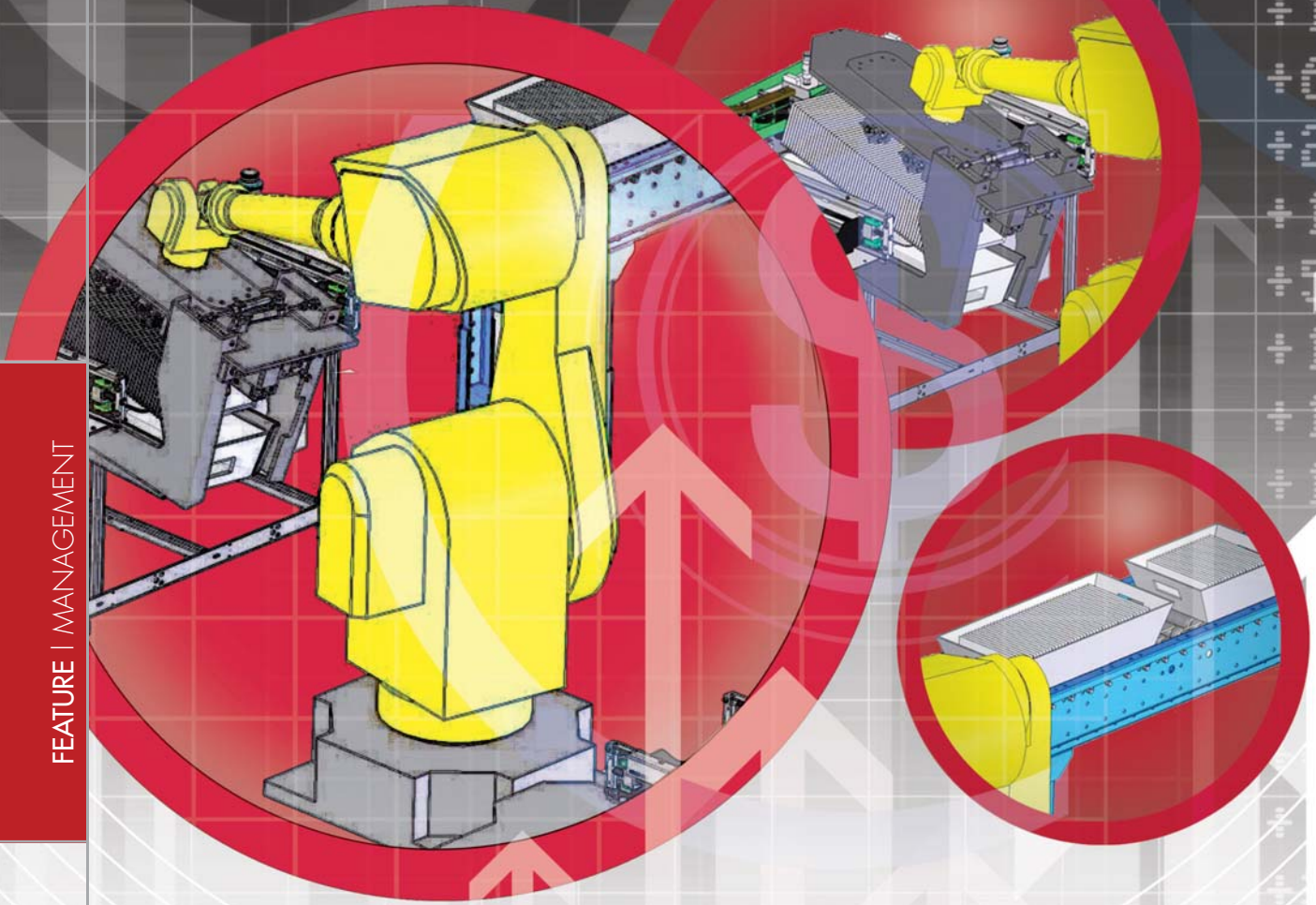


# mailstrategies

PREPARING FOR SUCCESS



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## CAPTURING SUSTAINABLE SAVINGS ON THE **INSERTING FLOOR**

How today's operational activities become tomorrow's profit | BY TROY POWER

**Y**our inserting operation depends upon properly combining the basic elements of people, process, technology, and/or facilities to deliver value to your customer and profits to your bottom line. Every activity in your operation should contribute value to your customer. If your customer would NOT be willing to pay for an activity in your operation, then ask yourselves: Why does it exist? Even more, what is it costing your bottom line? Those questions sound elementary, and perhaps even trite to some, but inefficiencies seen on inserting floors all across America today demonstrate they aren't.

Despite the constant drive to stimulate growth and secure a competitive advantage in the marketplace, amazingly few people consider the biggest, most reliable and low-cost opportunities to do so that currently exist in today's production inserting operations: operational performance at both the front-end and back-end of the inserter.

Recently, one mailing company critically examined its production process and as a result implemented change that doubled its capacity and justifiably eliminated so much non-value-add operational activity that the company reduced its cycle time from four days to a few hours.

The shortened cycle time reduced costs dramatically. When 50% of the total cost per piece is wrapped up in non-value-add pre- and post-inserter activity that can be reduced or eliminated, it's not hard to calculate the savings realized for this company that mails well over one million pieces each day.

This particular company determined there were tremendous cost savings and revenue opportunities available if it re-engineered its entire production process. A project team was assembled, and it focused on creating a more efficient operation and a more cost-effective way to produce its product. The result is a premier manufacturing facility that serves its business model and meets its growth needs for the next 10 to 20 years. While not every company will undertake such large-scale change and reap the corresponding large-scale financial benefits, this example does provide the narrative that applies similarly to inserting operations of all shapes and sizes.

#### WHO CAN ACHIEVE THIS SUCCESS?

If an operation as massive and sophisticated as the example company can completely re-engineer its manufacturing process to more than double its capacity and at the same time justifiably eliminate so much non-value-add operational activity that it reduces its cycle time from four days to a few hours, then every operation is capable of making operational improvements that can, at a minimum, provide positive financial results, and quite possibly transform the company.

Operational performance is the driver of financial results, and ample opportunity exists in today's production inserting operations within the pre- and post-inserting functions. So why don't more companies embrace it?

Interesting question, and the answer lies partly in the unglamorous role operational innovation generally portrays. Simply put, operational change is not at the top of the list in most companies. While more glamorous alternatives to potentially impact financial results exist and are often pursued, the fact is operational innovation offers a meaningful and sustainable way to get ahead—

and stay ahead—of the pack. It's really the only lasting basis for superior performance and positive financial results. Organizations who understand and apply this can add one of the most powerful competitive weapons in existence to their strategic arsenal.

#### APPLYING THE CONCEPT TO YOUR ORGANIZATION

So what exactly does operational innovation look like in an inserting environment? Consider the inserter itself and all the activity taking place upstream and downstream

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of it. That's essentially what the earlier example company did on a large scale, but it applies similarly to operations of all sizes.

When you invest in technology (i.e. inserters), you want to fully optimize the business processes that surround your investment, which means you must be sure you have the supporting process, people and facilities elements in place to fully utilize the machine. To get the return on investment you expect you must ensure, for example, that an adequate supply of raw material is delivered and that finished material is efficiently taken away so the inserter does not stop for those reasons. There are significant process differences in servicing intermediate and lower speed finishing equipment as opposed to high-speed technology being implemented today. Without operational review, new technology can become part of an inefficient process that includes wait times followed by short bursts of high output, the net result being no increased efficiency or, at best, less than expected results.

Many technology purchasers end up disappointed in an investment because they have not proactively anticipated and made the changes necessary to ensure their new inserter is properly supported by the process, people and facilities elements. Not doing so allows pre- and post-inserting activity to cause unplanned stoppages of the inserter, which ultimately reduces utilization.

That's exactly what's happening in production inserting operations everywhere and exactly why ample opportunity exists with new and existing inserter populations everywhere. So just what kind of opportunity exists around inserting? Well...

1. What if you could achieve sustainable savings in an area of your operation that contributes nearly 50% to your total cost per piece?
2. What if you could effectively add capacity to your production floor without increasing the cycle speed of your inserter?
3. What if you could effectively add 20% more production time without adding resources or lengthening the shift?
4. What if you could increase the net operational throughput of your inserter?
5. What if you could make an investment to

improve existing activity that paid for itself in one year?

6. What if that investment amounted to what you'd normally spend on that activity over the year anyway?

## WHEN YOU INVEST IN TECHNOLOGY (I.E. INSERTERS) YOU WANT TO FULLY OPTIMIZE THE BUSINESS PROCESSES THAT SURROUND YOUR INVESTMENT, WHICH MEANS YOU MUST BE SURE YOU HAVE THE SUPPORTING PROCESS, PEOPLE AND FACILITIES IN PLACE.

All are available today and achievable by addressing operational performance pre- and post-inserting to drive financial results. An independent study of multiple inserter manufacturers that output more than 10 million pieces over eight weeks in a side-by-side production comparison run revealed some key findings. During that run, the inserters averaged 27.6 unplanned stoppages per production hour. Each of those unplanned stoppages averaged 27.5 seconds/stoppage. That totaled 12.6 minutes of unplanned stoppages per production hour. At a net inserter throughput of 16,000 pieces/hour, that equates to 3,369 lost pieces/hour.

The simple principle is this: inserter stoppages, planned or unplanned, reduce net throughput. Stoppages can occur for a variety of reasons, but a surprising, and costly, amount are caused by pre- and post-inserter activity. Inefficient delivery to the inserter and takeaway at the back-end of the inserter, for example, increases the unplanned stoppages, time per stoppage and overall lost production in time and pieces.

It's not hard to calculate the financial impact this has for a company running multiple inserters in a three shift operation.

Unplanned stoppages occur in three primary areas of the machine: feed/input section; insertion section; and output section. By reducing the stoppages at the output, the inserter runs more consistently and therefore produces more pieces. Furthermore, reduced stoppages in one area allow the operator to then focus more attention on the stoppages occurring in the other areas of the machine. Doing so allows the operator to resolve stoppages in those areas more quickly and consequently reduces the average time per stoppage. So, even though the number of stoppage events in the other areas of the machine has not decreased, the average time per stoppage has, which gets the inserter back into net production faster and therefore more pieces can be produced.

One area with tremendous savings opportunities is the post-inserting function of traying the mail. Whether you're producing five, 50 or 500 million envelopes annually, it creates significant demand on resources to simply place envelopes in USPS mail trays. In fact, many inserters today can output well over one ton of mail each hour, all of which must be removed from the inserter, placed in a USPS mail tray and delivered to another part of the facility. This back-end inserter function presents an increasing challenge and tremendous cost savings opportunity in today's production environments, especially as inserter cycle rates advance further.

Current state-of-the-art, inserter cycle speeds of 22,000 envelopes per hour are commonplace. Undoubtedly the day will come when the state-of-the-art inserter cycle speeds push well beyond 22k. Not only do these high speed machines offer improved quality, mail-piece integrity and reduced total cost of producing the mail-piece, they also significantly increase demand at the inserter output. However, whether you're in an environment of 3,000 – 5,000 envelopes per hour, or one that's over 22,000 per hour, or one that's in between, the following tasks remain:

1. Handling of empty USPS mail trays (full and half sizes) at the inserter
2. "Sweeping" of envelopes from the inserter

into a USPS mail tray

3. Delivery of the loaded USPS mail tray to the plant

CapStone's Robotic Mail Traying solution is just one example, albeit a very big one, of the tremendous savings opportunities that exist in the pre- and post-inserting activity of today's inserting operations of all shapes and sizes. Other areas to consider for pre- and post-inserting operational improvements—to eliminate activity your customer would NOT be willing to pay for—include the following:

- Evaluating tray sleeving methods and activity location
- Evaluating finished tray handling methods
- Reassigning material handling from the machine operator to material handling personnel and/or mechanize or automate justifiable material handling functions of bringing materials to the inserter and taking the finished product away
- Automating manual job reconciliation
- Staggering operator breaks for continuous machine operation
- Establishing best business practices for operators
- Establishing operator training, recognition and incentives
- Increasing job sizes
- Performing intelligent picking of the right number of inserts and other materials to eliminate waiting for materials (at 20,000 envelopes per hour, every minute the machine is waiting equates to over 333 lost envelopes)
- Eliminating intentionally stopping the machine for quality checks
- Designing best practices workflow for material staging and handling logistics
- Considering alternative print input
- Streamlining envelope stock and statement fold setups
- Requiring envelope suppliers to package stock in larger quantities
- Reducing setups
- Reducing changeover time

Operational innovation results in direct performance improvements (i.e., faster cycle time and lower costs), which leads to superior market performance (i.e., greater customer satisfaction and more highly differentiated products). Not to mention that improved market performance yields a host of strategic payoffs,

from higher customer retention to the ability to penetrate new markets.

Tremendous opportunity exists in today's inserting operations of all shapes and sizes to improve operational performance and ultimately

drive financial results. The opportunity in just the post-inserting functions alone provides the means to convert money being spent on today's operational activities into tomorrow's profit, while at the same time improving the value-add to your customer. □

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