2019

Our Thoughts On... the Schneider Downs

MANUFACTURERS' ECONOMIC SURVEY

SCHNEIDER DOWNS

Big Thinking. Personal Focus.

INTRODUCTION

Edward R. Friel

As the second decade of the 2000s ends, we are pleased to present the results of the 2019 Schneider Downs Annual Manufacturing Survey. Let me start by thanking all who took the time to complete the survey.

Our 2019 respondents come from diverse manufacturing sectors, with industrial (30%) and metals (27%) leading the way, but we also heard from consumer goods, mixed materials, wholesale distribution, plastics and assembly. We received responses from small, medium and large companies, as defined by both number of employees and revenue.

In reviewing responses to the question asking what are the toughest challenges faced by manufacturing organizations, the answers were consistent with prior years, with lack of skilled labor remaining the most significant, followed by increasing labor costs (including healthcare) and tariffs/trade wars. Labor concerns have been around for a few years and will continue to be an issue as more baby boomers retire. The fact that 50% of respondents expect their workforce to increase in 2020 makes the labor problems even more troublesome.

Last year, everyone was expecting that tax reform (the Tax Cuts and Jobs Act) would benefit manufacturers, but only 45% of respondents indicated it helped their company.

As we begin 2020, respondents are still optimistic and bullish on manufacturing, but realize the concerns around labor and tariffs/trade wars are factors that can impact that success.

Good luck and best wishes for a prosperous 2020!

ABOUT THE SURVEY RESPONDENTS


Karen M. Lang

ANNUAL REVENUES

Less than $10 million	16%
$10 to $25 million	30%
$26 to $50 million	11%
$51 to $100 million	8%
$101 to $250 million	13%
More than $250 million	22%

SECTORS

Industrial	30%
Metals	27%
Consumer Goods	11%
Mixed Materials	8%
Assembly	5%
Wholesale Distribution	5%
Plastics	3%
Textiles	3%
Food Services	3%
Chemicals	3%

EMPLOYEES

Less than 50	24%
51 to 150	30%
151 to 250	8%
251 to 500	8%
More than 500	30%

2020 WORKFORCE

50% OF RESPONDENTS EXPECT THEIR WORKFORCE TO INCREASE IN 2020

BUDGET

56% THE 2019 BUDGET/FORECAST WAS CONSISTENT OR SLIGHTLY BELOW THEIR ACTUAL REVENUES.

78% IN 2020, THE MAJORITY OF THE RESPONDENTS' BUDGETS WILL INCREASE OR REMAIN THE SAME.

TOUGHEST CHALLENGES

Karen M. Lang

SURVEY

The toughest challenges your organization is currently facing:

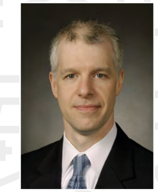
LACK OF SKILLED LABOR	67%
RISING COST OF LABOR, INCLUDING HEALTHCARE COSTS	61%
TARIFFS/TRADE WARS	53%
GOVERNMENT AND ENVIRONMENTAL REGULATION (COMPLIANCE)	31%
TECHNOLOGY AND AUTOMATION	28%
INCREASING CURRENT DISTRIBUTION AREA (INCLUDING INTERNATIONALLY)	22%
IT SECURITY	17%
SUCCESSION PLANNING	14%

Every year, lack of skilled laborers and associated costs surface as the toughest challenge for our survey respondents. Traditionally, organizations have used apprenticeships, wage increases and community outreach to help build their labor force, but have found that these alone are not filling the gap fast enough. It's become apparent that there's a need to be innovative and open-minded about how to recruit, and what benefits are most appealing to the current workforce.

Recognizing that the current generation of employees have grown up with social media, demand more work/life balance and are saddled with student debt, our respondents have developed new recruitment and retention strategies including:

- Recruiting via social media
- Paying referral bonuses
- Providing tuition reimbursement
- Offering sign-on bonuses
- Reimbursing health insurance premiums
- Offering additional paid time off
- Letting employees work from home
- Allowing for a flexible work schedule

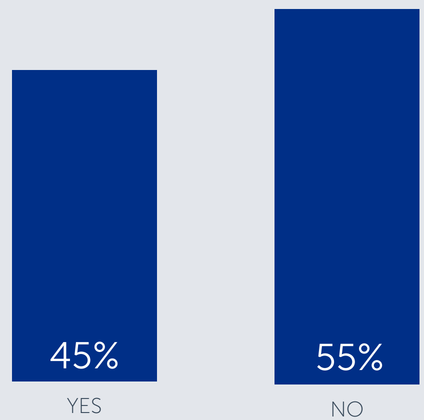
TAX UPDATE



Evan C. Ogrodnik

SURVEY

Did the Tax Cuts and Jobs Act (tax reform) benefit your business?

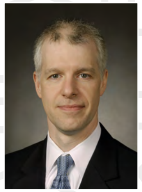


In 2019, taxpayers had their first real look at how the Tax Cuts and Jobs Act of 2017 ("TCJA") would ultimately impact their 2018 tax reporting. Despite all the planning for the many nuances of the TCJA (both positive and negative), there was still uncertainty as to how the puzzle would look once all the pieces were assembled. There were also mixed opinions as to whether the TCJA was beneficial or detrimental to taxpayers as a whole. The results of our survey indicate that only 45% of respondents felt the TCJA was beneficial to their business, primarily due to tax-rate reductions and accelerated depreciation on capital spending.

As anticipated, there were a few provisions that significantly impacted a number of manufacturers. The Section 199A Qualified Business Income (QBI) deduction was a benefit for pass-through taxpayers (partnership and S corporation) with taxable income. The QBI deduction is a 20% reduction of a qualified taxpayer's eligible income during the tax year, effectively bringing the top marginal rate on business income down to less than 30%.

The reinstated 100% bonus depreciation rules provided benefits to capital-intensive manufacturers and acquisitive companies making asset purchases during the year. The year-one depreciation benefits softened the net cash needs for these companies, by way of reduced cash-tax requirements.

TAX UPDATE



Evan C. Ogrodnik

The Section 163(j) interest expense limitation proved to be detrimental for highly leveraged entities, particularly those that are private-equity owned. For tax years 2018-2021, the deductibility of interest expense is limited to 30% of a tax-calculated EBITDA. Many manufacturers saw significant amounts of otherwise deductible interest expense suspended for use in subsequent tax years, but with the change in the calculation in 2022 to a limit of 30% of tax EBIT (no addback for depreciation and amortization), it remains to be seen whether some companies will ever realize the tax benefit.

There were two new foreign-related provisions that began impacting some manufacturers in 2018. First, the Foreign Derived Intangible Income (FDII) deduction was a benefit for companies taxed as C corporations that are deriving revenue in foreign markets. FDII results in the benefit of a 37.5% reduction of eligible income, effectively reducing the corporate tax rate to just over 13%.

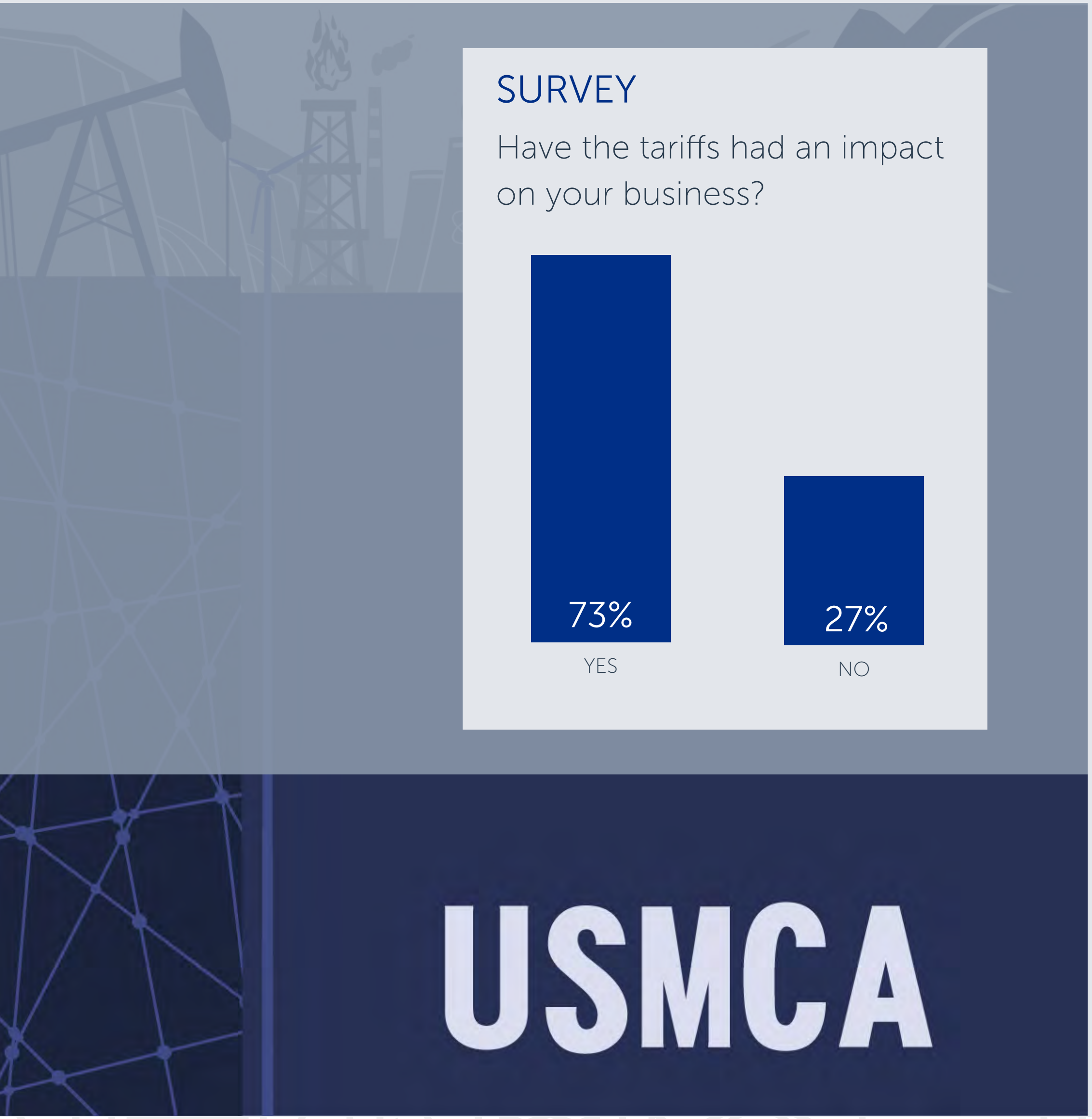
While FDII rules provide benefits for exports and foreign source revenues, the Global Intangible Low-Taxed Income (GILTI) rules were enacted to penalize companies for accumulating profits in foreign jurisdictions. You may recall that companies owning foreign subsidiaries with accumulated and undistributed earnings were subject to a one-time transition tax on their 2017 income tax returns. GILTI provisions apply to controlled foreign corporations as a new category of deemed repatriated income for their U.S. shareholder(s).

New revenue recognition standards for GAAP reporting may result in accelerated taxable income for certain manufacturers in 2019, particularly those that shift from a "point in time" recognition to an "over time" recognition. The Section 451 rules were overhauled, which likely results in some taxpayers being required to accelerate revenue without a corresponding cost reduction, thereby creating a mismatch in the timing of revenue and cost recognition. This may come as an unwelcome surprise to some taxpayers that have not done formal revenue recognition analysis and planning.

The Internal Revenue Service continues to issue Treasury Regulations to interpret the TCJA, with several more sets of significant guidance expected in early 2020. It's unlikely that anything issued in the near term will have a significant impact to manufacturer taxpayers.

TRADE WARS ARE HERE TO STAY

Brian W. Matthews



Looking back on 2019, there's no question that the trade war with China and the lack of a ratified United States-Mexico-Canada Agreement (USMCA) caused disruption and uncertainty in the manufacturing industry. Respondents of our survey told us that tariffs and trade wars are big challenges and will be most impactful to the U.S. manufacturing industry over the next five years. For those impacted by the China trade war that began in March 2018, some have passed increased costs to customers, some have sourced materials from other countries, while others have been forced to consume the additional cost. Those impacted by the USMCA will have to wait to see what the final version of the agreement will look like.

USMCA Update

As we explained in last year's survey, the USMCA was negotiated by the United States, Mexico and Canada in November 2018, subject to approval by each country. In June 2019, Mexico ratified the USMCA. Late in December 2019, both the U.S. House of Representative and Senate ratified the USMCA. On January 29, 2020 President Trump signed the trade deal. It's speculated that Canada will ratify it now that the United States has, which brings some hopeful certainty to the industry.

TRADE WARS ARE HERE TO STAY

Brian W. Matthews

SURVEY

How does your company plan to react to the recently enacted tariffs?

PASS ON INCREASED COSTS TO CUSTOMERS	56%
SOURCING RAW MATERIALS FROM DIFFERENT REGIONS (INCLUDING DOMESTIC)	39%
ENACT COST-SAVING MEASURES TO OFF-SET INCREASED MATERIALS COST	39%

INTERNATIONAL CUSTOMER BASE

30% OF THE RESPONDENTS HAVE AN INTERNATIONAL CUSTOMER BASE

91%	ASIA-PACIFIC
91%	CANADA
73%	MEXICO & CENTRAL AMERICA

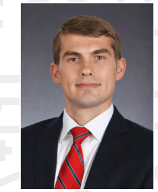
China Trade War

No matter where your organization is on the spectrum of reacting to tariffs on products, hopefully the agreement reached in January 2020 will bring some relief. The trade deal may restore some confidence in manufacturing, agricultural and energy markets with the two-year commitment by China to import $200 billion of American products, but the deal preserves tariffs on $360 billion of goods imported *from* China. Those tariffs will not be lifted until the two countries can agree to a phase-two agreement.

Other key provisions of the trade deal were changes to help dairy farmers and other agricultural groups, as well as provisions to ensure fair, adequate and effective protection and enforcement of intellectual property rights.

Having turned the calendar to 2020, it seems that no matter the organization size, location or type of operation, trade wars and agreements are here to stay, and they will impact the manufacturing industry. That doesn't change the fact that our respondents are still optimistic about the future of the industry.

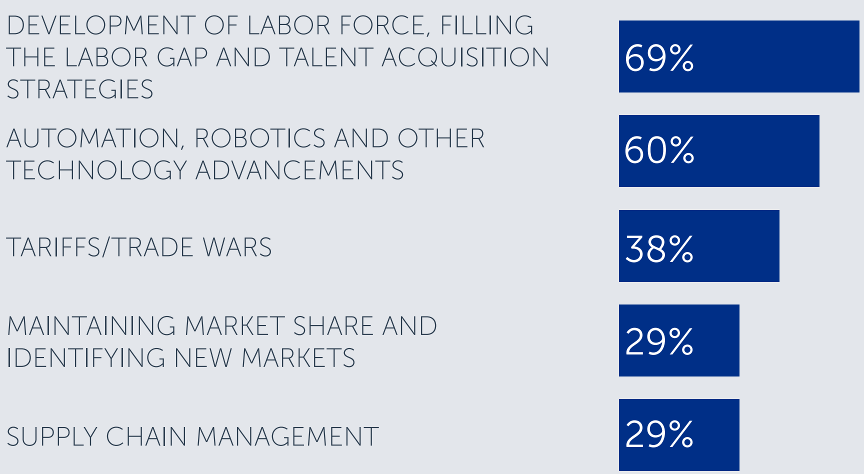
AUTOMATION IN MANUFACTURING



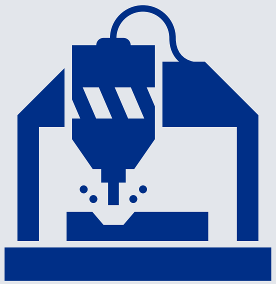
Brian C. Reitz

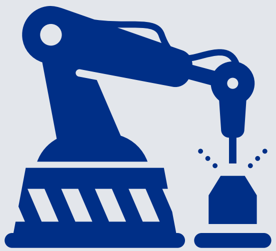
SURVEY - TOP 5

The most impact on the U.S. manufacturing industry over the next five years.

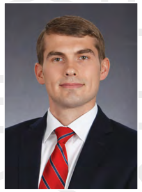


Year after year, our survey respondents consistently cite development of labor force and advancements in technology as having the most impact on the U.S. manufacturing industry over the next five years. In our 2019 survey, these two choices were again the top results for this question, with nearly 70% of participants selecting development of labor force and filling the labor gap, and 60% choosing automation, robotics and other technology advancements. The reason these two choices top the list each year should come as no surprise. For years now, the United States manufacturing industry has been facing a skilled labor shortage, the reason for which is multifaceted. Not only have manufacturing jobs become stigmatized as dirty, low-skill, back-breaking work, but a fear that these jobs will be replaced by robots has led to fewer Americans entering the field.





AUTOMATION IN MANUFACTURING

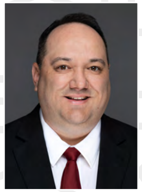


Brian C. Reitz

The industry is looking to adaptation and advancements in technology to solve both of these issues. Manufacturers large and small are implementing new technologies to help eliminate tasks that are repetitive, exhausting and dangerous for employees to perform. Advanced machines and robotic solutions are often intended to complement the skills of employees and lead to a more effective and efficient manufacturing process, rather than simply replacing jobs. Additionally, the integration of advanced technologies within the manufacturing process requires new skillsets for employees, shifting the focus toward critical thinking, complex problem-solving and monitoring.

We've seen the success of implementing such technologies firsthand in our manufacturing client base. For example, a local sheet metal fabricator and producer of precision parts has continued to drive efficiencies in its processes by implementing new technology when and where it makes sense, including the use of robotic welders and automated powder coaters. The company is currently designing an automated grinding solution through a partnership with a local nonprofit focused on innovation, robotics and workforce development. Part of the motivation for selecting the grinding process as a good candidate for implementing new technology is that it's a difficult and tedious job that requires protective equipment due to potential hazards. The catalyst for innovation is as much for employee satisfaction as it is for gaining efficiencies in the process. According to this client, and others, employees have generally approached new technology advancements with apprehension, but after seeing that new robotic solutions have improved their job quality and satisfaction rather than replaced them, they've started to embrace their new counterparts with open arms.

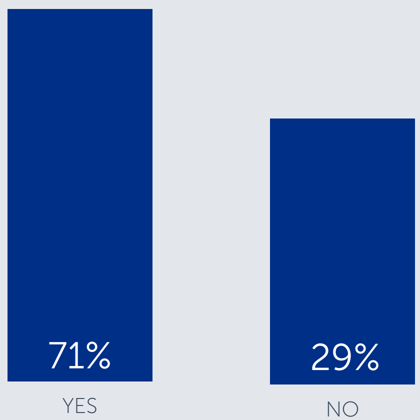
R&D CREDITS



Ross S. Alessandro

SURVEY

Are you currently performing research and development activities?



SURVEY RESULTS

ARE YOU TAKING ADVANTAGE OF THE R&D TAX CREDITS?

68% YES

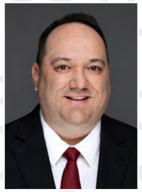
32% NO

The Credit for Increasing Research Activities (IRC Section 41), or the R&D Tax Credit as it is more commonly known, has been around since 1981. And while methodologies for calculating and documenting the credit have evolved through the years, it remains a great benefit to taxpayers that can take advantage. With the PATH Act of 2015 making the R&D Tax Credit permanent, and enabling eligible startup companies to utilize the credit to offset payroll taxes, some organizations do not even have to be in a taxable position to benefit.

While the federal R&D Tax Credit is industry-agnostic, manufacturing companies have certainly derived benefit. With the nation's economy on the rise, we are seeing more taxpayers emerging from loss positions, which means that even more can utilize the credits claimed. But what questions should taxpayers be asking themselves to assess whether the opportunity for a R&D Tax Credit is viable?

1. Has your company recently developed a new product or improved an existing product or process in terms of function, performance, reliability or quality?

2. When developing this new or improved product or process, did your researchers fundamentally rely on principles of the "hard sciences" (i.e., chemistry, physics, biology, engineering, computer science, etc.)?



Ross S. Alessandro

3. When developing this new or improved product or process, did your researchers perform activities intended to discover information to eliminate uncertainty related to capability or method, or design around developing or improving a business component?

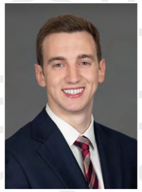
4. Did your researchers undertake a process of experimentation through which they identified uncertainty concerning the development or improvement of a business component, or evaluated one or more alternatives intended to eliminate uncertainty (e.g. through trial-and-error, modeling, etc.)?

If you answered "yes" to the questions above, it's very likely your company is eligible for R&D Tax Credits. Examples of activities being performed by companies in the manufacturing industry typically include the following:

- New product development
- Improvements to existing products
- New process development
- Improvements to existing processes
- Construction of prototypes
- Design/development of custom dies and/or tooling
- Customization to existing or newly purchased equipment that improves function, performance, reliability and/or quality

Every year, thousands of taxpayers are claiming billions of dollars in federal R&D Tax Credits. Could your company be one of them?

CYBERSECURITY



Matthew Creel

Cybersecurity breaches are on the rise in the manufacturing industry, as is the case with most industries. Threats faced by manufacturers include ransomware, viruses, Trojans and business email compromise. Often, these forms of malware are delivered or downloaded by each other, meaning that they often manifest in compromised networks together. Threat actors behind attacks might be looking for a quick payday (ransomware) or sensitive information held by an organization that can be sold on the dark web, or they might even be going after trade secrets and intellectual property.

We included several cybersecurity-related questions in our latest manufacturers survey:

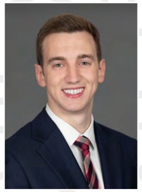
- How much of your IT budget do you spend on cybersecurity?
- Have any malicious actors attempted to infiltrate your corporate systems or network?
- Which of the following actions have you taken to improve your security against cyber-attacks in the past year?

About 30% of respondents said that their company spends 1% to 2% of the IT budget on security – a concerning number, but not shocking. Only 15% responded that more than 10% of the budget goes to security. In other words, it appears that many manufacturers are not laying the financial groundwork to implement sufficient technical cybersecurity controls.

About 57% of respondents indicated that their company had discovered attempts by outside actors to infiltrate corporate systems. However, very few respondents indicated that there had been a loss of data. As cybersecurity experts, this gives us pause. It's not surprising to see a significant number of companies recognizing threats, but the low number reporting compromise may understate the risk these attacks pose.

The top security measures taken by our survey respondents were holding security awareness training (55%) and conducting a high-level security assessment (49%). More technical measures included performing a vulnerability assessment (42%) and performing an independent security penetration test (36%). Only 12% indicated that someone had been hired specifically to manage security risks.

CYBERSECURITY



Matthew Creel

Several high-profile ransomware cases in 2019 targeted manufacturers in the greater Pittsburgh area. We have assisted multiple manufacturing companies in the region that have faced and/or are recovering from these attacks. Here are a few lessons learned during these breaches that your company can benefit from:

Conduct backups regularly and test the restoration process. If you do not have clean (uninfected) backups from which to restore your data and systems after a ransomware attack, there are almost no options to get your data back without paying the ransom.

Monitor and log system and network activity. It seems that only a small number of organizations are sufficiently monitoring network traffic and system activity. Without a tool to monitor and analyze network traffic in real time, such as a SIEM (Security Information and Event Management), it becomes much harder to detect and stop attacks before full compromise occurs.

Implement two-factor authentication. Many attacks involve a threat spreading from compromised and unprotected email or VPN accounts. Obtaining passwords is easy for attackers; do not rely solely on passwords to differentiate your users from an attacker.

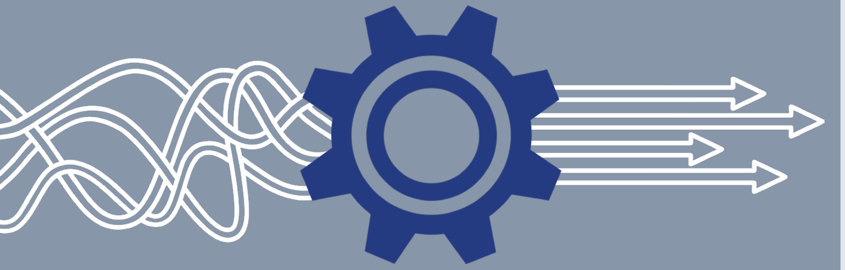
Protect your users. You can take reasonable steps to lower the chance that your employees will click on links or attachments and fall victim to a phish, but you can never totally alleviate the risk. Assume that someone at some point in time will click on a malicious link. Implement appropriate defense measures, because it will happen. Protect inboxes by using an advanced anti-phishing/antispam email filter and protect endpoints with a heuristic based antivirus solution.

SUCCESSION PLANNING STARTS WITH: *"What's Next?"*

John A. Kohler

SUCCESSION PLANNING

Regardless of size, location or industry sector, a carefully designed succession plan is necessary to ensure a company's passage to the next generation. Business owners are well-advised to invest time and resources to ensure a smooth transition of leadership.



Consider this: a $10MM S corporation manufacturer with a single owner realizes they want to sell the company because they want to spend more time pursuing personal activities. Will this business be able to maximize value upon exit?

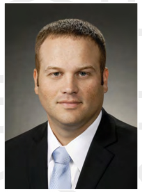
Looking back at a business over the years, perhaps we ask, "What made the entity successful?" In many small businesses, the owner is the principal driver to the business, particularly from a technical and sales aspect. They've been the one coordinating sales, staying late to ensure that products get made, and working relationships with clients and customers to ensure that orders continue to come in.

With all the owner is doing, have they ever thought about what they'd want to do next? Unfortunately, there's a good chance that one of the five Ds (Death, Divorce, Disability, Distress, Disagreement) could affect the business, often with little lead time or preparation.

Most owners have the majority of their wealth tied into the business, and one of the ways to monetize that wealth is to sell the company. A successful transition plan has three areas of focus:

1. Understanding and maximizing the value of the company
2. Understanding the owner's future financial needs
3. Understanding what the owner wants to do after exit

SUCCESSION PLANNING STARTS WITH:
"What's Next?"



John A. Kohler

The owner may have ideas about one or more of those areas but, in many cases, it is not well thought out or planned for. Working with owners to understand what they want to do upon exit helps with another area—the owner's future financial needs. It's important to create a plan to understand how the owner intends to spend his or her time after exiting he business.

A thorough understanding of what the owner wants to do next in life will help develop the framework to determine how much money that individual needs to achieve his or her desired lifestyle.

Once future needs are identified, the owner can look at current business value based on economic conditions, industry data and company-specific performances. While this looks relatively simple, there are ways to improve the overall value of the company, and some of those factors may not be solely financially driven.

Developing a plan that addresses the owner's exit ahead of time isn't just good succession planning, it's good strategic business planning. By creating this plan, the owner is better able to understand the context of what the company is worth, and may find ways to continue to maximize value, taking into account their financial needs for the future and finally creating a plan for how they are going to spend their time, ultimately leading to a successful exit from the company. As a result, the owner can transition to the next phase of his or her life with less questions about what they could have done differently.

ABOUT THE SCHNEIDER DOWNS *Manufacturing Industry Group*

Schneider Downs provides accounting, tax and business advisory services to the manufacturing industry in Western Pennsylvania, Central Ohio, Washington D.C. and around the world. Our team of business advisors works with a range of manufacturers from high-tech startups to publicly traded industrial manufacturers.

Our Manufacturing Industry Group helps our clients streamline operations, improve internal controls, save taxes and grow profitability. Our dedicated team of professionals has the experience and knowledge to create solutions specific to your manufacturing organization, solutions that will help you achieve your business goals.

Stay current with changes as they happen and subscribe to our weekly *Our Thoughts On* articles. Sign up on our website: **https://www.schneiderdowns.com/subscribe.**

CLICK HERE TO LEARN MORE

For more information about our services to the manufacturing industry, visit our website or contact one of our Manufacturing Industry Group Team Members:

Evan C. Ogrodnik – eogrodnik@schneiderdowns.com
Edward R. Friel – efriel@schneiderdowns.com
Brian W. Matthews – bmatthews@schneiderdowns.com
Brian C. Reitz – breitz@schneiderdowns.com
Mark A. Sarver – msarver@schneiderdowns.com
Karen M. Lang – klang@schneiderdowns.com

Pittsburgh:
p 412.261.3644

Columbus:
p 614.621.4060

Washington D.C.:
p 571.380.9003

schneiderdowns.com

PrimeGlobal
An Association of Independent Accounting Firms