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ON THE COVER: With so much time spent trying to keep up with orders, it's difficult for cast polymer professionals to follow business and financial trends as closely as they'd like. This issue seeks to address a few of the topics that ICPA members have on their minds.

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Gathering knowledge

"BECAUSE OF THE

TRAGIC FIRE THAT

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FOR HOW TO PLAN FOR

EMERGENCIES."



I'M INCREDIBLY ENTHUSIASTIC about several of the concepts in this issue of Cast Polymer Connection, which focuses on some of today's business and financial trends. First of all, I'm a huge supporter of the concept of incorporating lean methods into the cast polymer manufacturing process. Lean creates a vehicle to deal with the challenges that crop up day to day. It also makes the issues we deal with less personal

and more solvable by outlining the steps that go into our processes and then looking at each step from the vantage of how that step interacts with the next step and how the whole thing can be arranged more efficiently. Lean has been around in this country almost as long as assembly lines. However, in the last few decades, the wealth of information about

how this can be done better with today's workers, technologies, operational methods and challenges has grown exponentially.

The decision about when and how to go lean is definitely at the forefront of today's world, and I believe what Jim Lewis tells us in his feature can help readers focus their efforts. David Christensen also tells us in his article how we can take a step back and see where we spend our time so that

we can better visualize where we can trim back and place priorities.

Because of the tragic fire that occurred in one of our members' facilities in October and the members affected by the floods in Houston earlier, we thought any issue today that focuses on business trends should include suggestions for how to plan for emergencies. We want to offer members affected by these challenges our support and encouragement as they get back on their feet, and we hope they will let us know how we, as an association,

As the ideas in this magazine reveal, there are increasingly new ways to make work in our industry more satisfying, enjoyable and profitable. The place to begin finding and fine-tuning what we do is by gathering knowledge. This issue contains an article that outlines why and

> how your association works to help you in these areas, and I would encourage anyone who wants to get the most from ICPA and wants to give back most effectively to volunteer to be on the board or on one of our committees.

> I also encourage each of you to pursue the education and reading that will give you what you need to be part of the exciting future. You'll get some of that knowledge in the pages of this magazine,

and our planning people are heavily into seeing that you get major doses at this year's POLY-CON meeting April 19-20 in the Chicago area.

As your president, one of my goals is to find where we can improve on communicating with members and where we can provide more value to their businesses. Please let us know your thoughts on how we can do this. See you in Chicago! ■

> Luke Haas ICPA President





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MAKING THE DECISION



DESIGN

MANUFACTURE

ASSEMBLY

TEST

BY JIM LEWIS SHOULD I GO LEAN? That question, or the less positive version of it, "Why should I go lean?" has been raised many times in the last few decades, especially in the manufacturing world. I've written this article specifically to present some ideas that can help guide the decision.

A case in point

The owner of a small custom cabinet shop [for the sake of clarity, let's call him Bill] has been challenged by the "why" version of that question for some time. Bill invited me to visit his plant. I don't know if he extended the invitation to help him develop the answer or if it was to validate his perception that his company is already as "lean" as he can make it. He pointed out all of the latest and greatest technology his company has, and he boasted about the cross-functional staff and how they could float with the work load.

Both of these factors are commendable attributes, but they are just surface fluff. To determine how the staff may be applying *lean thinking* requires a deeper assessment of the company's situation. As we walked through the disconnected departments and around all the clutter of work in

progress, samples, cancelled orders and other distracting debris, I saw opportunities for improvement that were far more important than cross-training and sophisticated computer numeric code equipment.

A truly lean company employs technology as needed to create flow and eliminate waste. A lean company cross-

trains staff in critical skills so there is an adequate pool to draw from as demand dictates, not as a matter of course just so they can follow jobs through the plant. Since neither of those were apparent in my observations, I don't consider the company to fit the model of lean.

In a follow-up conversation with Bill, we discussed measuring success and key performance indicators. The company's measurement of performance to date had been profit. Profit is not a bad indicator of how a company is faring, but it's difficult to track and evaluate on a daily or weekly basis because of the expanse of variables that will affect it. I shared with the owner how the lean transformation was progressing at another shop [we will call it Joe's], and how improvements were measured there. One measure used at Joe's, Revenue Per Labor Hour (RPLH), was of particular interest to Bill.

RPLH is calculated weekly comparing the actual hours worked to the revenue generated in that week. I asked Bill what his company's RPLH was, and he conducted a quick calculation using what he thought was a good formula for figuring and came up with a number of \$218 per direct labor hour. That's an impressive number, but it was impacted

by assumptions that may not hold up under scrutiny. He said the total hours were based on a regular, 40-hour work week times 52 weeks times the current number of production employees. Revenue was interpolated based on the assumption that the current trend would continue through the year.

However, those numbers

From the trenches BY BRAD CAIRNS

One of my favorite sayings is "Lean is not for those who need it, Lean is for those who want it." If you're wondering what the heck this lean thing is, and if it is for you, do your homework. Just like buying a new machine of some type, you don't buy it sight unseen just because it has some wonderful features. Lean is not a new concept: it traces as far back as the 1800s and before (see next page). There's a ton of literature on the subject, and a quick Google or YouTube search will result in an avalanche of data. Get curious, read a lean book (see "List of resources") and watch videos.

ABOUT BECOMING LEAN



History of lean

Most people are surprised when they find out where the concept of lean originated. Many of the principles stretch back further than the Toyota production line or even Henry Ford.

There is evidence of process thinking in the shipyards and armories of Venice in the 1450s. Production lines go back as far as King Henry the third, who watched the hourly production of galley ships in 1574 go through continuous flow processing, and Marc Brunel, who created production lines for the British Royal Navy in 1810.

In the United States, the concept of doing things better on a production line goes back to Eli Whitney. Whitney, known best for inventing the cotton gin, actually had a long list of accomplishments, including the perfection of the concept of interchangeable parts, which he used in winning a U.S. army contract for the manufacturer of 10,000 muskets at the incredibly low price of \$13 per weapon.

For the next century, industry mostly concentrated on developing individual technologies that could speed up the process of making a product. Little attention was paid to what happened between each process in a plant or how those processes could be arranged for better efficiency or how each worker could better approach his or her task.

In the 1890s, however, the profession of industrial engineer was perfected, and one of the things these engineers did was look at how methods and individual workers affected efficiency. Thinkers such as Frederick W. Taylor, who looked at time study and standardized work methods; Frank Gilbreth, who added process charting; and his wife Lillian Gilbreth, who brought psychology and motivation into the mix, added the concept of elimination of waste into the manufacturing picture.

Henry Ford and his right-hand man Charles E. Sorensen were the first two thinkers to develop a manufacturing strategy that took all of the elements of a plant (people, machines, tooling, productions) and arranged them in a manner most efficient for producing the Model T. General Motors' Alfred P. Sloan then took it a step further with an approach for dealing with very large enterprises.

The methods of U.S. manufacturers caught the attention of the Japanese industrialists after the allied victory of World War II, and those industrialists emulated and perfected what was happening here. At Toyota Motor Company, the Just in Time method recognized the central role of inventory to efficiency. The recognition of how much importance factory workers hold in the picture has been credited with why Quality Circles were born followed by team development and cellular manufacturing principles.

By the 1970s, American executives were traveling to Japan to see how things were done there and in the 1980s, consultants entered the picture and began to define lean in practical and more easily spread principles and practices.



Ford assembly line, 1913. The magneto assembly line was the first of its kind.

are fraught with errors. For instance, he didn't account for potential changes by the customer, supplier issues, equipment, personnel and a number of other issues that occur regularly. The RPLH number was really a guess at best and could hardly be compared week to week for analyzing trends or measuring the results of improvement initiatives. Rather than condemn the process Bill used to arrive at the number, however. let's assume that the number he came up with was on the right track. The next consideration would be: Are there any conclusions or further assumptions that could be drawn by comparing the RPLH from Bill's company to Joe's? When we started the lean transformation at Joe's company, the RPLH was about \$130. Within two years of the launch of the lean journey at Joe's, the RPLH had increased to \$278. If Joe's number is so much higher than Bill's, does that mean that Joe's transformation

achieved success? To take that a step further, does it also mean Joe's shop is so good they don't need to continue to make improvements?

On the other hand, just because Bill's company has an estimated RPLH over \$200, should his shop be able to ignore opportunities to increase RPLH just because it seems like an already acceptable number has been achieved?

The answer to those questions is no. Since the selling price of an item is comprised of many factors that can be regionally and competitively influenced, comparing Joe's RPLH to Bill's would be like comparing apples to oranges. They may be in the same business, but they are not in the same market. Joe's company is in a very competitive area while Bill's company has little competition in his region. Joe operates at a lower margin so comparing his RPLH to Bill's company wouldn't be much of an indicator of continuous improvement opportunities or of progress towards an objective.

The only way to determine progress is to continually compare the current state to an established baseline and evaluate the resulting trend. At Bill's company, managers can't determine if improvements have been made or a goal is being achieved until periodic profit reports are created through the accounting process. That means that weeks or months can

A list of must-reads

BY BRAD CAIRNS

One of the most important things you can do for your company, your people and yourself is become an avid learner. Steve Jobs (you know, the Apple guy!) was quoted as saying "if I could have one super power, it would be to read books faster."

Many books are available to get you up to speed on lean and many of them are audio books. Here are my favorites.

To provide you some building blocks, there's

- 2 Second Lean: Paul A. Akers
- How to Win Friends and Influence People: Dale Carnegie
- The Advantage: Patrick Lencioni
- The Toyota Way: Jeffrey Liker
 To give you food for thought, there's
- Throughput Accounting: Thomas Corbett
- The Goal: Eli Goldratt (or any of his books, they all rock)
- Ideal Team Player: Patrick Lencioni
- Who Moved My Cheese?: Spencer Johnson

Brad Cairns is a partner for the Center for Lean Learning. He can be reached at brad@ signaturewoodsystems.ca. He will be addressing issues regarding lean manufacturing at POLYCON 18 in Chicago. go by with no definitive indicator of progress.

Returning to the "why"

So, back to the original question: "Why should Bill go lean?" Bill told me he doesn't want his company to get any larger and additional revenue isn't a motivator. But even when revenue isn't a motivator, delivering a quality product, on time, at the lowest cost, and with the least aggravation is. He can accomplish that by eliminating the waste and process interferences that are preventing maximum use of his current resources. Maximizing resource use doesn't necessarily mean that Bill will have to bring in more business to fill the void. He can reduce the internal lead time by holding orders in queue longer and increase the velocity of work going through the same resources. He can still continue to quote long lead times, or he can pass along the

increased efficiency and productivity to the customer in the form of quicker turnaround. Holding work in queue longer and increasing the velocity of work through the process is a good safeguard against the inevitable last-minute changes by the customer.

Whatever the decision, Bill will be able to increase profit while maintaining the same level of business by reducing the cost of quality production and by reducing interest expense for carrying inventory longer than necessary. Bill also will see his RPLH increase because lesser amounts of labor that adds no value will be going into making the product.

This brings us back to our original question, which I'd like to aim at this reading audience: Should you take your company on the lean journey? The answer should always be: yes!

Improving the way you do business, reducing lead time to be more competitive, reducing cost, increasing profit, and creating a more employee-friendly company should be objectives that you strive to achieve even if you never quite attain them. Applying lean thinking is the only way to move towards those objectives and effectively measure results along the way. Shouldn't you be on the lean journey?

JIM LEWIS is the founder of the Center for Lean Learning (www.thecenterforleanlearning.org).



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BY DAVID RYAN CHRISTENSEN "LONG DAYS AND HARD WORK" is a phrase that bounces around in the heads of many ICPA members. They put

in a ton of hours and sometimes feel like not enough reward is coming back their way. They know that's often the cost of doing business, but it's frustrating and troublesome.

I truly believe that many of today's business owners will lose millions in take-home money over the next decade. I often say they are missing out at a rate of about a hundred thousand dollars a year of personal money (as well as time with family, vacations and life improvements that bring everyday joy). Sadly, many of those owners are simply unaware of some simple reasons why they don't make more money. They blame it on stiff competition, poor worker habits and the inability to keep up with changing technology. Instead of blame, however, they should be looking at cause.

Root cause is internal

General Electric Co. is a broad example of what's happening. After years of pundits praising the company and a resurgence in valuation in recent times, GE stock plummeted nearly 40% in 2017, and the company dismissed multiple key executives. GE is now being hit hard with market criticism for not "owning" their processes, for poor investments and eventually for underperformance. The problem is, none of the so-called

"experts" that praised its operation earlier actually had vision into the inner workings of GE's operations. They were limited in their ability to recognize potential causes for struggle. A company doesn't simply lose billions in valuation in a few months; the mistakes occurred years ago and involved not understanding company internal processes.

Business-school-trained experts and analysts have claimed GE stock was a good buy even as recently as eight months ago, and some still claim it is. This is because the numbers they have studied on the profit and loss statements and other financial documents don't show where mistakes are made or opportunities lost. Nor do they show where improvements could have been made over time.

ICPA members may not have the resources or the scale of problems of GE, but shockingly, their problems are similar, just on a dramatically smaller scale. Companies that focus only on expenses and revenue will miss the answers they need for growth and for better returns.

Time may be key

The first place to look for better answers is time. Executives who are owners of businesses spend many hours managing people, overseeing processes, deciding on what they can afford, worrying about sales figures, contacting prospects and dealing with customers. That will never change, but another

factor can, which is: measuring exactly how much time is spend on each area. How many of us really know how we use each hour?

I want to share three secrets I believe will take a business to the next level. I use baseball as a metaphor because statistics can prove how good individual players are and drive whether they'll be mediocre players or make it into the Baseball Hall of Fame

Tip one: Gather the stats and always remember there are levels of value in the numbers.

Complicated statistics can cause you to miss the simpler things, critical factors such as whether your customers are happy with your product. However, not having any statistics at all can cause a disaster. If you don't have numbers, you cannot know if your company's position is good or bad or how to make it better. Simple stats, with an understanding of deeper numbers, can drive someone to higher and higher plateaus.

Let's go to our baseball diamond: Baseball is a slow-paced sport, but it is one of the most measured sports because there are clear points of demarcation. A pitch is thrown as a separate and distinct action that can be measured for speed, for movement, for pitch type, for location on the plate. In today's baseball game, pitchers scout opposing batters based on throws in nine quadrants of the plate. Then they scout by pitch type to that quadrant. This data tells the pitcher the likelihood of an outcome from his throw. The goal for that pitcher is to control the outcome of the batting attempt.

Business owners who don't know how they use their time—and don't know how each part of the process operates and how each affects that time—can't control the outcome

of the pitch. They won't know if it takes three pitches to get the batter out or seven: All they see is that the goal is an out. They also don't know if there are key ways to improve what's done to guarantee it only takes three pitches.

Tip two: Map it out and don't forget to account for variation.

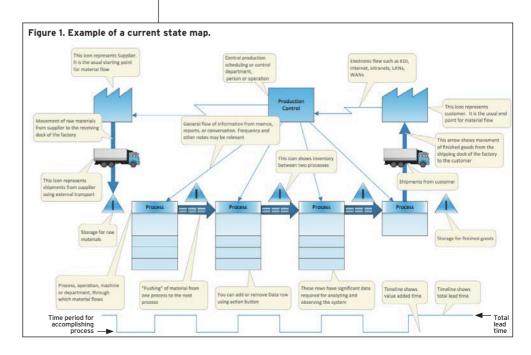
One way to create pitch quadrants for a manufacturing plant is to map the production process. This mapping exercise can be applied with all the processes of the operation. It is called a current state map. Figure 1 is a quick example of what such a map might look like.

The image uses lean manufacturing language and symbols; but the method with which you note a process or create a current state map is not as important as collecting the data; a company must be watching enough individual processes to know the variations and the causes of those variations. A current state map can help to analyze time for individual operations and individual work centers as well as provide a look at the entire process.

Measuring each step in the operation and accounting for variation are simple actions, yet a few hours of evaluation can lead to millions of dollars in terms of both money saved by fixing broken worker processes and in money to be earned through new opportunity. The key here is understanding what is being done with each area and how variations affect the outcome. Here's a quick list of what to assess:

- How much time is spent searching for answers to new challenges?
- How much time is spent re-ordering things?
- How much time is spent setting up machinery and aligning human resources for the next product and its manufacturing process?
- How much time is spent re-scheduling when things don't go as estimated? How often must customers be called to apologize for late delivery?
- How much time is spent searching inventory for what you need?

Management studies in recent years have shown that much time is wasted in the workplace. An oft-quoted 2014 study by Salary.com showed that 89% of respondents to an



employee survey admitted wasting time at work every day, a figure that had risen from the previous year's 69%. What's more, about 31% of respondents said they waste roughly an hour and another 31% said they waste about half an hour.

It's actually likely that most owners and their companies have too many steps in their processes. In those cases, it's taking seven pitches to get the batter out, or even worse, there are mistakes being made that cause a process to have to start all over again. One out should only take three pitches.

Tip three: Create a plan.

With the current state map, a company has the ability to create a specific plan for addressing each step. A plan is effective for the same reason that following a sensible and tracked eating plan works better in trying to lose weight than depending on just self control or going on a crash diet. People complain about how hard dieting is because it takes so long to see the desired changes—people lose faith along the way. By creating a process map, an owner can visualize where time is already being wasted (how much the company weighs) and what broken steps have led to that waste (eating before bedtime). Their process map is an instant diet plan that allows fat to be

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cut out of the picture, sometimes the very next day.

The key to success in doing this involves looking at individuals and their processes and analyzing how critical their particular processes are to the overall operation. If a person is a vital component to sales, management or operations of the company, the mapping should occur immediately, and the owner of the company should not go another day without a diet plan: Understanding what's happening with individual processes and where those processes should be modified is a step towards the future.

The role of technology

This entire mapping and tracking can be done without spending a single dollar on technology. However, I would be remiss if I didn't point out the benefit of investing in tools to help. Let's return to our baseball example. Baseball throwing can be watched by a single individual who tracks which quadrant the pitch entered, studying each ball thrown and presenting these findings to the pitcher. However, the process is a lot smoother if a camera is tracking, recording and reporting back what's happening.

Of course, you have to use that camera effectively. In the world of manufacturing, a company that has an enterprise resource planning (ERP) software system, but doesn't use it correctly, is no better off than the company where everything is done manually. An ERP is not a tool to track orders—it's a measuring stick to know better and quicker what's happening. Businesses who have ERPs don't have to manually record what's happening—the data is created automatically.

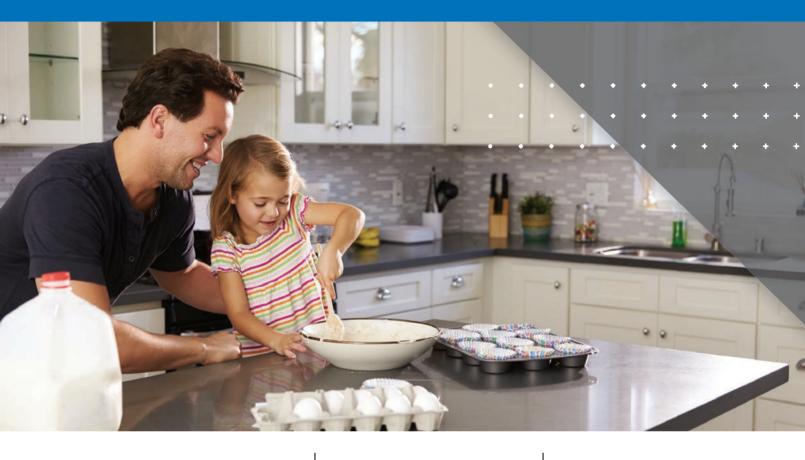
The key to why this is important is that people who have tools to help them get the simple, pertinent information they need for mapping, also have a way to track. They can note what's happening daily, weekly and monthly as well as look at what happens when improvements are made in each step of the process: The monitoring itself doesn't have to take all of their time.

There's also coaches in this process—consultants and other resources to guide the business owner in this mapping process. Returning to our dieting scenario, a fitness trainer can get someone in tip-top shape a lot quicker. The sooner he or she is able to do this, the quicker the fitness program will begin to show results. But once you've lost the fat, think of the possibilities—measuring and monitoring is just the beginning. The next step is a company that's healthy and ready to gain muscle. \blacksquare

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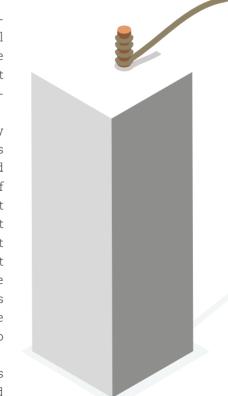
BY CINDY BODENSTEIN **TODAY'S GLOBAL GOVERNANCE CODES AND REGULATIONS** recognize the duty of boards and executives of companies to take a long-term view of their businesses. One key responsibility in doing that is

to develop ways to ensure a company's sustainability. This change in emphasis from the days of yesteryear is driven in part by the fact that in the current global business world, companies are dealing with ever-longer supply chains and closer integration between business partners, which means risk becomes both more complex and highly contagious.

In other words, the inability of a manufacturing plant in Japan (for example) to honor its commitments has the potential to impact many supply chains and countries today. On a more local basis, a fire in one company's factory can affect not just that facility but the whole company, the surrounding community and the company's suppliers.

This is one of the main reasons that today an emergency plan is critical, as is the ability to handle natural disasters such as the floods and hurricanes the U.S. has experienced this year. Even actions as simple as a shutdown because of major equipment failure can become major. We must protect our staff, save our key records and files, secure our equipment and more. Also, what happens during the crisis is only the first step. The real challenge comes next: Where will the staff report for work if their usual work areas are not accessible? What are the implications for other business processes and partners when one aspect of our operation goes down? How will the events that have occurred be communicated to the public, to stakeholders and others?

In recognition of the complex levels of interdependencies in today's business world, disaster recovery has expanded



into the discipline of business continuity management, which has its own set of standards (among them, the global International Standardization Organization's 22301) as well as a professional organization whose purpose is to service members of the business continuity profession (the Business Continuity Institute).

Business continuity is a process that needs to be managed throughout a business' entire life cycle, constantly being tested and improved. In the process, a company will not only be better able to respond to a disaster, it hopefully can prevent some of the ill effects of that disaster from materializing.

The concept is called "business resilience," and it's vital in today's world, where the risks are so plentiful.



Looking at the impact

A business continuity plan begins with understanding the specific risks a company faces, and what effects would result if those risks become reality. Externally, this means surveying the entire risk landscape within which the company operates. Even more important than this external picture is an internal review of risk. That involves understanding exactly what business processes make up the operations of the company as well as measuring the relative importance of each process in achieving overall corporate strategy. Doing this can be complicated by the fact that each person involved in the business process believes what they do is most critical. This is why it's important that the person in the company entrusted with business continuity management (whether that's the company owner or a designated emergency

In an emergency

Emergency planning is part of the wider business continuity management program, but it's essential. When any type of emergency occurs, the following should be in place:

- A response team should be well briefed and assigned specific tasks.
- should have complete lists of personnel and contact details to monitor safety and continue combers should be on record. Instant messaging groups can provide an easy way to keep large numbers of people informed.
- Assembly points within specific facilities should be established and roll calls taken for on-premise emergencies. First-aid kits should always be on site.
- noted for use as needed including how to get in touch with top management, business partners, the board chair, media, emergency response teams and the business continuity provider, if there is one. It's also a good idea to always have a media contact within the company designated to handle a crisis.
- Call center and main business numbers should have the capability to be rerouted as needed.
- A "battle box" should be put together for relocation purposes. In that box should be physical items such as stationary, stamps, company manuals and other vital company publications.
- A copy of all the passwords people need to access their systems as well as the shortcuts to frequently used corporate applications should be kept securely off site.

manager) needs to engage with the entire management staff to prioritize business processes in relation to strategy.

While difficult to put together, this "business impact analysis" is critical because it determines how quickly each process in operations can recover and how far back in time that process of recovery can reach, which in turn affects budget allocations.

It is vitally important not only to get buy-in from senior management, but also to bring the entire staff into the planning processes.

Once a business impact analysis has been completed, a company can begin to develop specific plans for recovering each process based on risks that particular company faces.

Because of the reliance of modern business on information and communication

technology, it follows that the business continuity plan for many companies will focus heavily on disaster recovery for events that cause technology disruption, including (for many companies today) cybercrime. But information failure or loss is only one element of a business continuity plan. Other elements of the plan must address what will happen in the event of natural disasters such as fire and flood, unpredicted industrial events such as strikes, health epidemics and terrorism. Even something like power and water outages can compromise a company's ability to operate.

Many companies include a work-area recovery element to their plan. That's a place where staff goes during an event if operations are disrupted. Business continuity providers, for example, often provide fully equipped office space so clients' clerical or back-office functions can be relocated relatively easily. Providing recovery sites for manufacturing facilities is a much trickier proposition, but it can be done through careful preplanning on how to continue production if a particular site is rendered unusable. Companies with more than one site can have plans that include shifting production to alternate sites. There are also companies that enter into agreements with competitors to handle production needs during a disaster.

The key here is that there are many moving parts to any company, and the plan for continuity needs to be thought through in advance. Working out what to do with staff or where to move production is something that would be difficult to achieve in the middle of the crisis itself.

What's in the plan

A business continuity plan should:

- 1. Identify the scope of the plan.
- 2. Identify key business
- 3. Identify critical functions.
- 4. Identify dependencies between various business areas and functions.
- 5. Determine acceptable downtime for each critical function.
- 6. Create a plan to maintain operations.
- 7. Test your plan and revise often.

A process, not a destination

Like any business plan or strategy, it is important to understand that a business continuity plan has its own distinct life cycle. Risks and other circumstances change, and perfection of any plan is never attainable, so companies should seek a map of action that flows smoothly with continuous improvements made.

Also, a business continuity plan is worth little unless it is regularly and thoroughly tested with the results of each test fed back into the plan. Some of this testing must take the form of real-life drills, rather than desktop simulations, because these drills provide the hard information on just how effective the response is, and, more critically, its shortcomings. This iterative process is analo-

gous to fitness training because it means that the company develops an innate resilience that allows it to respond to, and recover from, any disaster.

A highly specialized element of any disaster response plan is crisis communications. Experience has shown that a major factor in how quickly and effectively a business can recover depends on how well it can communicate during a disaster. This communication is a vital link with employees, but also other stakeholders, including business partners, families of employees, neighboring communities, government agencies and the public as a whole. In an age dominated by social media, communication has become a zero-sum game that can easily spiral out of control.

Too often, companies focus on planning for a specific disaster without taking into account the bigger picture: forming a plan that grows and improves. Building resilience into disaster planning means what happens can be applied to all types of disasters and interruptions in business. That's why business continuity management has become a profession and entire companies are springing up as third-party service providers for part or all of the needs that will help a company get back on track. \blacksquare

CINDY BODENSTEIN is marketing manager for ContinuitySA (www. continuitysa.com), a leading provider of business continuity management and resilience services to public and private organizations. The company operates Africa's largest network of recovery centers. To reach the author, write Rebecca Warsop, Warstreet Marketing at rebeccaw@ warstreet.co.za.



BY GENILEE PARENTE

THE INTERNAL REVENUE ASSOCIATION currently recognizes almost 67,000

associations in the U.S., according to the latest The Power of Associations report by the American Society of Association Executives. Within those organizations, there are 63 million Americans who have volunteered their time and effort.

Looking at the world of associations through this wide angle reveals just how important professional societies and organizations have become to the background of this country's businesses—associations generated \$142 billion in revenue for the country in 2013 (the latest year such information was gathered). Clearly, professional organizations have become vital to most people in this country and are a major influence on society. To understand why individuals join associations, let's take a more focused look.

Why people join

As busy as everyone in the cast polymer industry is, most owners still know they should probably join ICPA and maybe a local business organization. Finding time, however, to not only belong but be active, seems like a daunting task.

Often people ask, "What will I get out of being a member of the ICPA?" says ICPA Executive Director Jennifer Towner. "That is very important of course, but it's also important to *give* as a member of an association."

"Sharing advice and support can build relationships that can ultimately strengthen the industry and gain more business," she says.

Those that have belonged to an organization for a long time would scrap the question of how to find time in favor of a more important one: How can any company afford not to join its professional society?



The value of the old and new friendships developed by belonging goes way beyond simple exchange of information—it provides bonds that last a long time. Enjoying Dallas during last year's POLYCON were (from left) Anne Thomas, Composites One; Bonnie Webster, Monroe Industries; Jack Simmons, ACS International; Sandy Luicana, Luicana Industries; ReBecca Erdmann, Sand & Swirl; and ICPA Executive Director Jennifer Towner.

They'll tell you the basic "why" behind joining has remained the same over the years: strength in numbers.

Al-Co products has been an ICPA member since 1978, when the association was called the Cultured Marble Institute

Member Bret A. Busch, CCT-CP, manager of Al-Co, says this about ICPA: "The most valuable reason to belong to this association is networking with fellow manufacturers and having an association that keeps up to date on government regulations, manufacturing techniques, building trends," and other key data.

Supplier member Marilyn Huber, national sales representative, Caddo Pigment, agrees.

"Our company joined many years ago to stay current on trends and developments in the industry, to interact with our customers at the meetings, and to meet potential customers and share our products and available services with them," she says.

That need for interaction has not changed over the years and is always listed by association organizations and experts as the top benefit.

What has changed, however, is that the world of manufacturing and industry is evolving so rapidly, professionals need a way to reach out and grab hold of what's happening before it gets away from them.

Buss Wible, director of marketing at supplier American Colors, has been a familiar face at ICPA events for many years. American Colors has been a member of ICPA since its inception.

Here's how he explains why people join professional trade groups:

"The benefits of joining vary with each member. For instance, a supplier may be interested in acquiring leads from

an association or keeping up with changing trends. He may wish to make contact with clients by advertising in association publications or keep in touch with distributors through association exclusive events."

Meanwhile, "A manufacturer may be interested in exchanging product concepts or finding solutions to specific production difficulties," he adds.

For American Colors, the value in being a member of ICPA increased when the industry became automated, changing from small, individualized, hand-based manufacturing to today's high-output, mechanized production, he says.

"Today, automation allows manufacturers to produce an amount in one day, the volume that would require a month not long ago," he says.

Keeping up is a constant process and suppliers or manufacturers who ignore that reality will find it hard to catch the success train

The top reasons to belong

Here are other reasons people give for joining, and why they say they become active in their associations:

Knowledge. With so much time spent getting daily orders taken care of, it's hard to concentrate on the broader picture: learning how to improve processes, develop professionally and bolster the bottom line. The world is crammed with advice from self-help resources, business books, management tips, consulting companies and more. Belonging to an association allows a person to filter through that expanse of available information to find the juicy bits that other members have found useful or that the association has deemed worthy enough to post on the web, feature in an event or write about in a publication. Targeted knowledge is gained at every meeting, through every association communication and from every conversation between two members.

In recent years, ICPA has become the go-between for the younger generations coming into places of leadership. Last year's POLYCON had a roundtable designed for new industry leaders.



Raising the industry's influence. Belonging to an association allows members to work on a common goal: creating a positive image for the industry. Associations today are a major influencer at the community level, within the government and with the media. By joining forces, members create a unified front to tout the benefits of cast polymer products and the strength of its industry players. They also have the force to demand that legislative action be fair and balanced, and that others in the industry live by quality standards.

Improving the image of individual companies. Belonging to an association also bolsters the reputation of the individual member company. Putting an ICPA logo on a website, using an ICPA publication as a handout or talking to others in the industry about the association and what it does shows customers and potential customers that the company takes its role in the cast polymer industry very seriously. Belonging to an association is like taking on a brand—in this case the brand of professionalism. In today's society, which is constantly looking for ways to ensure what we buy is a quality product, that brand can be vital.

Ensuring the industry's future. One of the most recognized challenges in manufacturing today is finding the technical skill levels needed to make the best products. As baby boomers retire, taking years of experience with them, at the same time industrial companies are fighting the stigma that factory work is dirty labor, getting the right people in place becomes more and more difficult. Associations can be the go-between: They can bring in new ideas and new blood from the younger members while allowing the more experienced to pass along what they've learned. Associations are both a resource for learning new skills for the younger generation and a way for the older generation to get up to speed.

Strengthening the net. One advantage that most long-time ICPA members say they get from networking in an associa-

An association can provide the practical hands-on knowledge that a manufacturer needs to make the very best products.





The learning process takes place at every event, every social gathering, every small or large meeting.

tion is that, when their business has a particularly troublesome problem, they can pick up the phone and call someone who may have experienced a similar situation. Networking reaches way beyond the cocktail hours or lunches of specific events. Also, the more it's done, the stronger the network a member builds to help him or her in times of need.

Staying motivated. Professionals who put in too many hours and find themselves stressed too frequently need to periodically review why they are doing what they do. Belonging to an association, discussing the industry's general issues and opportunities, serving on committees that further the work of the entire membership, swapping stories with other people in the cast polymer field can remind them why they got into this business in the first place.

Finetuning leadership skills. Serving as head of a committee or project brings satisfaction to a member beyond knowing that he or she fulfilled a duty to serve. Being put in charge flexes the muscles of compromise and management, and leading an effort for the association gives a person practice at what it takes to get things done.

Making friends. When someone within an association walks up to another member at a reception, he or she already has topics for conversation: the industry, the event they're attending and after a few times of seeing the person, their past interactions. Although networking is touted as a way to make valuable contacts for purposes of work, it also serves a second purpose: It establishes ongoing relationships that develop into friendship. In today's disconnected world, a world in which everyone is too often nose-to-the-grindstone, those friendships can be a life preserver.

GENILEE PARENTE is executive editor of Cast Polymer Connection. She welcomes story ideas for this publication. She can be reached at gsparente@verizon.net.

An exercise in measuring value pricing

BY ANDREW GREGSON



WHO WOULD HAVE THOUGHT that pool noodles—those colored foam rounded sticks so popular in the summer at the local swimming places—could teach me a lesson about value pricing.

Two summers ago, I noticed a gas station selling them in a rural area that displayed a sign proclaiming their price at that location and bragging that the price was: "Cheaper than Canadian Tire in Town." I knew that "in town" was 20 miles away. Why, I thought, would you advertise you were cheaper when you could have made more money by posting a sign reading: "Only \$1 more than you'll find at Canadian Tire, which is 20 miles away!" They were simply giving up bottom-line dollars, since the distance someone would have to go to get a pool noodle at a better price was part of this equation.

After you ponder that question, think about this: Many years ago the pundits were saying that the company Gillette had lost its way and would soon disappear. The company made and sold razor blades, which were a commodity item in that everyone owned a razor and everyone needed blades

for those razors. Gillette was competing in a huge market with even larger companies—but it had a product everyone needed and wanted. Then Bic entered the market with cheap disposable razors, the black clouds gathered and the portending of doom for Gillette commenced. But instead of folding, Gillette created its own version of a disposable razor, which gave a smooth shave just like the old-style blades secured by a metal top and a screw in the handle. The multibladed Trak razors sold for higher prices and sold well.

Finding the profit in a product is always about finding the value proposition. In the case of the pool noodles, it could have been clearly stated in that first sign. "Don't drive 20 miles for \$1 in savings." In the Gillette case, they found a value proposition in appealing to those who liked the notion of a disposable razor but would pay for a shave without the tugging and face rash given by Bic razors.

Do you think you have a product or service where you are squeezed by competitors and customers? Do you feel you might be in a price trap?

Continued on page 22

The ICPA is Moving Forward with Forward Thinking by strengthening our membership and developing new strategies to promote our industry and support our members.



Our website, TheICPA.com, provides international exposure through public membership listings and advertising opportunities. For ICPA Members only: technical and regulatory documents, legislative information, and other valuable resources.



Our monthly e-Newsletter, *The ICPA Insider*, features timely news, research and studies, educational opportunities, regulation updates, as well as events and announcements.



Our association's own magazine, *Cast Polymer Connection*, is filled with features, articles, manufacturer spotlights, and advertising opportunities for suppliers and distributors.



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Have you made plans for POLYCON?

Early registration for POLYCON Chicago began in December. The event will be April 19-20 with the main business meet-



ings taking place on the luxurious grounds of the Eaglewood Resort and Spa, which is just northwest of Chicago in Itasca, IL. Plant demos will be in the facilities of Marble Works, South Elgin, IL. Based on requests by members and past attendees, this year's event will have a stronger focus on technology and new automated systems.

Composites One, Polynt Composites and R. J. Marshall will be this year's platinum sponsors for the event. Composites One will sponsor a welcoming reception on the Wednesday preceding the business meetings. That reception will be held in the Prairie River restaurant and its outdoor patio, which is off the Eaglewood golf course. Polynt Composites will host Thursday night's post-business-session reception, which will take place in Ogden's bar and terrace at the Eaglewood. R.J. Marshall is sponsoring the Thursday luncheon for the event.

POLYCON offers a full day of educational sessions planned by the ICPA POLYCON Planning Committee. These sessions are designed to give attendees new tools for running their operations and their plants, including a half day of the popular roundtable discussions, which focus on specific issues and allow attendees multiple opportunities to pick and choose which topics interest them. On Friday of the event, attendees will travel to Marble Works to see plant demonstrations of new and improved techniques for making cast polymer products.

The Eaglewood Resort offers attendees a 72-par, 18-hole championship golf course certified by the United States Golf Association, as well as a host of relaxing spa opportunities and other recreational activities; a beautiful, natural setting; and facilities inspired by Frank Lloyd Wright. ICPA has se-

cured a block of rooms at a discounted rate.

Keep up to date on the planning of the event or register for the event by visiting ICPA's POLYCON site at www.POLYCON event.com.

Help ICPA with the forum page

One of the planned special sections for ICPA's website is a forum page where members will be able to get answers to specific questions, post equipment and other items they want to buy or sell, and exchange information directly with other ICPA members.

Executive Director Jennifer Towner needs help getting this forum off the ground. She's requesting aid in determining the design and format of the forum. Her hope is to make the page informative and valuable but also user friendly. Once the forum is in creation, she needs volunteers to help test it out and to assist her in setting the "rules of engagement" (what should and should not be discussed). To volunteer, write her at jennifer@theicpa.com.

Get One Take 20 through this year

The special membership campaign ICPA created to encourage people to spread the word about the association's many benefits goes through the end of 2017.

Get One Take 20 offers a 20% discount on dues to members who refer other members for membership. The drive was created in recognition of the fact that the best way for membership to grow is word-of-mouth.

Members are encouraged to seek out cast polymer companies who might not already be members and spread the word that ICPA is Moving Forward with Forward Thinking.

Member resources page continues to grow

Cast Polymer Connection included a partial list of what members will find on the member resources portion of the website in the last issue. That list is growing constantly. Here what's now under "industry regulatory and legislative information":

- Test Report—Monomer Emissions from the Manufacture of Cultured Marble and Solid Surface Products July 2017
- What you need to comply with the Respirable Crystalline Silica Standard
- OSHA's Respirable Crystalline Silica Standard Presentation by Kay Rowntree at POLYCON 2017
- 2017 OSHA Small Entity Compliance Guide for the Respirable Crystalline Silica Standard for General Industry

- CMI Fire Testing Program
- Complying With SARA, Title III (Section 313)
- Emissions Models for the Reinforced Plastics Industries
- EPA Proposed MACT
- Hazard Communication Standard
- How to Comply with the OSHA Methylene Chloride Standard
- MACT 2003
- OSHA Process Safety Management
- MSDS Cultured Granite
- MSDS Cultured Marble
- MSDS Lightweight Cultured Marble
- MSDS Solid Surface and Cultured Onyx

And that's only what's under "legislative/regulatory." The resources page also now has educational videos, technical bulletins, an ICPA quality control manual, and is building places for marketing support materials, educational support and much more.

Members who need to retrieve their password should contact Jennifer Towner at ICPA (jennifer@theICPA.com).

Best of the Best competitions at POLYCON Chicago 2018

POLYCON 2018 will expand on the Best of the Best contest to include a second category for entrants.

Manufacturers are encouraged to show their best work for either "Best Design Technique" or "Most Innovative." The competitions present companies the opportunity to showcase to all the attendees at POLYCON the industry's most beautiful and original products.

Both the winners and all competition entries are highlighted and displayed during an event at POLYCON on Thursday. Meanwhile, every attendee at POLYCON has the opportunity to get new ideas and see what other innovators are doing. They also get to vote for the winner of each category.

Winners receive attractive trophies and \$500 cash prizes. The information and rules for the competitions are found at the POLYCON website under "News and Info": http://polyconevent.com/news-info/.

The association needs you!

Nominations for the ICPA Board of Directors begin in March



ICPA NEWS TO KNOW

2018. The association is seeking new candidates and asks members to submit professionals they know would serve well in a leadership capacity or to volunteer their own expertise to serve as a member of the board.



Top tech trends for the workplace

It's that time of the year when experts look at what's happening in the world of busi-

ness and what may be coming in the near future. Last year, the website PGi says the top trends were streaming video, artificial intelligence, cloud computing and virtual reality applications. This year, however, the site says the trends are moving towards mobility, practical use of cloud technology and big data.

The site says smart devices and mobile technology are making a huge shift in the way businesses operate. Although desktops and offices are still around, remote worksites are becoming more common; PGi sites a study that says over 61% of workers today routinely operate outside the office and points to the newest iPhone as an example—it's designed to act as a personal laptop.

As far as cloud technology, PGi says that while the cloud has been around a while, it's only now starting to be used heavily: a recent study shows 90% of organizations use cloud technology in some fashion. The most popular uses are email, messaging and communication platforms.

The big data trend refers to algorithms and marketing automation that automatically pulls sales information for followup and trend analysis. PGi says that the challenge today is in finding meaningful ways to use that data.

For more information on what the company says, go to www.pgi.com and refer to the Oct. 5 blog. ■

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The Bottom Line

Continued from p. 18

Depends on the customer

Customers come in two flavors. First are the customers who will see that pool noodle sign and drive across town to save a dollar, usually because they really need that dollar. The remainder, however, will trade dollars for quality and perceived value. The challenge in most businesses, whether the business is direct retail, contractor or service provider, is to find the value your customer is willing to purchase.

So how can this be done? Here are a few steps in the process:

- Gather together samples of all the advertising you and your competitors use and build a table of benefits for the customers shown in those ads. Cross out all duplicates. What's left in the list?
- Interrogate your frontline people. These can be the sales people, the people in the shops or design centers, the installers, the after-service providers and even the receptionists in your front office. They call these people frontline for a reason—they are there in front of the action. Use that reality and find out what they know about what customers seek and how often it's something you don't offer.
- Go directly to your customers. Use emails, surveys, direct conversations, follow-up phone calls, whatever is available, to ask them directly: Why did you buy from us? Also ask: Are there ways we can improve what we offer and how we offer it? Collect this data and ruthlessly examine it. Treat it as data, not anecdotes, and look for patterns.
- Create a Unique Selling Proposition (see Fall's Cast Polymer Connection), a clearly articulated statement about who you are and what you do. The proposition should shout out customer answers to the questions: "why should I buy from you?" and "what's in it for me?" Once you have this statement, add it to every piece of advertising or marketing materials. It costs nothing extra to do this, but it will have an incredibly profound impact on the bottom line.

Once you go through the steps above, be honest with yourself. Once a month, ask yourself: "If I raised prices by 50%, how many customers would leave?" If the answer is ever: "all of them," go back to item 1 on this list.

ANDREW GREGSON (www.intentfinancials.com) is a business advisor specializing in finance and pricing. He writes on business matters and speaks to business groups on how to increase profits and follow the lead of larger companies. He can be reached at andrew.intentfinancial@gmail.com.



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