeting to the health-conscious millennial male easier than ever.

**Embracing the Change**

The frozen meal industry has changed for the better and Bright Meals must get on board. The industry is evolving in the era of transparency. Consumers, now more than ever, demand transparency in a company’s ingredients, social affairs, and environmental efforts. Price is no longer the only determinant in a sale. Bright Meals has to battle with many competitors in a very saturated market with limited shelf-space and shelf-life. We must increase name recognition, develop new customer perceptions, build brand equity, and increase brand awareness. Our strategy outlines utilizing our market share to trigger product acceptance, developing new market positions, furthering customer perceived value, targeting a new demographic never focused on before, working with many retailers, promoting and pricing our product, as well as overhauling our website and our social media. Closely following this strategy and the others we have outlined, will lead Bright Meals into a promising future.
Figure M1: Positioning Map
NEW! Spicy Nashville Style Hot Chicken with Cauli Rice

Click here to learn more about the hardy + healthy promise.
Figure M3:

170 likes

**brightmealsbrand** See what’s going on with Rob “Gronk” Gronkowski on our YouTube page! Link in the bio! 🌿,epidemic, #thehealthylifestylepromise

Figure M4:

111 likes

**brightmealsbrand** This post comes from our #healthyhardycommunity member, Mike in Indiana. “I love my Homestyle Chicken Tenders from Bright Meals. A perfect snack after a good workout.”
Team 80: Jacobs Consulting

OPERATIONS

From Idea to Execution
Operations: From Inception to Shelves

Once the management and marketing strategies have been outlined, we must focus on the actual production of the product. The new Bright Meals+ line requires scheduling, larger package sizes, equipment, new organic suppliers, aggregate production planning, and quality controls. Using everything that we have determined to be our production force and our sales plan, we outline the activities below.

Creating a Project Schedule

Bright Meals currently desires to achieve a project schedule for the new product launch that would allow it to hit shelves in time for peak season. Our team has developed a schedule for Bright Meals to achieve a product launch in 19 weeks while sustaining a crash cost of $28,500. The original project schedule for the new product was scheduled to take 25 weeks to complete. However, through shortening the duration of some activities, our team was able to achieve a 19-week completion time with the lowest costs possible.

As demonstrated below, the initial project scheduling allotted the product launch 25 weeks for completion. There were multiple activities that had slack time, or the most time an activity could be delayed without delaying the entire project. The problem with this strategy, however, is the failure to reach the 19-week target time which would not allow the new product to reach the market in time for peak sales, causing failure to meet sales expectations, a falling stock price, and unhappy distributors/retailers. We have chosen to include the uncrashed version of the Gantt chart (Figure P1 and P2), so that the operations team can clearly compare it with the crashed version to identify key changes in the timing of different activities. Changing the timing of events can affect the timelines for other activities belonging to the finance, marketing, and management teams. Additionally, we chose to display both charts as early start and early finish, due to the short time frame and urgency in having the project completed in 19 weeks (Figure P3 and P4). The ES/EF charts emphasize completing tasks as soon as it is possible. Finally, it is important to note that both charts include the installation of new equipment.
A 19 Week Plan

Below is the recommended strategy according to our team. The new project schedule would allow the project to be completed before peak season while incurring crash costs. The activities that will be shortened are recipe testing, producing the final recipe, sourcing raw materials, making promo plans, and starting shipment. As demonstrated by the Gantt chart, there is still slack time in the activities of package design, production method design, and installation of new equipment. This allows a buffer should some activities require additional human resources to be completed on time. It is important to note that no administrative savings were given. However, while we cannot quantify this, we do believe that there could be some savings by finishing the project in less time. That, combined with the potential to hit peak sales time, make it imperative that Bright Meals shorten the project time.

It is important to note that it is possible for Bright Meals to complete the project launch in 17 weeks with a crash cost of $50,500 by further shortening the evaluating data and consumer testing activities. Our team chose not to select this option because of the high costs. However, before project launch, if there are any changes in strategy such as the desire to beat a competitor to market or expected changes in the industry, then a 17-week strategy may then be more appropriate. However, in the interest of cost savings we recommend the 19-week plan given the current strategy.

Making an Equipment Decision

In order to adjust for the 14-oz packages that the “Spicy Nashville Style Hot Chicken with Cauli Rice” requires, Bright Meals faces the task of modifying or purchasing new equipment. Initially, it was expected that modifying the existing line would require a minimum three weeks’ time while purchasing and installing new equipment would take eight weeks’ time. Our team discovered through the analysis of the first Gantt Chart that this was not a concern given the eight-week slack period for the current eight-week activity of modifying new equipment. Put simply, there are 16 weeks available for either a three week or eight-week project.

However, the costs associated with this change cause for further investigation. We made a tree detailing the three options of modifying the current equipment inhouse, modifying the current equipment through an outside firm, or purchasing new equipment (Figure P5). The inhouse option would have an expected cost of $620,000, the outside firm option would have an expected cost of $572,000, and the purchasing of new equip-
ment would have an expected cost of $575,000. It is important to note that these figures are not absolute; they are calculated given the probabilities of lesser or greater costs for each option. There is some uncertainty involved. For example, if Bright Meals were to choose the inhouse modification process, they could pay as low as $350,000 or as high as $800,000.

**Purchasing New Equipment**

Despite the additional $3000 in expected cost as compared to the lowest expected cost item (using an outside firm for modification), we, at Jacobs Consulting, recommend Bright Meals purchase new equipment. The new equipment will allow both plants to have a higher capacity, as well as allow quicker changes from one product size to another. In addition, purchasing new equipment is less variable given that the highest possible cost at $625,000 is lower than the highest possible cost for the other two options at $660,000 and $800,000, respectively. Furthermore, higher capacity is important to Bright Meals’ long-term strategy as we may want to add additional products as they continue to grow. The new strategy of the Bright Meals+ line has the potential for growth in demand in the coming years. Therefore, it is important that Bright Meals have excess capacity to meet this demand in the future. In addition, the ability to change quickly from one product size to another will cut down on idle machine time. Idle machines can cause lessened productivity and failure to meet demand. Finally, the ability to change sizes could allow for the production of both larger and smaller sizes, including the current 9.5-oz size. Again, purchasing new equipment now is important to future production as Bright Meals may choose to offer, for example, family sized or health-conscious portion options.

Once the project schedule and the equipment purchase has been decided, Bright Meals must consider its suppliers. Now that BrightMeals+ is moving towards non-GMO, organic ingredients, we must expect higher costs and more spoilage due to the lack of preservatives and pesticides. When comparing suppliers, it's important
to take their ordering policies, such as price and lead time, as well as their quality into consideration.

**Evaluating Suppliers**

**Order Policies**

For any company in the Frozen Foods Market, Supplier Relations is a core aspect of the business. Frozen foods are limited in grocery shelf space, shelf life, and must compete with many competitors. Bright Meals has to differentiate itself from its competitors through the quality of its ingredients. First, however, they must make sure that they can afford to purchase from said suppliers with quality ingredients. Bright Meals is currently analyzing three separate suppliers: Midwest Farms, Pacific Produce LLC, and Southeast Supply Corp.

In order to compare the three suppliers, we must devise a Basic Fixed Order Quantity Model. The following assumptions were made: the demand for the “Spicy Nashville Style Hot Chicken with Cauli Rice” is constant meaning the 24.5 million dollar evaluation is already considering peak sales, the organic cauliflower is received in lots, the decisions for one item does not affect another item, there is no uncertainty for demand or supply, replenishment is instantaneous, and holding, setup, and purchasing costs are the only relevant costs. Below are all assumptions we made in calculating the optimal order quantities.

**Assumptions:**

- **Yearly Demand:** 24.5 Million Meals
- **Daily Demand:** 67,124 Units
- **Operating Days:** 365 Per Year
- **Ounces of Rice Per Meal:** 8 oz.
- **Daily Demand in oz.:** 536,987 oz.
- **Cost of Capital:** 4.89%
- **Annual per Unit Carrying Cost:** 9.89%

**Optimal Order Quantities**

Midwest Farms requires 10 days’ notice (lead time) in order to provide Bright Meals with organic produce. They expect an average ordering cost of $24 (including shipping) for each order placed. They price organic cauliflower at $2 per ounce. Using this information, we were able to find the optimal amount to order each time we order (Q) to be ~ 218,090 ounces of cauliflower. With that being said, Bright Meals will place and receive orders nearly two times a day. Ultimately, each order of Q will last for .41 of a day, meaning that an order would need to be placed every 3.25 hours of the work day. If Bright Meals were to place an order two times a day as well as receive shipments two times a day, we would end up having leftover inventory at the end of each day – this will make for a nice buffer, aka safety stock, against spoilage which is guaranteed to occur but
uncertain in what degree. It may seem that the $24 cost to place an order is negligible, but there are other costs associated with transporting goods. Much concern has recently been placed on exhaust pollution and the frozen food market is a heavy player. There is much worry that soon environmental activist groups will put pressure on the frozen food producers to lower their emissions. For these reasons, it is highly recommended that we do not order and receive shipments multiple times a day.

1. Midwest Farms Ordering Quantity

If we were to accept Midwest Farms offer, the two orders that Bright Meals places a day would be received in 10 days, meaning in those 10 days Bright Meals would have burned through 5,369,862 ounces of cauliflower. Ordering the optimal Q every 3.25 hours of the nine-hour work day and receiving two times a day, would place the total annual holding costs (TAHC) and total annual setup costs (TASC) at $21,569. The total annual purchasing cost (TAPC) would be $392 million dollars, making the total annual cost (TAC) roughly $392,043,138. It is important to note that, however spoilage is certain, the spoilage rate is uncertain. Due to this, our cost figures do not include repurchasing inventory that will be lost due to spoilage. It is safe to assume that the cost figures will grow. We will speak more on this later.

2. Pacific Produce LLC Ordering Quantity

Pacific Produce LLC, the second supplier in question, has a longer leadtime of 21 days, an average ordering cost of $40 (including shipping), and a per ounce price of $2.50. We were able to find the optimal order quantity (Q) to be ~251,829 ounces of cauliflower with meals being placed every ~ 3.75 hours of the work day. The TAHC and TASC would equate to $31,132. The TAPC would make up the largest portion of the total cost at around $490,000,000. Lastly, the total annual cost (TAC) for using Pacific Produce LLC as a supplier would be $490,062,264.

3. Southeast Supply Corp Ordering Quantity

The final supplier in question, Southeast Supply Corp, has the shortest lead time with five days. They require an average ordering cost of $18. No information was given on the shipping rate, so we shall assume it is included in the price as the other two suppliers offered. They ask for $2.20 per ounce of organic cauliflower. Using the given information, we were able to find a Q of ~ 180,082 ounces of cauliflower. The orders would need to be placed roughly every 2.5 hours of the work day. At the optimal order level, the total annual holding and
setup costs will be the same. The TAHC and TASC are $19,591.10, the TAPC is $431,200,000, and the TAC are $431,239,182 (Figure P6).

A Brief Note

When comparing the suppliers, the first thing that we noticed is that the suppliers were willing to supply Bright Meals with one ounce of cauliflower for $2, $2.50, and $2.20, respectively. Each one of the “Spicy Nashville Style Hot Chicken with Cauli Rice” meals, we are assuming, is going to contain one full serving of vegetables, which is eight ounces. Meaning the sole cost of organic cauliflower would be roughly around $16 per meal. This would likely put us way beyond the price point of our competitors and what our customers are willing to pay. Therefore, it is not a feasible option to do business with any of these suppliers at that price. Further analysis found that if Bright Meals was to work with their suppliers on a more realistic price for a higher quantity, say $2, $2.50, and $2.20 per 100 ounces, respectively, we could see a much better margin. For example, if Bright Meals were to purchase from Midwest Farms at a rate of $2 per 100 ounces, each meal would have an organic cauliflower cost of 16 cents. Which is much more closely related to our variable cost and our wholesaling price of $2.20. If Bright Meals was able to successfully make a deal with our suppliers, each optimal Q would grow by 10 times and the time between orders would no longer be multiple times a day, instead 4.06, 4.69, and 3.35 days apart, respectively. For each of the suppliers, the total annual costs will be nearly 100 times cheaper, $3,924,313.82, $4,906,226.46, and $4,316,918.22, respectively.
Given the information provided from the suppliers, if Bright Meals cannot strike a deal, we should look elsewhere for a supplier who is willing to supply larger quantities at much lower prices. If we were able to strike a deal with the suppliers, then, from a purely economic standpoint, Midwest Farms would be the best supplier to work with. They have the cheapest price per ounce, thus the cheapest total annual purchasing cost and total annual cost.

One aspect that adversely affects cost that Bright Meals must be weary of is lead time. Lead times can never be certain; shipping obstructions may occur at any time due to events such as material shortages, human error, natural disasters, etc. Lead time also varies among supply chain sources. Assuming that Bright Meals works with Midwest Farms for their produce needs, they will most likely have a different supplier for their chicken. One unit of “Spicy Nashville Style Hot Chicken with Cauli Rice” requires both cauliflower and chicken. Differing lead times will lead to excess inventory and increased spoilage, thus increased costs due to the constant repurchasing. Another risk with longer lead times is the chance of a stock-out. We assumed that the demand would be constant, but that does guarantee that it will be. If the “Spicy Nashville Style Hot Chicken with Cauli Rice” were to become extremely popular or a replenishment order was forgotten, then longer lead times may make Bright Meals run out of inventory, leading to a very costly halt in production. By using Midwest Farms, Bright Meals can expect a lead time of ten days, which is not the shortest of the three suppliers nor the longest.

**Supplier Quality**
The transition to healthy, organic foods from dry, preserved alternatives bears a new weight in quality control. One must begin to consider the durability of the produce. Dry grains, used in pastas and for rice, have shelf lives for months. Organic cauliflower and other produce’s shelf life is much shorter – every day matters. The typical rate of spoilage on a shipment is 10%. Using the given statistics and Ms. Ryan’s samples, all three of Bright Meal’s suppliers were well within the typical spoilage rate.

In order to compare the suppliers, we must construct control charts and determine if each sample is in-control or out of control when compared to the respective supplier’s given sample. When a process is “in-control”, all of the assignable causes of variation have been eradicated from the process and only determents due to environmental factors remain. These determents cannot be traced back to a single origin, should appear random, and not follow any historical patterns. However, when deviations from the expected center line are found, such as patterns or outliers, the process is “out of control” and should be adjusted. Notice, even if a center line of a process is below the typical rate, that does not mean that the process will be in-control, as the two are mutually-exclusive.

1. Midwest Farms Quality

When comparing Ms. Ryan’s test samples to the in-control sample provided by Midwest Farms, all three test samples were found to be out of control. The center line from the provided sample was found to be 5.21% (Figure P7a). Test Sample 1 had eight samples (out of the 20 samples taken) with an average spoilage rate above the provided average rate (Figure P7b). At first glance, Test Sample 2 seems in-control. However, the average spoilage rate for sample 11 was found to be above the upper control limit of the in-control sample provided, thus rendering the sample out of control (Figure P7c). Finally, for the Test Sample 3 taken by Ms. Ryan for Midwest Farms, each sample was found to be above the upper control limit of the in-control sample. The average spoilage rate for Test Sample 3 was calculated at 7.21%, which is still below the typical spoilage rate for organic cauliflower of 10%, however above the in-control sample’s upper control limit of 5.44% (Figure P7d). As stated above, each of the Ms. Ryan’s test samples were well within the typical spoilage rate for organic cauliflower, however Ms. Ryan’s investigation resulted in drastically different outcomes than the sample provided by Midwest Farms. From a purely quality standpoint, Midwest Farms is not the optimal performer and Bright Meals should not do business with them if they want to reduce their spoilage rate, thus minimizing costs.
**2. Pacific Produce LLC Quality**

Pacific Produce LLC also supplied an in-control sample and Ms. Ryan was able to take two additional samples for comparison. The average spoilage rate per shipment from the Pacific Produce's in-control sample was found to be 5.29% - which is still well below the typical rate, however it is slightly above Midwest Farm's rate. When comparing Test Sample 1 to the provided sample, the sample is found to be in-control – no observable patterns, consecutive points, and/or points outside/near our limits. However, closer observation found that the first 12 samples of the 17 samples, were the exact same as the provided sample. It seems as if an error occurred where the same shipments were counted twice –thus forcing us to discredibly the sample (Figure P8a and P9b). Ms. Ryan’s second sample test of Pacific Produce LLC’s shipments had an average spoilage rate of 5.19% which is better than the provided sample’s center line. However, there is an observable sawtooth pattern when looking at the average spoilage of the samples thus rendering the test sample out of control (Figure P8c). Again, each of the test samples were well within the 10% requirement, however Ms. Ryan’s sample tests had observable patterns as well as duplicate data. Bright Meals should look elsewhere for a supplier as the data provided is not enough to make to make an honest judgement about quality control for Pacific Produce LLC.

**3. Southeast Supply Corp Quality**

Lastly, Ms. Ryan gathered additional data on the spoilage rate in Southeast Supply Corp’s shipments. They also provided their own in-control sample with a center line of 5.2%, which is comfortably below the 10% suitable spoilage rate for organic cauliflower, as well as the lowest of the three suppliers (Figure P9a). Ms. Ryan’s first two test samples were found to be in-control with no observable patterns, outliers, and/or general determents from the provided average. Both Test Sample 1 and 2 had a rounded average spoilage rate of 5.19% (Figure P9b and P9c). Ms. Ryan’s Southeast Supply Corp’s Test Sample 3 is closely related to Midwest Farm’s Test Sample 3 in which every point is well above the upper control limit of the provided sample, with an average spoilage rate greater than 7.2%. The sample is clearly out of control, but represents a realistic “worst case scenario” as the other three samples were well in-control and closely related to each other. Even with a “worst case scenario” spoilage rate of 7.2%, it still leaves a buffer from the typical spoilage rate for organic cauliflower (Figure P9d). From a quality standpoint, Southeast Supply would make the best supplier. Utilizing Southeast Supply Corp, Bright Meals can expect to realistically have a spoilage rate that is nearly half the typical rate, thus minimizing costs. There is an off chance that the shipment will have a spoilage rate of 7.2%, however this is still comfortably below the typical rate of 10%.
Final Choice

Taking into consideration ordering policies and supplier quality, Bright Meals should work with Southeast Supply Corp. Southeast Supply Corp’s test samples were found to be mostly in-control and a “worst case scenario” still comfortably below the typical rate – making them a safe choice. Southeast Supply Corp. had the second highest annual costs but the shortest lead time. For all of the stated reasons above, shorter lead times allow buffer and ward off unexpected costs. Southeast Supply Corp. may cost more upfront but operates much more predictably and will make a great choice in supplier. There are various dimensions to quality as well as costs, such as: prevention, appraisal, external and internal failures. The closer the failure event occurs to the customer and the farther it is removed from its source the costlier it is. One way to combat these heavy costs is by spending more on prevention, as expenditures to improve quality are generally less than what will be saved from allowing a failure farther down the line. Paying more to work with Southeast Supply Corp, utilizing their shorter lead times, as well as their lower spoilage rates will be more cost effective than if we were to work with another supplier and allow our food to spoil more quickly down the line. We will get into quality control a bit later, but first we must develop a process plan and determine our stakeholders.

Operational Characteristics

We have spent much time going over management, marketing, and now project scheduling, packaging, equipment purchases, and our suppliers. Now, we must outline the major operational planning activities. Assuming that Bright Meals operates using an Enterprise Resource Planning (ERP) system to track orders, inventory, and purchases, we must first focus on the long-term with a process plan. Process planning involves determining the sequence of operations or processes needed to produce a single unit. We developed a Business Process Model & Notation (BPMN) Chart to highlight the key activities (Figure P10).

After drafting the process plan, Bright Meals must forecast the capacity requirements to meet our anticipated demand of 24.5 million units for one year, thus developing a capacity plan. Once the capacity plan is underway, we must determine our time buckets, production rates, work-force levels, and inventory requirements. Operations’ upper management will have to strategically work together with management’s upper level in order to gather information about time periods (time horizon and time buckets) and what the workforce level and production output will be. From our own analysis, Bright Meals will have 31 production workers for the first year that will produce at a rate of 380 units per hour. However, operations must stay in tune with management in cases of turnover, etc. Due to economies of scale, as time passes our production workers should become more
effective and our production rate should increase. Once the aggregate operations plan and sales plan have been
developed, Bright Meals will need to begin disaggregation and break down our “products” into more real end
product items that can be handled appropriately. Simply put, the master production schedule places emphasis
on the smaller sub-segments in the larger grand scheme of things. Once that has been approved, we will need
to calculate the final material components needed to manufacture the final product, thus creating the material
requirements plan.

A purchase requisition must be filed and approved before a purchase order is placed and an order sched-
ule, that determines delivery times, is drafted. Once the shipment has been received after waiting the suggested
lead time, our production workers must scan in inventory, organize the units into their respective departments,
assemble the product, and ready for shipment to our distributers and/or retailers. Operations management will
be tasked with continually checking for approval, updating, and monitoring for fallacies in the ERP system. The
process should repeat over and over again until the end of the year when new forecasting must be done for antici-
ipated demand.

**Key Stakeholders**

Within any manufacturing company, the operations department is a huge, vital component of the busi-
ness with many stakeholders. One could argue that every single person in the business has express interest in the
operations department because the success of operations will determine the success of every other department.
We will break down operations’ key stakeholders into the following groups: employees, shareholders, our suppli-
ers, our retailers/distributors, and our customers.

**Internal Stakeholders**

Our employees’ livelihood depends on the success of operations. Simply put, without successful produc-
tion, there is no product to sell. With no product to sell, there is no business. Without a business, there are no jobs. Our employees’ effectively work in the best interest of keeping a job, thus they want what is best for the business in the long-term. Our shareholders’ interest in the operations department is similar except they have money and not job security on the line.

External Stakeholders

As for external stakeholders, we must consider how the success of our operations department affects our suppliers, distributors/retailers, and customers. The new Bright Meals+ line is making a change to non-GMO, organic produce and putting an emphasis on working with smaller farmers. If our operations department operates less than successfully, we put much unnecessary stress on our farmers – from miscommunication to job security. Many of our distributors/retailers will be larger scale and our poor operations may very well not risk job security. However, our less than effective operations can lead them to miss quotas, deadlines, etc., in return upsetting their own stakeholders. As for our consumers, they require the success for the operations department as to ensure that their food is labeled correctly, within the expiration date, portioned and packaged correctly. Ultimately, they are the ones that must put our product into their being and risk their own health. The operations department has a lot of weight on its shoulders and must insure that it has all the necessary information when conducting production.

Inter-Department Communication

As stated before, the operations department must work closely with the management department for labor considerations. Just to begin, they must hire, promote, and pay the production workers. The two departments must insure that the employees are well taken care of, trained, and compensated appropriately in order for the success of production. Operations will also seek aide from marketing in forecasting. The two departments must determine a sales plan as this is the foundation of production. Lastly, every purchase that operations makes will need run by the finance department. The finance department will set a budget for operations that includes supply purchases, equipment breakage, department morale, etc. In order for purchase orders to be placed, operations must work with finance to approve purchase requisitions.

The last component of operations is to ensure quality in our final products. If our products do not meet the customer perceived value, our entire operations process will have been for nothing, our stakeholders will be upset, the many departments will begin to fail, and the business will struggle (Figure P11).
Six Sigma Quality

In the frozen food industry, inventory management has been heavily invested in through the creation and use of highly automated systems. Bright Meals has been a leader in its computerized technology to manage supply chain operations, as well as distribution. It is important that Bright Meals continue their strong supply chain management with the addition of the new product. One of the keys to an effective supply chain is total quality management or TQM. TQM is defined as “managing the entire organization so that it excels on all dimensions of products and services that are important to the customer”, the TQM approach we will be using is Six Sigma. Having good quality is important as it results in better customer and vendor relationships, as well as lower costs.

Dimensions of Quality

There are eight dimensions of quality which include: performance, features, reliability, durability, conformance, serviceability, aesthetics, and perceived quality. These dimensions of quality are all important in determining how we evaluate the new “Spicy Nashville Style Hot Chicken with Cauki Rice”.

Performance

In performance, we must analyze if the meal does what it is designed to do. For example, we must ensure that the meal has the correct calorie content and includes the correct portions.

Features

Next, we have to analyze the features of the product for quality. These extra “bells and whistles” could include things such as a steamer top for the Cauki rice.

Reliability and Serviceability

We do not believe that reliability and serviceability, which have to do with repair, are an important dimension for Bright Meals. This is due to the fact that the meal is a disposable product, which will not be repaired.

Durability

As far as durability, we could measure this as the number of products that arrive at a customer or retailer that need to be replaced because they are defective or have spoiled.
Conformance

In relation to conformance, or following the established standards, Bright Meals will have to look at FDA regulations, as well as health and safety procedures.

Aesthetics

Next, aesthetics is extremely important to a food producer. For our products to be high quality, they must look, taste, and smell great. Finally, we must also focus on perceived quality. While much of this is done through our marketing strategy, the operations department must aid in perceived quality by creating good packaging and ensuring a strong reputation.

To ensure our expected level of quality, Jacobs Consulting recommends using Six Sigma Methodology. In Six Sigma, we work to minimize the number of defective products. The probability is that 99% of measurements will fall within plus or minus three standard deviations from the mean. For example, as mentioned, our goal is to have each of the meals weigh 14-oz, and for this purpose we will assume a standard deviation of .02-oz. If we achieved Six Sigma, the probability is that 99% of the meals would weigh between 13.94 and 14.06-oz. The other 1% would be a result of a Type I error, or, for example, we thought a meal weighed 14.10-oz when it actually weighed 14.06-oz. This process follows the steps: Define, Measure, Analyze, Improve, and Control (DMAIC).
Step 1: Define

Beginning with define, we have to identify our customer and their priorities, choose a project suitable for Six-Sigma efforts, and finally, analyze which elements of quality are important to our customers. Using a cross-functional team, with members from Marketing and Operations, we can determine which variables are critical to quality characteristics. Our marketing team has already identified that our customer is the health-conscious millennial male who wants a hardy but healthy option. Some aspects of quality relevant to our customer base that would be suitable for a Six Sigma project could be an accurate calorie count or portion size. For example, we could measure and insure that each meal is within plus or minus three standard deviations of a certain calorie count. Other potential aspects of quality that could be benefited through Six Sigma Methodology include percentage of total defects, total package weight, and/or spoilage. In all, our objective is to determine which aspects of quality are most important to our customers.

Step 2: Measure

After defining, we must follow the measure step. This includes determining how to measure the process and how it is performing. Similarly, we have to look specifically at those processes that create the critical-to-quality characteristics. Let’s use the example related to package weight again. In deciding how to measure, it is best to use the acceptance sampling method - where we take out a small sample from a large batch or production run to test it. If the process appears to be in our control limits, it is accepted and the entire batch is deemed not defective. However, if we were to sample and weigh one of the meals and find that two of the ten observations were over three standard deviations above the mean, we would judge the entire batch as out of control. Other items that could be measured would be, for example, package dimensions in inches and weights of specific items. We also must decide if we are using discrete or continuous data when measuring. An example of defective vs. non-defective would be discrete whereas the weight of a package would be continuous.

Step 3: Analyze

The analyzing phase requires us to determine the most likely cause of defects. Using the measurements taken, we can pool together data that can identify which processes are not up to our standards. For example, using the weight of packages again, pretend we determine that as compared to last month, there are 2x more package weights falling outside of our acceptable range. This is cause for investigation. During
the analyze phase we may list and prioritize ways to improve. One example may be weighing each portion of the product: chicken, cauli rice, and packaging, to determine what is the likely culprit for throwing off the weight.

**Step 4: Improve**

After analyzing, we move into the improve phase where we identify ways to remove the cause of the defects, as well as identify the acceptable range. Sticking with the above example, pretend we find that the cauli rice and actual packaging weights are in the same ranges as before. However, the chicken weights are found to be out of control. Let’s say the average is 6-oz of chicken with a standard deviation of .03-oz. Using Six Sigma, this would mean the acceptable range is between 5.91 and 6.09-oz. By using cause and effect charts and a checksheet system for the chicken, we could dive deeper and find out more about what is causing this process to be out of control. The cause and effect diagram lists multiple possibilities for why there may be a defect in the total weight of the chicken. Figure P12 is a simplified version of a potential cause and effect chart for the out of control chicken weights. Meanwhile, the checksheet (Figure P12a and P12b) helps to identify which of these causes the problem the most often. Finally, the pareto chart (Figure P13c) within the analysis clearly ranks the frequency of these occurrences. Another simplified example of this chart is included. From this, we can identify what main problem or problems is causing the process to be out of control. Once we have uncovered the cause, which in this case is mostly due to a broken part but is also due to multiple issues with human error, we can fix it to keep the chicken within the acceptable range. These charts also help us to be more efficient, as they demonstrate that the environment is not a cause of variation. Not looking into this helps us to save time and money.

**Step 5: Control**

Finally, we arrive at the control phase, where we put tools in place to maintain improvements. This can be in the form of constant monitoring or increased maintenance. In our chicken example, it could mean doing a weekly inspection of machines to ensure that all parts are working correctly. Similarly, we could work with the management team to better train and prepare employees for production. Bright Meals must ensure that we are taking constant measurements to inspect product quality. However, inspection alone will not make a product higher quality. The idea is to take these inspections and practice continuous improvement to ensure all of our processes work closer to 99% in control. Figure P14a and P14b are a new comparative checksheet and pareto chart that show cases that the changes made indeed brought the process in-control. Bright Meals should replicate this system when they encounter and work to fix a problem.
Applying for the ISO 9000

Lastly, another strategy Jacobs Consulting recommends is to demonstrate our outstanding operations by applying for the ISO 9000. This certification signifies that our processes are documented, consistently performed, and suited to task. Bright Meals already has strong operations and automatization. Similarly, we have received numerous awards, already. Receiving this certification would signify our commitment to quality, and ensure that all retailers will be open to our products. Finally, it would also open us up to more international business, should we choose.

Putting it All Together

To conclude, Six Sigma methodology is the perfect project management style for the introduction of the new “Spicy Nashville Style Hot Chicken with Cauli Rice”. It will help Bright Meals to focus on the dimensions of quality that are important to our target market while also maintaining low cost operations. In addition, it will help us to work at peak efficiency, discover problems quickly, and fix them for long term success.

Through our analysis, we have adjusted the project schedule to fit 19 weeks in order to go to market in time for peak sales. We have outlined the estimated costs with purchasing new equipment to create the larger package sizes needed for the Bright Meals+ line. Our team has determined our new supplier of non-GMO, organic produce by weighing overall price and quality. We defined the process plan for the new products and their key stakeholders. Lastly, we gave examples for how quality control will play a major factor in our production. Next, Jacobs Consulting must determine our finances in order to approve the launch of Bright Meals+ with the first product “Spicy Nashville Style Hot Chicken with Cauli Rice.”
Figure P1: Uncrashed Plan Table

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Figure P2: Uncrashed Gantt Chart
## Figure P3: Crashed Plan Table

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## Figure P4: Crashed Gantt Chart
Modify or purchase new equipment?

- **Modify**
  - **Inhouse**
    - .20 -> $350,000
    - .30 -> $500,000
    - .50 -> $800,000
    - EC = $620,000

- **Outside Firm**
  - .80 -> $550,000
  - .20 -> $660,000
  - EC = $572,000

- **New**
  - .40 -> $550,000
  - .40 -> $575,000
  - .20 -> $625,000
  - EC = $575,000

Figure P5: Expected Cost Diagram
## Operations Appendix

### Figure P6: Supplier Order Policies

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<td>536986.30</td>
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<tr>
<td>Cost of Capital</td>
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<td>4.89%</td>
<td>4.89%</td>
<td></td>
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<td>Holding Cost (%)</td>
<td>9.89%</td>
<td>9.89%</td>
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<td>Optimal Order Quantity</td>
<td>218089.88</td>
<td>251828.50</td>
<td>180081.79</td>
<td></td>
<td>218089.87</td>
<td>251828.50</td>
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<td>Time Between Orders</td>
<td>0.41</td>
<td>0.47</td>
<td>0.34</td>
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<td>4.06</td>
<td>4.69</td>
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<td>Order every __ Hours</td>
<td>3.25</td>
<td>3.75</td>
<td>2.68</td>
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<td>32.49</td>
<td>37.52</td>
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<td>TAHC</td>
<td>$21,569.09</td>
<td>$31,132.30</td>
<td>$19,591.10</td>
<td></td>
<td>$2,156.91</td>
<td>$3,113.23</td>
</tr>
<tr>
<td>TASC</td>
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<td>$31,132.30</td>
<td>$19,591.10</td>
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<td>$2,156.91</td>
<td>$3,113.23</td>
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<td>TAPC</td>
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<td>$4,900,000.00</td>
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<td>$4,906,226.46</td>
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Figure P7a: Midwest Farms In Control Sample

Figure P7b: Midwest Farms Test Sample 1

Figure P7c: Midwest Farms Test Sample 2

Figure P7d: Midwest Farms Test Sample 3

Figure P8a: Pacific Produce In Control Sample

Figure P8b: Pacific Produce Test Sample 1

Figure P8c: Pacific Produce Test Sample 2
Figure P9a:

Southeast Supply In Control Sample

Figure P9b:

Southeast Supply Test Sample 1

Figure P9c:

Southeast Supply Test Sample 2

Figure P9d:

Southeast Supply Test Sample 3
Figure P10: Process Plan
Figure P12: Cause and Effect Diagram

- Man Power
  - Machines are not properly maintained
  - Weight is recorded incorrectly
  - Lack of training

- Measurement
  - Scale is not calibrated correctly

- Machine
  - Cooking temperature is too high
  - Machine part is broken
  - Line speed is too fast/slow

- Environment
  - Shrinkage occurs in process
  - Moisture retention occurs in process

Chicken weights are out of con-
Figure P11: Detailed Project Launch
Figure P13a: Reason Check Sheet

<table>
<thead>
<tr>
<th>Date</th>
<th>Underweight</th>
<th>Overweight</th>
<th>Total</th>
</tr>
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<tbody>
<tr>
<td>1-Dec</td>
<td>I</td>
<td>I</td>
<td>I</td>
</tr>
<tr>
<td>7-Dec</td>
<td>I</td>
<td>I</td>
<td>I</td>
</tr>
<tr>
<td>14-Dec</td>
<td>I</td>
<td>I</td>
<td>I</td>
</tr>
<tr>
<td>21-Dec</td>
<td>I</td>
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</tr>
<tr>
<td>28-Dec</td>
<td>II</td>
<td>III</td>
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Figure P13b: Problem Identification Chart

<table>
<thead>
<tr>
<th>Code</th>
<th>Problem</th>
<th>Daily Average</th>
<th>Total Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Machines are not programmed or run correctly</td>
<td>1.50</td>
<td>42</td>
</tr>
<tr>
<td>B</td>
<td>Weight is recorded incorrectly</td>
<td>1.07</td>
<td>30</td>
</tr>
<tr>
<td>C</td>
<td>Lack of training</td>
<td>1.00</td>
<td>28</td>
</tr>
<tr>
<td>D</td>
<td>Scale is not calibrated correctly</td>
<td>0.04</td>
<td>1</td>
</tr>
<tr>
<td>E</td>
<td>Cooking temperature is too high</td>
<td>0.00</td>
<td>0</td>
</tr>
<tr>
<td>F</td>
<td>Machine part is broken</td>
<td>2.14</td>
<td>60</td>
</tr>
<tr>
<td>G</td>
<td>Line speed is too fast/slow</td>
<td>0.14</td>
<td>4</td>
</tr>
<tr>
<td>H</td>
<td>Shrinkage occurs in process</td>
<td>0.00</td>
<td>0</td>
</tr>
<tr>
<td>I</td>
<td>Moisture retention occurs in process</td>
<td>0.00</td>
<td>0</td>
</tr>
</tbody>
</table>

Figure P13c: Out of Control Pareto Chart

Reasons Chicken Weight is Out of Control
Figure P14a: Comparative Problem Identification Chart

<table>
<thead>
<tr>
<th>Code</th>
<th>Problem</th>
<th>Before</th>
<th></th>
<th>After</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Machines are not programmed or run correctly</td>
<td>1.50</td>
<td>42</td>
<td>0.21</td>
<td>6</td>
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<tr>
<td>B</td>
<td>Weight is recorded incorrectly</td>
<td>1.07</td>
<td>30</td>
<td>0.14</td>
<td>4</td>
</tr>
<tr>
<td>C</td>
<td>Lack of training</td>
<td>1.00</td>
<td>28</td>
<td>0.14</td>
<td>4</td>
</tr>
<tr>
<td>D</td>
<td>Scale is not calibrated correctly</td>
<td>0.04</td>
<td>1</td>
<td>0.04</td>
<td>1</td>
</tr>
<tr>
<td>E</td>
<td>Cooking temperature is too high</td>
<td>0.00</td>
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<td>0.00</td>
<td>0</td>
</tr>
<tr>
<td>F</td>
<td>Machine part is broken</td>
<td>2.14</td>
<td>60</td>
<td>0.25</td>
<td>7</td>
</tr>
<tr>
<td>G</td>
<td>Line speed is too fast/slow</td>
<td>0.14</td>
<td>4</td>
<td>0.14</td>
<td>4</td>
</tr>
<tr>
<td>H</td>
<td>Shrinkage occurs in process</td>
<td>0.00</td>
<td>0</td>
<td>0.00</td>
<td>0</td>
</tr>
<tr>
<td>I</td>
<td>Moisture retention occurs in process</td>
<td>0.00</td>
<td>0</td>
<td>0.00</td>
<td>0</td>
</tr>
</tbody>
</table>

Figure P14b: Comparative Pareto Chart

Reasons Chicken Weight is Out of Control

Effects of QC
Team 80: Jacobs Consulting

FINANCE

Making it All Happen
Making it All Happen

Bright Meals new project, “Spicy Nashville Style Hot Chicken with Cauli Rice”, will only be financially viable to the company once it is creating incremental value for the shareholders, which is determined by its Net Present Value (NPV). Positive NPV is created when a project's Internal Rate of Return (IRR) is greater than its Cost of Capital ($r$), resulting in value creation for shareholders, as well as a stock price increase. The cost of capital and its incremental cash flows for this project are estimated through the methods below.

Cost of Capital

The project's cost of capital, or the required return by shareholders to invest in this project, is calculated using the Capital Asset Pricing Model (CAPM) and is usually a function of risk-free rate, market risk premium and project beta. The process to calculate these variables are detailed below.

Choosing the Appropriate Risk-free Rate

We are given three default-free treasury securities and their corresponding YTM’s are: T-Bill (3.02%), T-Note (4.69%) and T-Bond (5.91%). For risk-free rate, we suggest using the Yield to Maturity (YTM) of the shortest-term treasury security available (a 73-day T-Bill), as other treasury securities with maturity of 5 years or more carry a higher maturity risk premium. Thus, to make it truly risk-free, we must remove as much price risk as possible, so we need a bond with a high level of liquidity that we can sell without having a significant change in bond's price over time. The best possible scenario in our case will be the T-Bill with the lowest maturity (remaining term of 73 days) and lowest price volatility.

Calculating Market Risk Premium ($EP$)

$EP$, the additional return required by the investors above the risk-free rate, is calculated by finding the average historic annual returns of the S&P 500 (8.39%) and subtracting average historic annual returns of the T-Bill during the same period (2.66%). This premium (5.73%) represents the extra return for bearing an average level of stock-market risk, represented by the S&P 500 in our case.

Calculating Project Beta ($\beta$)

Any project's beta, unlike stock beta, cannot be simply found by running a regression against the historic market return, as it does not have a market price that trades on the stock market. However, we can find
another sensitivity measure of Sales to Market returns of the project and compare it with that of the whole firm. A Risk Scaler can be derived from this, which will convert this sensitivity measure of the Market to Returns to a CAPM-suited beta (Returns to Returns). Running a slope or regression of historic sales to historic market returns of different projects in the company, we find the Market to Returns sensitivity measure of all the projects. The relevant sensitivity measure is of Project P ($16,914) as the new project will respond similarly to market-wide news and thus will have the same sensitivity measure. Next, we calculate the firm’s sales to market returns ($67,520) by summing the weighted average slopes of all the projects in the company; the weight of each project is assigned as its proportion of historic sales to total historic sales of the firm. We also have to calculate the firm’s Beta to apply project’s Risk Scaler (0.2505) on it to find the project’s beta. Since, our firm trades on the stock market, we run a regression of its price returns with that of stock market to find its levered beta (1.51). This beta must be unlevered, to remove the impact of debt and make it comparable to the Bright Meals new project without the influence of capital structure. The unlevered beta (1.30) is found by inputting it in the conversion formula: levered beta, average of given historic tax rates (35.63%) and average of given debt to equity ratios (0.25). Finally, the product of the project’s Risk Scaler and unlevered Beta of the firm will yield anew project β of 0.33.

Decision to use Liquidity Premium and Default Premium

An investor should definitely be compensated for Liquidity Premium and Default Premium. However, the CAPM model is a representation of all stock premiums; according to the model there is one overall risk premium (EP) that represent average level of risk in the stock market. EP includes all possible risk premiums that can impact the stock market on average. The product of EP and Beta makes it firm-specific and creates rp that represents all risk premiums present in the stock. Hence, we will not include liquidity and default premiums, as it has already been built in rp. Cost of Capital (r) for our new project is thus rf+β(EP), which in return equals 4.89%
Incremental Cash Flows

Incremental cash flows of this project are additional returns an investor will get by investing in this project rather than investing in a mutual fund carrying similar risk. We estimate these cash flows for different periods to see how different durations affect the NPV of this project.

Calculating Operating Cash Flows

With the given units sold and sales price of $2.20, we estimate sales revenue and subtract given annual fixed costs, variable costs, and depreciation to get net profit before tax. Total variable costs, given as a factor of sales revenue (38.1 cents/$), is calculated by finding the product of the factor and sales revenue; detailed process of calculating depreciation will be defined in the next section. We apply the tax (35.63%) only when we generate a pre-tax profit and add back depreciation to after-tax profit in order to realize tax-shields from this non-cash expense. In case of pre-tax loss, like seen in year 1, Bright Meals will not be taxed and will not receive any tax savings from depreciation, as well.

Calculating Cash Flow from Capital Investments

We assume that we will purchase the asset at timepoint 0 and use it for the entire period before selling or salvaging it in the last year of any given period. Hence, only one cycle of fixed assets is used throughout the project period. With a straight-line depreciation method, the given recovery periods and book value for each machine, we find total annual depreciation for each period. At the end of the project period, we salvage all the machines and find the tax-affected NSV for each machine and sum it for all machines to find total net salvage value for that period.

Calculating change in Net Working Capital

Given a net working capital (NWC) of 1.5% of next year’s sales, we calculate the NWC of each period and assume that we realize a cash inflow of NWC, that is required for the last period, since there are no sales after the last period. Any increase in NWC is a cash outflow and any decrease in NWC is a cash inflow.

Side Effects and Cash Flow-Previous spending

The only relevant cash flow from previous spending is a NSV of $3.728 Million as it is an opportunity cost of going through with the project, so it will be a cash outflow. The rest of the costs from previous spending
are all sunk and irrelevant costs. Interest expenses, being a financing activity, are not considered. Side effects from additional revenue creation for other products will be considered as the increase would not be possible without Bright Meals new project. Additionally, we will include a cash outflow of $300,000 for the first two years in the project period as a cost of replacing employees.

**Opportunity Cost**

The opportunity cost of Bright Meals new project is the return the investor would have received by putting their investment at timepoint 0 (ICF) in a mutual fund of similar risk. At the project's risk level, a mutual fund will reap the same return as project’s cost of capital (4.89%), because the R^2 of Bright Meals Stock is close to 1 (Figure F1). Meaning the company’s stock and each of it’s projects contains very little firm-focused risk. Since a mutual fund contains only market-focused risk, this project’s expected return will replicate nearly that of a mutual fund. Also, the mutual fund is assumed to pay out returns in an annuity form during the project period.

**Analyzing NPV for Different Periods**

Taking the base case scenario of a six years project period, since our new project's IRR (6.35%) is beating its external return (4.89%), our project has more than competitive levels of cash flow and a positive NPV of $2,973,516, that will lead to appreciation in Bright Meals’ stock price. For all other projects, with a duration of less than six years, the IRR will be less than the external return of the project and generate a negative NPV for the company. Thus, Jacobs Consulting recommends Bright Meals to run this project for at least six years to provide incremental value to the shareholders.

---

**Project Financial Data Form (PFD)**

**Project:** Spicy Nashville Style Hot Chicken with Cauli Rice  
**Capital Investments:** $31,800,000  
**Initial Net Working Capital Investment:** $808,500  
**Initial Non-Depreciable Expenditures (pre-tax):** $26,240,000  
**Total Initial Investment:** $53,226,313  
**First Year Sales:** $24,500,000  
**Project Beta:** .33  
**Project Cost of Capital:** 4.89%  
**IRR:** 6.35%  
**NPV:** $2,973,516  
**Recommendation:** Accept the project
Decision to Buy or Lease Asset D

Bright Meals senior management wants to find the least expensive option to use Asset D. The present value of the Buy and Lease decisions are compared and the option with the lowest value will work best for Bright Meals cost-minimizing strategy.

Calculating PV of Leasing Asset D

An operating lease from an equipment salesperson is structured in an annual lease payment format; Bright Meals will make these lease payments at the beginning of every year. We also will receive a tax shield on lease expenses. Using the present value formula, the cost or present value of Asset D will be $3,077,075 using lease option.

Calculating Effective Cost or PV of Buying Asset D

Buying a fixed asset involves cash flows in the form of purchase cost, depreciation tax savings, and net salvage value. The effective cost requires calculating the present value of annual tax savings ($314,761) and the tax-adjusted sales proceeds from Asset D ($1,029,867) with the given discount rate (5%), then deducting it from the cost to buy Asset D ($5,300,000). The calculated present value or EC of Asset D ($2,933,867) shows the PV generated by the firm for using the asset for 6 years.

***With a lower present value than the leasing option, we recommend buying Asset D***
Figure F1: Correlation between S&P500 and Bright Meals Stock

R Squared = 0.99