(RE)GAINING CONTROL IN MANUFACTURING

The Right ERP Can Ensure Uncertainty Doesn't Restrict your Growth

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Manufacturers Face New Realities

Enterprise Software to Meet New Challenges

Given the ever-shifting realities of today's manufacturing environment, how can business leaders (re)gain control? The answer is to have an enterprise resources planning system (ERP) that fits and spans their business. Many companies are finding their current ways of working restrict their ability to respond. These companies are at an inflection point and will benefit from seeking out and investing in ERP that enables instant yet profitable decisions using complete information from across their business and plant operations.

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Responding in an Uncertain World

Uncertainty Defines the Market

No one doubts that their environment is uncertain. Nearly every business is feeling the impact of world affairs, including the COVID-19 pandemic, natural disasters, political upheaval, trade wars, and tariffs.
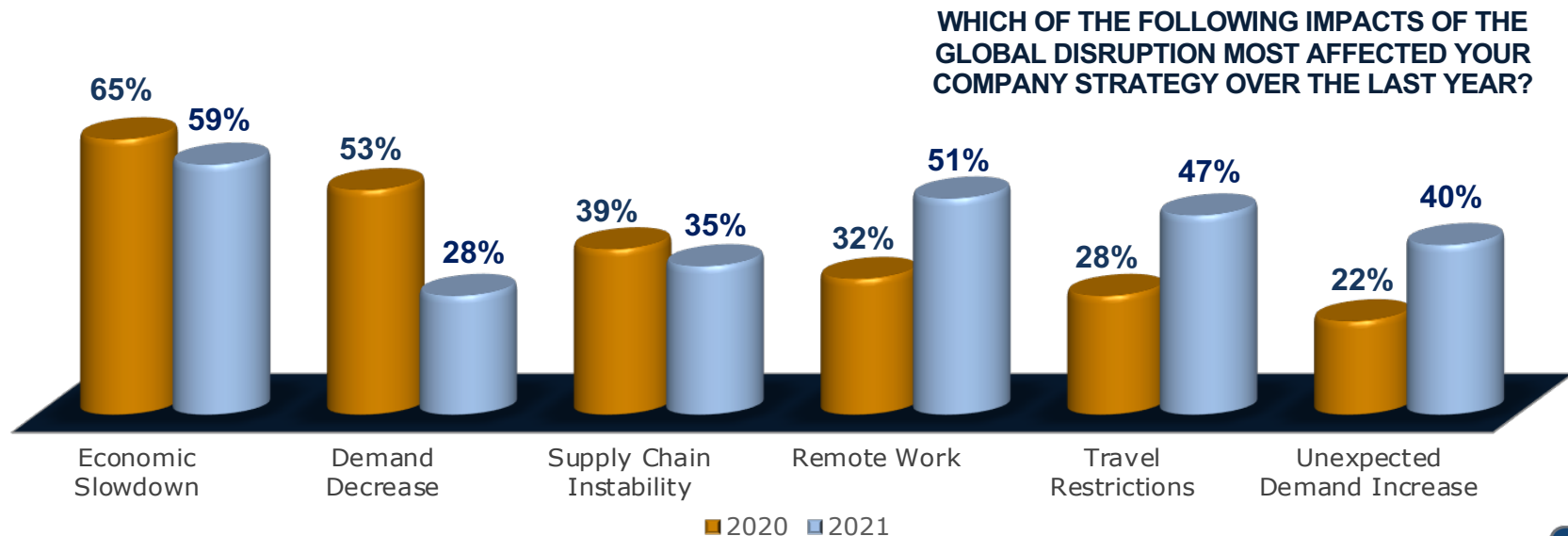
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> Today's ever-changing business environment makes control difficult. There is no normality to business anymore. You must be on your toes now more than ever before, and you need to make quick decisions to survive. Good data and facts are key to maneuvering during these times."

Chris Naumovski
CFO
THE SISLER MANUFACTURING GROUP

Raising Key Questions

As a result, manufacturers face a plethora of market questions.[1]

- **Demand** – Will customer orders be up or down or swing wildly between the two?
- **Supply** – Will raw materials to meet that demand be available now or later or not?
- **Labor** – Can the company hire and retain employees with the needed skills and experience in the face of an enormous talent shortage nearly everywhere?
- **Sustainability** – Can the business keep up with ever-changing and more stringent government and customer requirements?
- **Costs** – Even when customers expect price drops, costs are rising; can we keep a healthy profit?

WHICH OF THE FOLLOWING IMPACTS OF THE GLOBAL DISRUPTION MOST AFFECTED YOUR COMPANY STRATEGY OVER THE LAST YEAR?

Bar chart:

Category	2020	2021
Economic Slowdown	65%	59%
Demand Decrease	53%	28%
Supply Chain Instability	39%	35%
Remote Work	32%	51%
Travel Restrictions	28%	47%
Unexpected Demand Increase	22%	40%

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The Growth Conundrum

> " As small business people, we just keep our heads down and keep going. We have to ignore the noise on the outside and just keep going."

Lindsey Hahn
CEO
METRO PLASTICS

What's Possible to Control

With so much uncertainty, control may seem elusive. Yet, there is a known approach. Peter Drucker said, "You can't manage what you don't measure." To measure, you need to define and understand, plus see all the relevant information.

In short, **visibility** is the foundation of control. Seeing everything is relatively easy when the company is small but becomes exponentially more difficult as the business grows.

Growth Beyond Span of Control

Losing visibility is an issue. However, many companies get stuck in their growth because it is hard to change, especially when you've had success.

Starting a business is not the same as scaling, and scaling has various breakpoints where processes need to change. Typical breakpoints are when the founder or founding team leaves, when the employee count reaches 100 or 250, and when the product portfolio grows dramatically.

> " The **#1** limiting factor for first- and second-generation family-owned companies is that they did not develop **a plan to transfer the leadership** of the company. The next limiting factor is that they don't know how to scale. You must develop the leadership team and still have the system work."

Michael Engler
CEO
INTERCONNECT SOLUTIONS COMPANY
PLASTICS DESIGN & MANUFACTURING

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Expanding the Advantage

Follow the Money

Manufacturers will always find new markets, regions, and customers to serve if they want to expand. The question is, can you succeed in those, with the proliferation of requirements, regulations, and expectations? Growth becomes an information visibility problem that can lead to loss of control. When visibility and operating processes are inadequate, the company can't accurately cost products and keep operating margins in line for a healthy profit.

Responding to the Unknown

Agility is often an advantage for small and medium businesses. So, how can companies keep that agility as they grow? Agile yet efficient and scalable is the vision of digital manufacturing. Digital transformation rests on having the right software to gain visibility. The vast majority of manufacturers believe technology adoption is key to their business sustainability.[2] To both see everything and seize control, end-to-end manufacturing ERP is an essential foundation.

"

When we make a product and scan it into inventory, it's all captured: production history, material usage, and how many parts we have at that time. So, when a customer calls, we know whether we have enough material if they want to increase the order. If they want to cancel, we can check that impact also."

Lindsey Hahn
CEO
METRO PLASTICS

HOW IMPORTANT IS TECHNOLOGY ADOPTION TO THE LONG-TERM SUCCESS AND PROFITABILITY OF YOUR COMPANY?

- 1%
- 5%
- 51%
- 43%

- ■ Critical
- ■ Important
- ■ May Contribute
- ■ Not Relevant
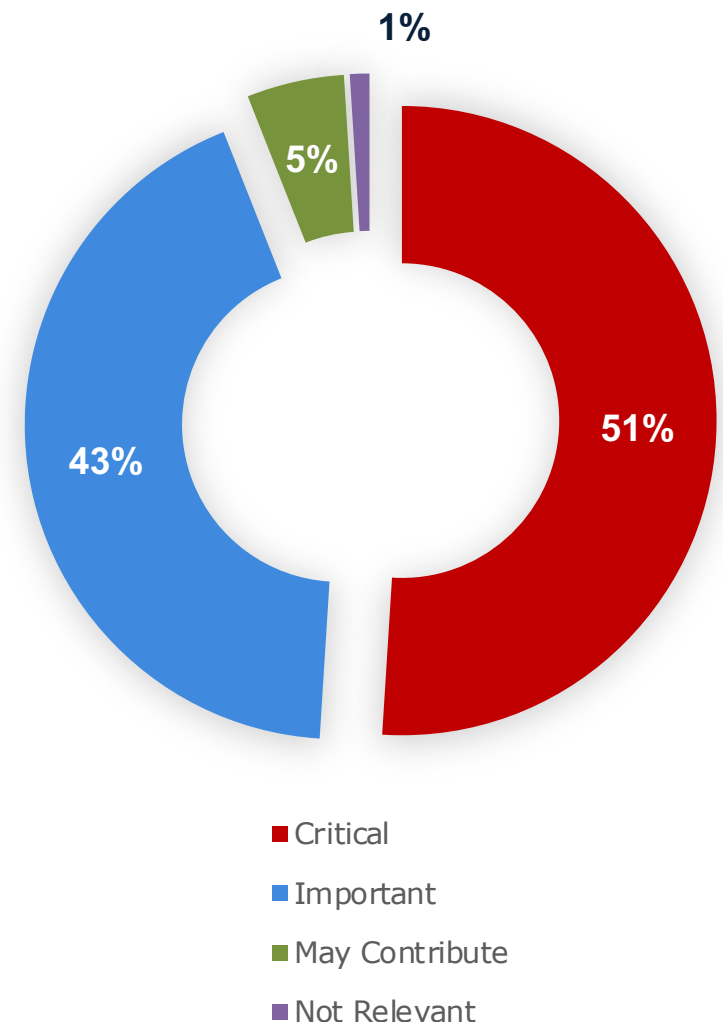
Digital Ways of Working

Many of our decisions are based on financial results. However, to have good financial data and results, we need good systems to harness information that encompasses our overall operations from quality, engineering, manufacturing production, scheduling, materials, maintenance, and so on. It takes all these areas working toward our strategic plan."

Chris Naumovski
CFO
THE SISLER MANUFACTURING GROUP

Seamless Information Flow

When a company is small, a few people know everything. As the company grows, it's more complicated, as more people need to make good decisions. Most mid-size companies find it too expensive to integrate even a few independent applications. As a result, they typically have separate systems with manual, spreadsheet, or shared files to fill in gaps. This does not enable information to flow reliably.

The Power of End-to-End Software

Modern ERP covers every department in the company and reaches into the ecosystem of suppliers, outsource contractors, channel partners, and customers. The result is free-flowing, consistent data from a trusted single source. Because it's in context, the data becomes information. Integrated workflows between departments support quick yet confident decisions.

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Digital Manufacturing In Reach

Automated Process Support

Comprehensive ERP is not new, but modern ones now automate some repetitive, standard processes. Each user can then focus on contributing where they deliver high value. In short, the concept of digital manufacturing is not just for big companies. Smaller manufacturers have gained tremendously in efficiency, consistency, and accuracy to control the business for profit. With cloud options, it's easier than ever to implement and maintain the ERP that fits and feeds your business with limited equipment and IT staff.

"

ERP is vast – nobody uses 100% of every feature in every module. But if you look at the companies that use the most, you'll find there's a strong correlation between use and productivity and profitability of that company."

Michael Engler
CEO
INTERCONNECT SOLUTIONS COMPANY
PLASTICS DESIGN & MANUFACTURING

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What to Look for in ERP Software

Functionality

- **Comprehensive:** To get seamless information across the business, the ERP must have many functions. Yet, not every company needs every capability. Modular software enables the company to acquire only functions it needs and build out capabilities as the company grows and changes.

- **Manufacturing-centric:** Activities in your manufacturing plant are essential to making a profit and serving customers successfully. Many ERP solutions are weak in this area, with only a thin layer of functionality. Seek out one with MES in the ERP.

- **Scalable:** The ERP must be ready for company growth. Ideally it has multi-site, multi-language, multi-currency, multi-regulation capabilities. Look for a system that has proven success in companies of your size and larger.

> " The major capabilities to support control for our manufacturing are: sound of bill materials (BOM) reporting, inventory & material handling, scanning of product throughout the plant, EDI, quality procedures with data flow, and solid financial outputs to make strategic decisions. All these tie together – you can't be successful with just a few. They all need to be working to the highest level"

Chris Naumovski
CFO
THE SISLER MANUFACTURING GROUP

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What to Look for in ERP Software

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> It's on the cloud now – but we think that's the way to go. You'd need so much data storage, you can't keep up with it in data servers.

Lindsey Hahn
CEO
METRO PLASTICS

Technology Integration

Expect modern technology capabilities in each module. Integration to bar code readers, label printers, IoT, materials handling, and processing equipment can make digital manufacturing a reality. Integrated advanced analytics will support continuous improvement and sound decisions.

Tailored to Needs

With the skills shortage, it's crucial that the user interface (UI) is engaging for young workers and intuitive for older ones. Also, the system is ideally configured and not customized, to ensure upgrades are possible. Cloud-based solutions are ideal for upgrades, and also eliminate the need for extensive on-site hardware and IT staff.

Product Design Data

A manufacturing business revolves around its products. Thus, it's particularly important that ERP have integration with product design and definition software. Clean access to all relevant product information is valuable in procurement, quoting and sales, quality, and manufacturing operations.

Choosing an ERP Partner

Responsive

The company should be ready to invest in your success, even if you're a small company. Seek out a software provider that keeps up with market trends to ensure their vision is ahead of customers' needs. In this fast-changing market, it means the company will be enhancing the product continually. To do that, they need to be big enough to invest and evolve with you.

Manufacturing Specialists

Every company needs ERP, but manufacturers need one that is strong on the shop floor and equally capable in the offices. Many ERP providers are finance-centric and have only enough production control to feed data to materials management and finance, not run the shop. Select a software company with manufacturing domain expertise and focus that won't be distracted by markets that are easier to serve. Be sure plant floor capabilities are central, not just an afterthought.

Long-term Partner

Seek out a company with a track record of success and growth serving manufacturers. Ideally, their focus is on improving your business outcomes over the long term. Be sure it's a stable company with a robust financial outlook so that your partnership can last.

"

Some ERPs do what they say, and some don't. Be sure it's able to fit your business process. It should not be you trying to fit into their business processes."

Michael Engler

CEO

INTERCONNECT SOLUTIONS COMPANY AND PLASTICS DESIGN & MANUFACTURING

(RE)GAINING CONTROL IN MANUFACTURING

Executives on ERP

> "It's a mindset shift to ERP; you have to go all-in and bet all the cards on that. It forces you to become mature and stable using a streamlined process. People who've been successful are already doing it, but they don't think of it as a process."

Michael Engler
CEO
INTERCONNECT SOLUTIONS COMPANY AND PLASTIC DESIGNS & MANUFACTURING

> "We are able to react to customer demands quickly as a direct result of having good data we can use to make strategic decisions. So, I would say performance is very visible to the market. That is why we have grown significantly over the last seven years to nearly $70M in sales and expect to approach $100M in the coming years."

Chris Naumovski
CFO
THE SISLER MANUFACTURING GROUP

> "When we make a product and scan it into inventory, it's all captured: production history, material usage, how many parts we have at that time. So, when a customer calls, we know whether we have enough material if they want to increase the order. If they want to cancel, we can check that impact also."

Lindsey Hahn
CEO
METRO PLASTICS

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Control the Business

Despite Uncertainty

Uncertainty is a feature of the "new normal;" don't expect it to go away. Digital is a reality every manufacturer must keep up with, especially since competitors are. Today's manufacturing-centric ERP allows you to gain visibility, control, and analyze not just past performance but likely future scenarios. Because of these benefits, 50% of companies are planning or actively investing in ERP[3].

People Matter

Technology is only one aspect of this change to digital manufacturing. For ERP to succeed, expect to put effort into changing processes and mindsets as well.

People will be both the enabler and the most significant obstacle in most cases. Those who are now the key holders of knowledge may feel threatened.

Project Readiness

Setting up an ERP project is a significant undertaking. The most successful selections and implementations result from the of best subject-matter experts in every department devoting time to them. For the project to work well, their understanding of best practices and real-world processes will be essential. Plan for resistance and plenty of hard work, with ups and downs in the mood.

Lift Restrictions and Gain Control

Once the software is in place across all departments and functioning well, prepare to feel more confident and less restricted. Everyone will be sharing information and helping to boost the company's success. As new challenges arise, the system will guide employees and executives to profitable decisions, despite the unknowns.

As Jack Welch said in his book title, "Control Your Own Destiny or Someone Else Will." The right ERP can help you gain information visibility to grasp control.
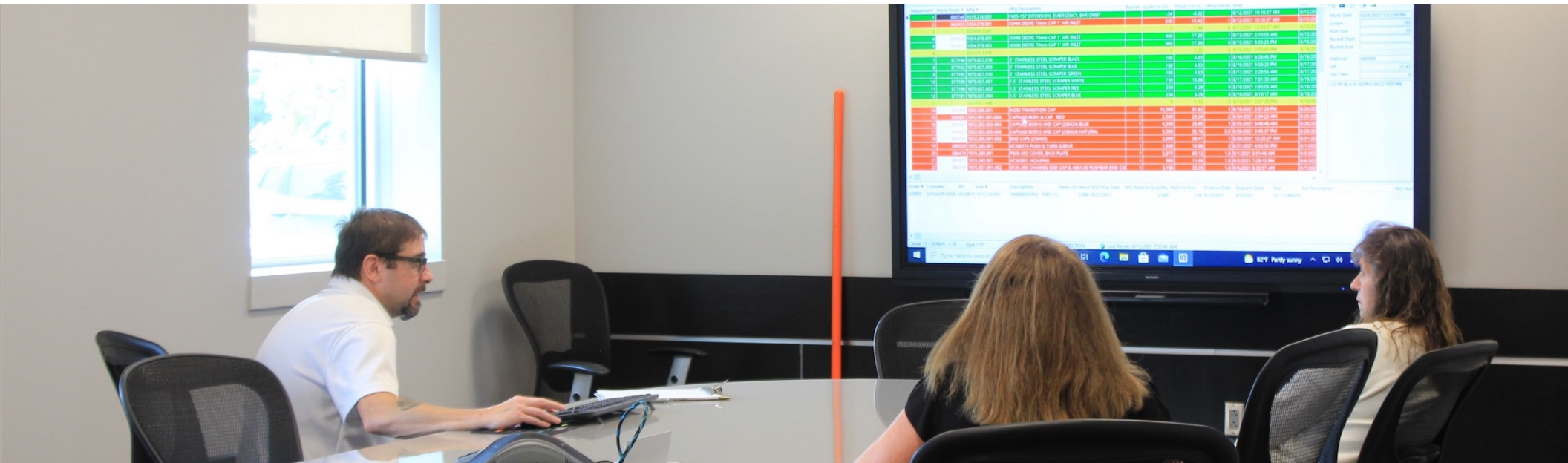
Acknowledgments

About the Author

Julie Fraser joined Tech-Clarity in 2020 and has over 35 years of experience in the manufacturing software industry. She is an enthusiastic researcher, author, and speaker. She has a passion for manufacturing progress and performance gains through Industry 4.0 strategies and supporting software technology.

Julie is actively researching the impact of digital transformation and technology convergence in the manufacturing industries, with a focus on supply chain and plant floor and how to use factory data in conjunction with data from offices, labs, and the ecosystem.

Tech-Clarity is an independent research firm dedicated to making the business value of technology clear. We analyze how companies improve innovation, product development, design, engineering, manufacturing, and service performance through the use of digital transformation, best practices, software technology, industrial automation, and IT services.

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