ChillOut's standard costing system: Is it working for them?

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Abstract

Given the prominent role that standard costing plays in the manufacturing environment, among others, it is crucial that users comprehend its far-reaching capabilities (and drawbacks). This case provides an opportunity to identify problems within the existing standard costing system of a frozen foods company, where variance information is used in its reward structure. At the same time, users are asked to consider whether at least two different, alternative costing systems (actual costing and normal costing) might 'fix' the problems. The primary purpose of this case is to provide an opportunity to explore the behavioral and ethical implications of a standard costing system. In the process of working this case, it is hoped that users will see beyond the technical aspects of these costing systems, realizing that the information they generate may affect multiple decision contexts within the company.

Keywords: Standard costing, behavioral implications, ethics, normal costing, actual costing, frozen foods industry

INTRODUCTION

Erica Simpson, junior cost analyst at ChillOut Corporation, a company that sells frozen food orders, was reviewing data pertaining to the company's standard cost variances. She and her supervisor, Henry James, noticed that all of the direct material and direct labor variances for the past two years had been favorable in one of their three departments, "Healthyfreeze". Erica commented, "That's a good thing, right?" "This could be a good thing Erica, but I think we may need to take a closer look at this," said Henry as he pointed to the most recent financials. "It just strikes me as odd that our direct material and labor variances are all favorable, despite the Healthyfreeze department experiencing reduced sales in this tight economy."

Erica thought, too, that it seemed like an unusual scenario. She entered the standard information herself, though, and was certain that the variances were correct. The standard-costing software that she had been using on a daily basis was now in its second year of use, and she felt very confident about using the software. Healthyfreeze was the highest revenue generating department of the company, and this unusual trend of variances was a point of concern for Erica and Henry. There are two other departments in the company, "Veggiefreeze", with variance information for one year since it was started a year ago, and "Veganfreeze", which has no variance information yet, because ChillOut started this department in the current year 2010. Erica and Henry knew that if the Healthyfreeze managers continued to see only favorable variances, they may go on thinking that everything is operating smoothly, even when in reality, the company is just trying to survive this economic downturn. Henry suggested, "Erica, could you conduct a formal investigation of this issue and give me a detailed report of the costing information for the Healthyfreeze department to understand the occurrence of favorable variances whilst department sales are dropping?" "Certainly, I think this situation needs immediate attention" Erica agreed and she immediately started searching for the underlying causes of the favorable variances.

CHILLOUT CORPORATION

Company History

David Buckley founded ChillOut Corporation in Mountain View, California, in the year 2000 to produce custom frozen food orders (by the case) for group homes where patients/clients have special dietary requirements. ChillOut had a successful start and has continued to grow and prosper because of the heightened awareness among people about leading a healthy lifestyle in the past ten years. In order to cater to a wider consumer base, the company has added new products to include a vegetarian and a vegan diet, and started the Veggiefreeze department in December 2009 and the Veganfreeze department most recently in December 2010. Thus, the company has three departments, Healthyfreeze, Veggiefreeze and Veganfreeze, which produce a variety of frozen foods including desserts.

Annual revenues in the past have approximated $8 million, and operating profit margins have usually been between 15% and 20%. The frozen meals prepared by the Healthyfreeze department are very popular and the department usually generates the highest revenues of the three departments of approximately $5 million. With the business growing at a rapid pace, ChillOut decided to change its costing methods from normal costing to standard costing two years ago. It was hoped that the standard costing system would allow better control for a growing business and allow management to identify any variances from budgets or identify areas for improvement. The company also planned to utilize the standard costing information for employee incentive purposes – to better align the employees' goals with the goals of the entire organization.

Competitive Position in the Frozen Food Industry

ChillOut has tried to position itself as the high-quality supplier of fresh-tasting, healthy frozen meals, catering to a select group of customers. ChillOut's line of products from the Healthyfreeze department are popular and are purchased in large quantities by group homes such as retirement communities and a couple of the major supermarkets. It has enjoyed this niche position in the market for the past several years.

The major buyers within the US frozen food market are considered to be supermarkets and hypermarkets (about 85.5% of the total distribution) which offer frozen food products to their customers. Usually, retail supermarkets stock their shelves with brands of frozen foods that are most popular with their customers and purchase large quantities of those frozen products from manufacturers such as ChillOut Corporation, so that they can negotiate prices. Competition from new companies or entrants is minimized due to high capital investments and the need to compete with popular and well established brands.

Frozen food manufacturers face a moderate level of threat from fresh produce such as fresh vegetables, fish, etc. as well as canned and dried goods. Since frozen food products are undifferentiated, it is hard to retain buyers and maintain brand loyalty. Exit barriers are also high in the frozen food industry because exiting this industry would warrant the liquidation of substantial and specialized assets. However, automated processes of production are conducive to an increase in production when necessary. (Frozen Food Industry Profile) ChillOut's focus on healthy foods and the addition of vegetarian and vegan frozen foods has allowed them to differentiate themselves amongst stiff competition in the frozen foods industry and also use their existing specialized assets and resources in a beneficial manner in the hopes of increasing future revenues.

Source of Raw Materials

ChillOut Corporation has entered into a yearly fixed contract with three of its local farmers for its primary raw materials: vegetables, fruits, grains, meat (they purchase much lower quantities of meat than their competitors since they focus on catering to consumers who are required to be on a special diet for health reasons; Much of their meat purchases include chicken and turkey) and fish. It is the purchasing manager's responsibility to negotiate the prices for these raw materials periodically.

ChillOut may purchase these essential raw ingredients from farmers or from the open market. If ChillOut purchases its raw materials in the open market, its purchasers have little control over prices, and often use techniques such as hedging to mitigate the impact of price fluctuations. Alternatively, they may enter into fixed-term contracts with periodically negotiated prices with farmers, thus, strengthening supplier power to some extent. Dairy products, meat, sugar and other sweeteners including high fructose corn syrup, spices, flour and certain other fruits and vegetables are generally purchased in the open market. (Frozen Food Industry Profile)

The purchasing manager at ChillOut has not formally reported any conflicts or grievances with the existing farmers ChillOut has contracts with; in fact, the purchasing manager is very pleased with this relationship, as the local farmers often offer ChillOut discounted prices when they have excess and/or slightly damaged products to move. (Frozen Food Industry Profile) However, purchasing managers at ChillOut have been advised to exercise caution when purchasing farmers' excess products or slightly damaged products because in the past ten years, the purchasing manager in the Healthyfreeze department has reported abnormal spoilage costs ranging between 3% and 6% of the department's gross margin.

Spoilage could be a result of inefficient operations (abnormal spoilage), or a result of the normal production process (inherent or normal spoilage). The costs of normal spoilage are incorporated into the standard costs when they are determined. Units that are defective due to abnormal spoilage at ChillOut are discarded as they are perishable items and they cannot be refined and re-used. Therefore, it is also not possible to sell them at reduced prices or earn any revenue from these products because customers will not purchase spoiled food. The costs of abnormal spoilage under the standard costing system are written off as a loss of the accounting period.

Purchasing managers have been advised to refrain from focusing on the discounts that farmers offer for purchase of their excess/slightly damaged raw materials, because maintaining an excess amount of perishable inventory would be defined as inefficient operations. Any spoilage costs due to inefficient maintenance of inventory levels is regarded as abnormal spoilage in the company. Although purchasing managers are advised to exercise prudence in their raw material purchases, there is no formal evaluation or quality control system in place to assess their raw material purchase decisions.

New Costing System

The Company invested in a high-end software package two years ago to implement the standard costing system. This software package has made it possible for ChillOut to automatically send alerts to the responsible department when unfavorable variances occur at a level that is significant; if a variance is favorable, no notice is sent, as it is assumed that all is well. Management has used a participative approach to determine that an unfavorable variance of greater than 5 percent would be considered significant. That is, managers and employees from all three departments were consulted in order to determine these levels. Further, the department managers, the purchasing managers and the production managers also help set the quantity/usage and cost standards for all the products in their respective departments. ChillOut also hired a full-time junior cost analyst, Erica Simpson, to operate and manage the standard costing system using this software. Exhibit 1 (all exhibits are in the Appendix) contains the standard costs and the actual costs for the month of December 2010 for the Healthyfreeze department. The standards specified in Exhibit 1 for HealthyFreeze have been in place since ChillOut first implemented its standard costing system, two years ago. The HealthyFreeze department was well established by that point in time, and management continues to feel that these standards remain valid today.

Bonus System

ChillOut revised the employee incentive or bonus scheme when it implemented the standard costing system two years ago. The department managers, the purchasing manager, the production managers and the employees on the production line were awarded bonuses semi-annually based on the new bonus system. The bonuses were calculated and awarded semi-annually on the following basis for the department managers:

- A base bonus is calculated at 3% of the department's gross margin. This bonus is then adjusted in the following manner:
  - Increased by $2,000 if their respective departments reported favorable variances for Direct Materials, Direct Labor and Overhead.
  - Increased by $2,000 if sales returns are less than or equal to 1.5% of sales
  - Decreased by 50% of excess of sales returns over 1.5% of sales.

The bonuses were calculated and awarded semi-annually on the following basis for the purchasing managers**:**

- A bonus of $2,000 is awarded to each of the purchasing managers if they report favorable direct material variances for their respective departments.

The bonuses were calculated and awarded semi-annually on the following basis for the production managers:

- A base bonus of $2,000 is awarded to each of the production managers if they report favorable direct labor and overhead variances for their respective departments. This bonus is then adjusted in the following manner:
  - Increased by $1,000, if they are able to earn revenues from the sale of the scrap materials that are between 3% - 6% of the department's gross margin.
  - No adjustments are made if they do not earn any revenue from the sale of scrap material.

The bonuses were calculated and awarded semi-annually on the following basis for the production line employees:

- A base bonus of $500 is awarded to the employees if their respective departments report favorable direct labor variances.
- No bonuses are awarded if there are unfavorable direct labor variances.

If the calculation of the bonus results in a negative amount for a particular semi-annual period, the managers and employees simply receive no bonus, and the negative amount is not carried forward to the next period. Table 1 (all tables are in the Appendix), below, provides background information for the incentive scheme for the past two years in relation to the Healthyfreeze and Veggiefreeze departments. It illustrates the success of the company's incentive program utilizing standard costing information.

Sales in Healthyfreeze

Despite the previous sales growth forecast and favorable cost variances, the department's sales dropped to approximately $4 million in 2010. The marketing team at ChillOut has forecasted that sales could drop even further to around $3.25 million in the year 2011. ChillOut CEO, Dave Buckley feels that this drop in revenue is much more a reflection of tough economic times than a reflection of customers' satisfaction with ChillOut's most popular line of products. It has been over two years, however, since the company has received formal feedback from its customers.

Preliminary Research done by Cost Analysts

Erica Simpson and the senior cost analyst, Henry James, have started to investigate the root causes for HealthyFreeze's streak of favorable variances during a period of decreasing sales. Since these favorable variances were not automatically communicated to others within the company, Erica and Henry began to wonder whether ChillOut was even utilizing its standard costing system effectively. Another question came about as a result of the favorable variance trend: to what extent might the employee incentive program be driving performance? In their preliminary research, Erica and Henry came across several articles that looked important to the investigation at hand, but they were unsure of how to use them. Details related to two of these articles are presented in Exhibit 2.

After realizing that this investigation may uncover some ineffective policies, practices, and behavior at various levels within HealthyFreeze, Henry and Erica feel that the company should hire an expert - an independent managerial consultant - to investigate the situation from an unbiased perspective. They have forwarded their suggestion to the company CEO, Dave Buckley, and have conveyed the urgency and importance of this matter. Dave Buckley has agreed with this recommendation, and has hired you as a consultant because you come highly recommended from other frozen food companies in the industry. Exhibit 3 presents the memo/engagement letter from Dave Buckley to you outlining the consultant engagement.

PROJECT REQUIREMENTS

Part I – Evaluation and Recommendation

- Prepare a written report (for the company's management team and board of directors) of your assessment of the company's current situation. Your report should address any concerns regarding ChillOut's current policies and practices within its existing standard costing system, how you suggest it deal with those concerns – assuming that it continues to use standard costing, and whether it may or may not be appropriate for ChillOut to consider switching to a different costing system (such as normal or actual costing) altogether. You should make a recommendation as to which costing system would be most appropriate to address the concerns that you have identified.
- Your written report should address the following questions:
    1. What were the variances this month (December, 2010)? Do they extend (or end) the previous trend of favorable variances? What are the likely causes of these variances?
    2. What are the strengths and weaknesses of the current employee incentive program? Are the performance measures used in the employee incentive program appropriate for evaluating employees? How could the current bonus system be modified to better evaluate employees and align the company's goals with those of the department managers' goals of division profitability?
    3. Explain how the current implementation and use of the standard costing system at ChillOut encourages inefficiencies in the company's operations or inappropriate employee behavior. Discuss how a standard costing system could be used to address the inefficiencies or concerns that you have identified and what would

need to change within ChillOut in order for the company to realize all the advantages and benefits of the standard costing system.

4. [Only if Part II is assigned]
Are the unit costs (as calculated under actual, normal, and standard costing) informative to the sales situation at ChillOut? Are the ending balances (as calculated under actual, normal, and standard costing) surprising? Do they support continued use of a standard costing system?
5. Are there any ethical concerns at ChillOut? Is the IMA Statement of Ethical Professional Practice applicable to ChillOut employees?
6. Overall, you may recommend continued use of standard costing (with or without adjustments); you may recommend the implementation of normal costing or actual costing; you may also recommend the implementation of a costing system other than the three mentioned above. If you recommend a system other than the three mentioned above, please substantiate your recommendation with appropriate evidence. Whichever costing system you recommend, however, be sure to address the following points:
    - How will the costing system you recommend be more beneficial in addressing the problems you have identified in this company than the current costing system used by the company? Please be specific.
    - How will the costing system you recommend influence or change the current employee incentive program? Please be specific.

- Please include any supplemental analysis as an appendix. You may include as many appendices as you need to provide appropriate evidence for your recommendation.

Part II – Cost Analysis

- Prepare journal entries to account for the specific transactions noted below, during the month of December; prepare them independently for each of the following costing systems: (round to the nearest cent if necessary)
    1. Actual costing
    2. Normal costing
    3. Standard costing
- Specific December journal entries to account for:
    1. Purchase of Direct Materials
    2. Transfer of 28,000 pounds of Direct Materials into production
    3. Payment for Direct Labor
    4. Incur Overhead costs
    5. Transfer/allocate Overhead costs into production
    6. Transfer completed units to Finished Goods
    7. Sale of units on credit
    8. Account for any Overhead variances (the company does this on a monthly basis)
    9. Closing any variances (and/or any under- or over-applied Overhead) using the most accurate approach given the information provided (the company does this on a monthly basis)
- Determine ending balances in the following accounts for each costing system (actual, normal, and standard costing):

1. Direct materials
2. Work in process
3. Finished goods
4. Cost of goods sold