**The Importance Of Reliability**

Reliability if probably the most important process factor as it is an “enabler” of so many other beneficial things, like synchronization, accurately planning cash flow, on-time delivery, elimination of expediting, etc. Lean describes reliability as “the right thing in the right place at the right time” or as the reduction of variability. One word says it best: reliability.

**Four Areas Important to Reliability**

When the key factors where reliability are known, the actions necessary to attain and sustain reliability are quite simple. However, these actions are quite frequently the actions that are eliminated from the routine because “we don’t have the time now”, “that would be asking too much of our supplier or customer”, “we can’t afford it right now”, “good workers are too hard to find”, etc. We pay people to work hard and to solve these challenges, not to claim they cannot be addressed. People should come to their job to work, not to make excuses. Unfortunately, in too many companies today, excuses are the norm; too many workers show up to go through the same motions and the same routine every day. So, mediocrity and complacency and expertise at coming up with excuses become the norm.

***Information Reliability***

Put together a list of the various pieces of information you need to properly complete the job, some examples are the art/print accuracy, color accuracy, delivery date, quantity required, materials delivery date and quality from suppliers, bill of material and routing information, etc. There are more, try to put together a comprehensive list and if things need to be added or deleted from that list, add or delete factors once you know what they are. Don’t worry about the perfect list. It doesn’t exist. Progress and consistent improvement over delays waiting for perfection.

Track job delays and errors that result from information reliability errors. Then start addressing them.

***Equipment and Equipment Related Reliability Factors***

Keeping the print equipment, die cut machines, pre-press equipment, etc., in a high state of working condition is also important. What happens when a key piece of equipment is down for four weeks because you cannot either get the parts needed or the technical person needed to fix the printer, etc. There are ways to avoid many of these issues, but companies choose not to do them. Sort of like not having fire insurance on the facility – except the equipment related problems happen with frequency whereas fires don’t (hopefully!!). But we buy fire insurance but leave our high-cost revenue generating equipment unprotected.

These reliability factors also cover other things such as the condition of dies, pre-press equipment, electrical and compressors, etc. We shortchange ourselves by skipping these maintenance related activities, and so when the do hit, they create significant issues. Your company makes money when these machines are operating. So why risk the loss of revenue and customer dissatisfaction? To save money. You are in business to make money, not save money. Opportunity cost is significantly more important than historical cost. Do you track opportunity cost anywhere? You should…

Track failures. Ask equipment manufacturers what the main failure points or what the most common wear parts are on the machines. Understand the fixes for the failures and have a cost and minimization of downtime matrix to decide what to invest in. A good company strategy of what type of machines to use can make a maintenance strategy more cost effective as spare parts that you can keep on hand could repair multiple machines. Measure downtime and its effect on on-time delivery, lost revenues, repair costs, etc. Many machines generate thousands of dollars of revenue per operating hour. One printer I worked with generated $1900 per hour of net cash flow per hour of operation. Historical cost rate on the machine was $200 per hour. Historical cost is meaningless except for P&L and tax purposes. You bought the machine to generate cash flow. Measure that.

***Supplier Reliability***

Companies have suppliers because they do things your company does not want to do or cannot do. So, suppliers are your business partners. If they fail you, you fail your customer unless you store tons of inventory to offset suppliers’ inadequacies.

I had one printer as a client that was going to open a warehouse to store raw materials inventory. I asked the CEO, “Are you a printing company or a warehousing company? Why do you need the warehouse?” He replied, because our supplier’s deliveries are so random, we need to store inventory. Find a better supplier instead of renting a warehouse. If the warehousing costs (electricity, rent, fork trucks, employees, insurance, racking, cycle counting, etc.) were added to the cost of the product from the suppliers, that supplier would be extremely expensive. Simple. Find a better supplier. Pay a bit more for the product (maybe) and eliminate the warehouse.

Set up and complete supplier report cards and evaluate each supplier on on-time delivery, product quality (reliability factors), lead-time or replenishment cycle (speed factors), pricing, ease of working with them. Set a high standard for the report card score – over 87 points out of a 100. Work with them to get to that level or find another supplier. Bad suppliers drive chaos throughout your organization. They force you to incur overtime or expedited shipping fees. They cause late deliveries to your customers. But for some odd reason (they are “cheaper”) we keep buying from them and living with the hand grenades they throw into our system. Unbelievable.

One key reason this happens is many purchasing people believe they save money by buying materials for a lower purchase price, and frequently they are rewarded for that. Another reason, it is “work” to find a better supplier. The routine is just using the bad supplier, this makes life easy for the purchasing person. Besides, they’ve grown numb to complaints from operations. It makes life really easy for the purchasing person, but handcuffs everyone else. If you’re going to reward purchasing, focus instead on high supplier report card scores. And have the ops people score the suppliers,

***Skills Reliability***

Another thing companies try to do is minimize labor costs. Save money instead of making money. Does a highly skilled person in pre-press or in die cut or printing, kitting, etc. produce more than a rookie? The difference in productivity, attendance, attitude can be measured in dollars that is costs the company by high turnover. The hiring costs and eternal interviews are also disruptive and expensive. They not only cost money for the search, but result in lost productivity when a key supervisor or manager spends 50% or more of their time in a conference room talking to a potential employee.

Do a skills matrix to evaluate employee strengths and weaknesses. This will also help highlight skills concentrations and risk points for the entire company. You can estimate the lost revenue or output when you have a great employee, a decent employee and a new person. Know the learning curve timeline to move a new person to a great person.

Include in the skills matrix the person’s attendance and attitude. Strive for 80% plus “A” players and potential “A” players. Develop plans for C players and below. (The right people on the bus).

To do these things, you need to make your company the place that people want to work. This takes some creativity and learning by the HR staff. But that is what they are there for - to work and to strengthen the company’s workforce. If all they do is place adds and do an initial screening and set up the next interview, they are doing a job I could learn in 15 minutes.

Reliable skills then are a well-trained workforce that shows up with a good attitude. Good initial hiring, fun events, clearly explaining the company culture and expectations, things that at work that are fun and those things that are a pain in the butt – be open with them. Look out for their interests as well as the company’s interests.

***Conclusion***

The San Francisco 49ers during the Joe Montana and Steve Young eras made plans after their Super Bowl wins as to what they needed to do to win the Super Bowl the next several years. The Minnesota Vikings planned for what they needed to do to win the division championship the next year. Both accomplished their goals. Set your goals to dominate the markets you choose. This all starts with a strong market strategy. Then reliability factors like the ones above, that align with that market strategy, start to turn that dominance into reality.

\_\_\_\_\_\_\_

**About the Author:** Bob Krausert is the owner of STRATE***X***, a Twin Cities based firm that works nationwide. Bob is the author of the book, ***Extreme Lean***, published in 2018. Bob has worked with over 60 printing companies, mostly mid-sized companies, but also with larger companies like Jostens and RR Donnelly. During his career, Bob has trained over 12,000 people at both public and private events. Bob has been working with PIM since 2010, periodically providing educational seminars for its members. Bob can be reached at stratexlean20@gmail.com or by phone at 612-743-8706. If you would like to have a specific question or topic covered in one of the monthly articles, feel free to make the suggestion!