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Business management sample 2

Table of Contents

[Introduction 3](#_Toc414824381)

[Statement of the Problem 3](#_Toc414824382)

[Methodology 5](#_Toc414824383)

[Findings 7](#_Toc414824384)

[Problem 1: Equipment Upgrade 7](#_Toc414824385)

[Problem 3: Physical Structure 9](#_Toc414824386)

[Problem 4: Maintaining cash flows during low season 10](#_Toc414824387)

[Conclusion 10](#_Toc414824388)

[Recommendations 11](#_Toc414824389)

[References 12](#_Toc414824390)

# Introduction

The ABC meat processing plant has been operational since 1969 and was established at the request of local farmers and townsfolk. At the time of its establishment, individuals in the town had found a skilled butcher and encouraged him to operate and manage the plant. He was granted permission to slowly pay back the community and obtain complete ownership of the plant. In time, the plant’s ownership has changed six times. Conventional and equity banks are now involved in financing the plant. Over the last decade, equipment of the plant has been upgraded many times and various new facilities have been added. This includes a new vacuum stuffer and a smokehouse. Several new equipment up-gradations are planned and lined up and attempts are being made to finance the same. The building (or the physical facility) of the plant has not changed much since its original establishment and appears quite run down at the moment. The ABC meat processing plant deals in all red meat and is capable of further smoking and processing the meat. Services provided include process and slaughter, ready to eat and raw sausages, beacons, dried beef, BBQ, beef jerky and retail packing. The sausage processing department is one of the most profitable to the company and consists of a total of 11 employees (5 of which are full-time). The company provides small scale retail on site and is involved in wholesale of meat to local grocery stores and for large events. Services provided by the company do not include catering.

Owing to recent changes in the operating environment, the meat processing plant is being faced with several financial issues. The state of financial trouble is such that immediate measures would have to be implemented so as to improve production in every department. In this regard, this report would concentrate on Russian/sausage production department within the organization. Operations of the department would be detailed out and aspects which might be playing an active role in overall financial gloom of the organization would be highlighted. This would be followed by finding a solution to highlighted problems and specifying how productivity of the department would be improved.

# Statement of the Problem

Looking closely at operations of the sausage producing department, several problems might be pointed out. Russian accounts for 85-90% of total sausage production of the department. While trying to produce this kind of sausage, raw meat ingredients are first placed along with non-met ingredients on a conveyer belt. These are then grounded and blended with non-meat ingredients (Iacumin et al 2012). A mixture of ice, water and dry milk is added so as to control temperature and facilitate binding. Meat by-products with minimum ability to bind are removed from the mixture. This mixture is then emulsified so as to further reduce meat particle size and form a proper mixture of salt, water, protein and fat. Additional ingredients with emulsification properties are also added so as to facilitate the process (Timoshenko et al, 2013). Sausages are then stuffed into casings which might be natural or synthetic in nature. Casings provide the required size and strength to each sausage which is then smoked to dry and cure the meat. Aroma and flavour is also added to the meat at this stage. Natural smoke might be generated by burning wood chips, logs or hardwood sawdust (Wójciak et al 2014). Alternately, special arrangements might be required so as to pass artificial liquid smoke capable of imparting flavours at the same time. High quality sausages are produced by strictly controlling temperature of the mixture before smoking the same (ChunHua & Rong 2013).

In line with this process of production, the very first operational inefficiency (with possible impact on financials of the plant) might be located in equipment required for the production process (Lewis & Peters 2012). Although the facility equipment has been upgraded several times, additional equipment might be necessary so as to bring in operational efficiency. This includes CO2 stunning machine required to replace electric stunning currently in place. Additional conveyer belt equipment (such as band-saws, skinners, wizard knives) might also be required so as to produce value added products. It would also be necessary for the plant to purchase additional coolers for carcass hanging as current ones have started to give way. These coolers are necessary for dry ageing meat for a period of 12-14 days before the meat is ready for sausage production. New computers might also be required so as to monitor temperature in the ageing room. Smokehouse requires upgrading and the ability to pass liquid smoke needs to be added. Absence of these specialised equipments is resulting in a compromise in quality of sausages produced. Additionally, equipment absence is also resulting in slowing down the manufacturing process which in turn is affecting production capacity of the plant.

Another departmental aspect with implications on operational inefficiencies and financial consequences might be located in the department’s inability to retain qualified workers (Qushim et al 2015). The department operates with the help of 11 workers and only 5 of these are full time. Other 6 workers work in the department on temporary basis and often leave if they find better career options. This wastes valuable production time as full time workers are required to train new workers and have to monitor their work regularly so as to ensure that production is in line with required standards. As temporary workers frequently leave and new ones are hired, training and monitoring procedures have to be repeated. This also results in cost escalations associated with hiring and training new staff members.

The physical structure of the building has not been changed since the original conception of the plant in 1969. This has resulted in limited space availability with every department. In line with increasing sausage demand in the industry, the plant is currently unable to pick up its production capacity. Alternately, cost of raw materials (such as flavours, spices, dry milk etc) required for the production of smoked sausages has been constantly increasing. This coupled with stagnant production is curbing profit margins of the department (Zhou et al 2012). The location of the plant is such that it is surrounded by local businesses and residential areas. Therefore, area outside the plant cannot be used for slaughtering or processing of meat. In this context, it is essential that current spaces are re-organized and utilised for multiple purposes. Vertical construction might also be an alternative option but that would require obtaining additional permissions and would result in cost escalations required for construction and maintenance.

Lastly, maintaining steady cash flows during off season is a typical problem associated with the department with potential financial implications. Summers are typically considered as off season and both meat demand and meat production typically falls during the season. This often results in layoffs across the department. Employees who are working with the department on temporary basis and have limited amount of experience are laid off (Keramidou et al 2013). During off-season, the department functions well with the help of its full time employees. This however becomes a problem as demand escalates again and the department is required to hire new workers. Additionally, limited cash flows during the summer season tend to reduce the number of work hours of full time members thereby reducing their wages. This in turn adversely affects their productivity at the plant thereby further hurting cash flows.

# Methodology

Methodology would primarily consist of investigating the root cause of every problem in the department and suggesting a solution for the same.

In context of the first problem, it would be necessary to conduct a cost benefit analysis of the situation and determine if bringing in additional equipment or modifying the current equipment list would actually result in benefits in the form of improved meat quality, reduced production time and financial benefits (Corbin & Strauss 2014). Based on the results of undertaken cost-benefit analysis, it would then be appropriate to arrange for required finance. This might be done by securing a loan from an equity or commercial bank or privately financing the investment. While trying to upgrade equipment however, it would be necessary to carefully evaluate benefits from the equipment, lifecycle of each equipment and costs which might be required for equipment maintenance at a later time.

In context of the second problem, investigation might be done with the help of surveys and one-on-one interviews. Employees might be asked specific questions regarding their reasons for leaving and factors which would help them stay with the plant and convert their status to full time (Cozby & Bates 2012). Employees might further be asked about additional benefits that they would want from the department. Based on replies received from employees of the department, additional benefits can be offered. Alternately, attempts might be made to understand the skill level and apprehensions of each employee and assign job responsibilities accordingly. Attempts can also be made towards creating a work culture in the department and maintaining the same so as to be able to retain trained employees and not incur hiring and training costs again and again.

In context of the third problem, it might be required to indulge in layout planning and strategically think how current spaces within the building might be better used. Techniques need to be devised so as to place machinery in a way that it would free up more space (Zikmund et al, 2012). Workers might also be asked to provide their opinion in this context as they practically utilise the available floor space and might have better ideas regarding a more efficient arrangement. Alternately, it might be required to undertake vertical construction in order to fit in additional equipment and increase overall production capacity of the plant. This however is an expensive alternative and it would be best to avoid this option in times of severe financial crisis.

In context of the last problem, it might again be essential to gain a detailed idea of employee expectations from the plant. Clear and consistent communication would be utilised to keep employees in the loop and they would be made aware of actual product demand in the market (Zikmund et al, 2012). It would also be communicated that they are important to the department and their interests would be taken care of with as much efficiency as possible. Lay-off practices would be sidelined and attempts would be made to retain staff members and convert them to full-time status. Alternative strategies would be devised to set a minimum off-season wage rate for full-time as well as newly trained employees and offer the same irrespective of plant operations. Alternative niche markets might also be explored to maintain steady cash flows during off-season.

# Findings

## Problem 1: Equipment Upgrade

**Cost**

|  |  |  |
| --- | --- | --- |
| Equipment: Co2 stunning machine | Cost (US $) | Rationale |
| Purchase Cost | 60,000 | Original cost of the machine lies between 70,000-90,000 but stunning machines are often available on discounted prices to meet processing plants |
| Training Cost | 1280 | (5 full time employees X 5 days per week X 2 hours per day X 16 $ per hour) + (6 temporary employees X 5 days per week X 2 hours per day X 8 $ per hour) |
| Operational Cost | NA | Same as that incurred by electronic stunning machine |
| Maintenance Cost | 1500 per annum  | Co2 stunning is low maintenance  |
| Standard Conveyer belt equipment  |  |  |
| Purchase Cost | 2500 | Conveyer belt equipment packages are available to meat processing units at $1500- $5,500 |
| Installation Costs | NA | Included |
| Training/ Operational Costs | NA | Employees are already trained in using and handling this equipment |
| Coolers (2) |  |  |
| Purchase Cost | $ 1000 | One ageing room cooler costs approximately $ 500 |
| Installation Costs | NA | Included |
| Training Costs | NA | Not Required |
| Operating Costs | 31200 per annum | 4 units per hour X $ 3.75 unit per hour X 40 hours a week X 52 weeks a year  |
| Computers (2) |  |  |
| Purchase Cost | $ 3000 | Average PC price for computers capable of running software for continuous monitoring = $ 1,500 per computer |
| Installation Costs | NA | Included  |
| Training Costs | NA | Not Required |
| Operational Costs | 11700 | 1.5 units per hour X $ 3.75 unit per hour X 40 hours a week X 52 weeks a year  |
| Total Annual Cost | $ 112,180 for the first year with only 44,400 as ongoing costs next year onwards |  |

**Benefit**

|  |  |  |
| --- | --- | --- |
| Benefit | Financial Benefit | Rationale |
| Increase in weekly production by 1,500 lbs | 287,820 per annum | Approximate price for 1 lb= $ 3.69. So 3.69 X 1500 X 52 weeks a year |
| Projected increase in sales to a total of $5,40,000 per annum  | 960000 per annum  | Current sales have been recorded at $ 300,000 per annum. So (5,40,000-300000) X minimum $ 4 per sausage |
| Time saving | 5720 per annum | 11employees X 2 hour per day X 5 days a week X 52 weeks in a year |
| Total Financial Benefit | 1,253,540 per annum |  |

Total cost savings incurred as a result of upgrading equipment of the facility= 1,253,540- 112,180= $ 1,141,360 for the first year. These savings would increase as fixed costs (such as that of purchasing the equipment and training of employees) would not be incurred next year.

Problem 2: Retaining qualified employees

In accordance with employee interview responses, they left the department owing to several reasons. Their primary reason however was availability of seasonal labour that paid them better. Furthermore, employee wages during off season dropped tremendously thereby making it difficult for them to make ends meet. Employees of the department also indicated that although the number of employees was extremely small, no one took time out in getting to know each other. There was no prevalent work culture in the department and the entire focus was on personal productivity. The concept of team work was unknown to employees and they did not help each other out or cover for each other as and when required. Temporary employees typically complained that they were willing to experiment and learn various processes in the department but were forced to train well and stick to specific roles. They indicated that they had no freedom while working in the department and were often criticised for being incompetent by full time employees of the department. Some of them agreed that they would be willing to stay with the department on full-time basis if they are allowed the freedom to openly learn all processes and pick processes that they wanted to be involved with.

## Problem 3: Physical Structure

A careful study of the current layout of the building and consultation with employees is suggestive of the fact that additional vertical construction would not be required. A better functional idea would be to mark rooms on a graph paper and then move them around the layout until they fit the current production process of the plant. Employees also indicated that the department might benefit from receiving animals in batches of small numbers each. This would reduce the problem of animal segregation and clashes with other departments as there is a single kill floor in the facility. Employees also suggested that the sausage manufacturing department might benefit from tying up with chicken processing and the same room can be used to kill beef/ pork and process chicken during different times of the week. This would free up more floor space and provide freedom of movement to employees working in these processes. Use of Co2 stunning machine as opposed to electronic stunning machine would also help in better space utilisation in the department. This might be attributed to the fact that Co2 stunning machine results in more humane meat production, less stress on the animal and far less bloodshed as compared to electronic stunning machine. Therefore less cleaning time can directly be equated to better space utilisation.

## Problem 4: Maintaining cash flows during low season

As indicated above, summer is typically considered as off season with a reasonable reduction in both market demand and production of sausage. Employee wages are gravely affected during this period thereby resulting in trained employees leaving the facility. Employees agreed that they understand that they cannot be paid in accordance with high season rates as it would be troublesome for profit margins of the plant. They however indicated that they would be willing to negotiate with the owner so as to decide a minimum wage rate that would be paid irrespective of plant operations during the season. Employees also indicated that they would be willing to train and work in other departments in the plant where the slack is not as big as in the sausage department. Lastly, employees indicated that they would be willing to trade their pay in exchange for alternate benefits such as health insurance cover for them and their families and fixed paid leaves around the year.

Looking at findings of this study, several measures might be outlined for improving operational efficiency of the sausage making department. These have been outlined in the recommendations section.

# Conclusion

This study was undertaken with the prime objective of understanding and analysing operational inefficiencies and financial issues faced by sausage making department of ABC meat processing company. A close look at each and every process and evaluation of the same revealed that the department is currently faced with four different issues. Although the equipment within the department has been upgraded several times, it is required to bring in some necessary equipment. While introduction of these equipments might increase production and improve process efficiency, this might be an expensive measure to undertake. In this context, a cost-benefit analysis was undertaken that introduction of the proposed equipment would indeed serve to improve operational efficiency and profitability of the department. Second issue as faced by the department could be seen reflecting in the department’s inability to retain skilled and trained employees. Gaining insights on employee perspectives in this context revealed that employees faced discrimination in the department and felt that a team spirit and work culture were missing. Third issue suggested that it was becoming difficult to efficiently fit the production process in the building’s current layout and additional construction would be an extremely expensive option. In this context, it was realised that trying to move around the rooms on a graph paper and coordinating with other departments to use the same rooms for multiple processes might serve to improve operational efficiency of the department. Finally, it was realised that maintaining steady cash flows and motivating employees to stick with the plant was a significant issue. In this context, it might be beneficial for the department to offer fixed wages and enable employees to train and work in other departments during off-season.

# Recommendations

Based on identified problems in the department and findings of the report, following recommendations might be made:

1. Invest in equipment: the report clearly suggests that it would be beneficial to introduce new equipment including a CO2 stunning machine, standard conveyer belt equipment, two coolers and two computers. The equipment would increase production capacity of the department and would also increase sales. Investment costs would be recovered in less than a year. Therefore, investment might be made with the help of securing a loan from equity or a commercial bank.
2. Creating a work culture- In line with attempts to retain trained and skilled employees, it would be necessary to motivate them and breed accountability. Employees should be made personally accountable for their work responsibilities and praised if they are able to handle them well. All employees should be trained in the concept of teamwork and should be encouraged to try and get to know one another. This would help increase productivity at the workplace and improve retention rates thereby reducing costs associated with repeated hiring and training.
3. Fixed wages should be offered to employees. For example a reduced fixed rate of $ 5-6 should be offered to all temporary employees working in the department. This should be offered irrespective of whether the plant is operational or not. Also, employees should be allowed to train within different departments and pick up work within the plant if they are required.
4. Equipment arrangement within the building should be re-examined and re-established so as to improve operational efficiency. Same rooms might be used for multiple purposes. For example, the beef/pig kill room might be converted into chicken processing room once a week. This would help in effective space utilization and would help in preventing possibilities of additional construction so as to improve plant production capacity.

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