

Production planning challenges faced by retail packers

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Meat processors receive lots of orders from different retailers every day, usually with very short delivery deadlines. They process inconsistent, perishable raw materials that have a short shelf life and have to work to different vehicle departure times.

Planning in this environment is very difficult. To make things worse, last minute changes and top-up orders are common in meat processing. This means that any plans quickly become out of date.

Raw materials and wages form the majority of overheads for a meat processing business. This means it is important to ensure the best possible use of these resources. Achieving this, while trying to meet customer orders in this high pressure environment, is a huge challenge.

To avoid order shorting, most processors usually compensate by over staffing. This means that, at times, crew stand around idle. They also tend to over stock and over produce, resulting in devalued product and waste. This is a serious issue as WRAP UK estimate that waste in the supply chain is costing food retailers and manufacturers £5bn annually.

There are several consequences of failing to communicate an effective plan, all of which will reduce profitability:

- **A stressful work environment:**

A negative atmosphere will increase the chance of errors, costing time and money.

- **Incorrect or late orders:**

Failing to meet customer service levels can result in fines, or even vehicles being turned away.

- **Inefficient use of raw materials:**

As order shorting is not an option, most processors over stock on raw materials, one of their most significant expenses. This either forces them to sell it off at a reduced price, or devalue it through freezing. Manufacturers also tend to over produce, which increases costs through rework. Another problem that arises when raw materials are not managed properly is hav-



ing to use premium ingredients for standard products.

- **Poor labour management:**

It is essential that this costly resource is used most efficiently. When a business understaffs, they have to pay overtime. However, it is more common for meat processors to err on the side of caution by overstaffing. This means that, at times, crew stand around idle.

- **Customer dissatisfaction:**

Failing to meet product supply service levels causes retailers to lose confidence and in the long term, contracts can be lost.

Creating a daily plan

Creating a daily production plan and keeping it up to date is very difficult for retail packers. There are many factors that affect the plan and a considerable amount of data to track and monitor in a fast paced, ever changing environment.

Firstly, planners have to decide which orders need to be dispatched that day. They then need to work out if any of the finished goods on site can be used for those orders, taking into account customers' different shelf life requirements. Once this has been calculated, planners can decide what else needs to be produced to fulfil the orders due to be dispatched.

Planners need to work out which production lines these items can be processed on. They then need to calculate what raw materials and packaging will be required, where, when and in what quantities.

Another important consideration is labour requirements. Planners have to decide how

many crew members will be needed that day, which production lines they should be sent to work on, when and for how long.

Planners have to consider where each order needs to be delivered to and when it should be despatched to meet the delivery deadline.

Finally, the machinery which will be used that day needs to be confirmed, as well as any planned breaks, wash-downs and power-downs. It is only when all of these factors have been considered that a plan can be produced to ensure that each order will be met on time.

There is a lot to consider, even if a plan remains the same throughout the day. Unfortunately, last minute changes and top-up orders are common and that is without considering problems such as machine breakdowns and staff absences.

It can take hours to manually plan production using spreadsheets. Daily plans are out of date as soon as they are created and rely on being emailed or reprinted every time there is a change.

Obviously this is very inconvenient, so many processors are turning to software to try to cut down planning time. However, most solutions have not been developed to cope with the perishable raw materials, short delivery deadlines, last minute changes and top-up orders that are specific to meat processing. It is therefore particularly important for retail packers to find a solution that will solve their business problems.

Time is money in any business and meat processors work to particularly short delivery deadlines. They need a solution that will account for all of the above issues, enabling them to build and update their plan in seconds.

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What to consider

There are several things to think about when sourcing production planning software. For example, how long does it take to perform the following tasks?

- Create and distribute a daily plan.
- Create and distribute a raw material requirement list.
- Create and distribute a packaging requirement list.
- Add breaks for wash-downs, power-downs etc.
- Update the plan with changes and top-up orders.

- Calculate crew levels.
- Adjust the plan to account for problems, such as machine breakdowns.
- Move orders/products onto different lines.
- Republish the updated plan.

With the right software, you should be able to perform any of the above actions in seconds. An effective production planning solution will automatically calculate what needs to be produced each day, as well as raw material, packaging and labour requirements. It will take into account finished goods stock, which lines each product can be produced on, vehicle departure times and any planned breaks. This should allow you to produce your daily plan with a few

clicks of the mouse. Producers will also need to consider visibility, for example:

- Will your production crew have a live view of the plan?
- Will they have a real time view of progress?
- Will they be immediately alerted to any last minute changes/problems? Are they able to see what effects these will have?
- Will they see the impact of problems such as machine breakdowns?
- Are management able to view what has been produced 'off plan'?

An effective solution will give you a live view of your plan, as well as production progress. It will enable you to log any last minute changes or issues in seconds and will immediately calculate the knock-on effects they will have on production time, as well as raw material and packaging requirements.

Any software supplier that works with meat processors understands that sometimes they have to produce 'off plan'.

This can be for a number of reasons. For example, you may have opened a box of perishable raw material and did not need to use all of it for the orders on that day's plan. It is likely that you will process it to avoid wastage and it is essential for your software solution to keep track of these products.

If you are not aware of all finished goods on site, it can lead to stock going out of date. An effective factory management system will ensure that the oldest raw materials and finished goods are used first to avoid freezing and waste.

Don't forget . . .

It is also important to consider the details:

- Will you be able to view your entire plan on one screen?
- Are different users able to set the screen view to their own specific requirements?
- Is it possible to see actual orders, pre orders, back orders and forecasts?
- Can you drill down into data for detailed associated information?
- Will you be able to view the plan for a specific customer/product/order?
- Can you view production timeframes for different products/orders/customers?

The best production planning software will be quick and easy to use. You should be able to view your entire daily plan on one screen, but also be able to focus on product, order or customer specific information in seconds.

The most suitable solutions will enable you to easily 'drill down' and analyse any piece of data with the click of a mouse.

If you answer 'yes' to the questions above, you should be getting a solution that offers the greatest return on investment.

The right solution for a meat processing business will result in significant savings and so could pay for itself within six months. This is achieved through time saving, 100% order fulfilment and the most efficient use of raw materials, labour and packaging. ■