



INSIGHTS FROM THE BDO MANUFACTURING & DISTRIBUTION PRACTICE

TRACKING TAX IN YOUR INDUSTRY 4.0 TRANSFORMATION

An organization's path to Industry 4.0 may be winding or direct, depending on where they are in the [Industry 4.0 maturity model](#). But regardless of digital maturity, companies can avoid speed bumps by tackling tax considerations and opportunities at the onset of their Industry 4.0 journey and reevaluating them at each turn in their transformation roadmap.

Given the complexities of domestic and global tax regimes, seemingly small changes in business approach can have far-reaching consequences to a business' various tax liabilities. Examining a company's total tax liability by considering all of its various tax dynamics is now a necessity for manufacturers looking to survive and thrive during this time of intense change.

TAX CONSIDERATIONS FOR STRATEGY & PLANNING

As manufacturers consider where they are on the continuum of Industry 4.0 readiness, they may uncover gaps and needs in critical technology, processes, data management or security. They may also uncover emerging customer needs that require transformation of products or services.

BUSINESS GOAL	INDUSTRY 4.0 TRIGGER	TAX IMPLICATION
<p>Bridging Digital Gaps Through M&A</p>	<p>For many manufacturers, Industry 4.0 implementation is a build-or-buy-decision between building new capabilities or buying them through strategic acquisitions. Acquiring existing technology, companies or talent with these capabilities can help manufacturers accelerate adoption.</p>	<p>Companies should consider tax liabilities as a part of any M&A due diligence process and plan for ideal tax structuring for the new business or entity.</p>
<p>Exploring New Business Models and Revenue Diversification</p>	<p>Some manufacturers are starting to use their data to explore new operating and business models, such as a product-as-a-service model in which the manufacturer delivers a service while the product is in use, a pay-per-use payment model, or even an information-as-a-service model, selling the insights from the data they collect.</p>	<p>New offerings open up new revenue streams and related tax and accounting implications across the organization, increasing the corporate income tax footprint, potentially impacting state nexus and exposing the business to new sales tax implications.</p> <p>Manufacturers must also analyze their revenue streams to ensure compliance with ASC 606, the Financial Accounting Standards Board's new guidance on revenue recognition. After understanding the financial statement impact by line item, tax departments will need to evaluate relevant tax rules in material jurisdictions where contracts with customers exist to determine whether revenue recognition changes are required for tax purposes.</p>
<p>Supply Chain 4.0</p>	<p>The digitization of the supply chain, or "Supply Chain 4.0," promises to reduce inefficiencies and lower costs while improving flexibility, redefining supplier relationships and the way value is created.</p>	<p>The Internet of Things (IoT) as an enabler of Industry 4.0 creates a situation where a specific intangible asset may be owned and developed by several entities. In the U.S., this multiple ownership/development scenario is a special one that requires more rigorous support and documentation for transfer pricing purposes.</p>
<p>Transforming Tax Function</p>	<p>Getting your organization ready for Industry 4.0 also means taking a hard look at all of your internal functions. Applying an innovation lens to your tax department could open up opportunities for automation and analytics to standardize processes, create efficiencies and minimize your overall tax burden.</p>	<p>By automating data gathering or other tax-related processes, your organization will improve accuracy and efficiency, which is critical to maximizing the benefits of Industry 4.0. With automated and predictive data that executives can access in real time, your organization can understand its total tax liability and will be equipped for better decision making and tax planning optimization.</p>

TAX CONSIDERATIONS FOR INVESTMENT

While middle market manufacturers are well-positioned for transformation, it may still require substantial investment. Tax credits and opportunities can, in some cases, offset the costs of innovation.

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<p>Funding Innovation: R&D Credits</p>	<p>The objective of R&D credits is to encourage exactly the type of efforts that are at the core of Industry 4.0.</p> <p>Qualifying activities don't need to be flashy or revolutionary, or even succeed. If companies are trying to make products, processes or software better, faster, cheaper or greener, they probably qualify—and many may not even know it. For the transition to Industry 4.0, manufacturers often qualify if they are attempting to design, develop or incorporate sensors, transmitters, smart devices or other types of machine intelligence into their products or plants.</p>	<p>Last year, more than 6,000 manufacturers claimed an estimated \$10 billion in R&D tax credits at an average benefit of \$1.67 million per company.</p> <p>The number of eligible manufacturers is much higher, meaning many have yet to capitalize on this opportunity, potentially leaving money on the table.</p> <p>Following tax reform, the federal R&D tax credit remained intact—and its net value was effectively increased by 22 percent, from 65 to 79 percent of incremental qualified spending because of the corporate rate's reduction to 21 percent and the required Sec. 280C(c) (3) election or add back of the section 174 Research & Experimental Expenditures tax deduction. The elimination of the corporate Alternative Minimum Tax also means that more manufacturers can benefit from the R&D tax credit.</p> <p>However, one credit ended up on the cutting room floor: Section 199 domestic production activities deduction (DPAD). While DPAD was historically a key tax break for U.S. manufacturers, its loss is offset in part by the corporate rate reduction.</p>
<p>Funding Innovation: Corporate Tax Rate Savings</p>	<p>Manufacturers have been seeking to gain efficiencies and cut costs for years, but margins are typically razor thin. One major benefit of tax reform was the decline in the corporate tax rate, leaving many manufacturers with more cash on hand than in recent years.</p>	<p>If your organization is enjoying a lower tax rate, there's no doubt that you have considered how best to deploy those resources. While there are many strategic options—including investing in your talent through bonuses and pay raises—companies can also allocate their tax savings to help fund innovation and/or bolster trainings and reward programs to develop the right talent for a digitized industry.</p>

TAX CONSIDERATIONS FOR IMPLEMENTATION

Pressing “Go” on Industry 4.0 isn’t an overnight process and may bring significant changes to your organization’s physical presence or service offerings.

BUSINESS GOAL	INDUSTRY 4.0 TRIGGER	TAX IMPLICATION
<p>Expanding Global Footprint</p>	<p>With a renewed focus on the supply chain, companies will be looking closely at their global footprints, and potential opportunities to either expand or reduce their presence overseas, given their new capabilities.</p>	<p>As manufacturers evaluate potential changes to their supply chain operations, they will need to assess potential exit charges, permanent establishment status and the preservation of tax attributes on the movement of functions, assets and risks.</p> <p>Manufacturers expanding supply chain operations domestically or reducing their domestic footprint must also consider the implications on state nexus.</p> <p>Additionally, corporate manufacturers that sell or lease property to foreign customers or provide services overseas should consider whether such activities will qualify for the Foreign-Derived Intangible Income (FDII) deduction, which can reduce their effective tax rate on eligible income by almost 8 percent.</p>
<p>Using Tech to do More at Home</p>	<p>If the move to robotics, 3D-printing or end-to-end supply chain visibility allows manufacturers to produce or serve more in the U.S., or reduce raw materials coming from outside the U.S., then indirect taxes may be impacted.</p>	<p>Valued added taxes (VAT) and other indirect taxes, including customs duties, are complicated and often overlooked as a part of a company’s total tax liability. Moreover, goods crossing national boundaries require customs classifications, and goods with technical content can be particularly challenging to define. Any shifts in the flow of goods and sales overseas should prompt a new look at indirect and VAT tax exposures.</p>

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<p>Optimizing Your Space for Industry 4.0</p>	<p>Some companies may find that their factory or corporate space is no longer aligned with the needs of their new digital strategy. In some cases, this could mean expanding or downsizing, or moving factories or offices closer to their talent pool.</p>	<p>Many state governments are eager to attract companies (and therefore jobs) to their state, and some will offer tax benefits and incentives to do so. From tax rebates or exemptions to discretionary cash grants or infrastructure assistance, consider whether there is potential to receive or negotiate economic and tax incentives in any new site selection strategy.</p> <p>Whether it's a new site or the enhancement of an existing site, now is a good time for manufacturers to consider capital spending. Costs associated with all types of site optimization can be subject to advanced federal tax depreciation opportunities—from newly-constructed buildings to significant remodels and renovations—often resulting in significant cost savings. In addition, under the new tax law, companies will be able to fully expense certain capital expenditures, including acquisitions of used property, for purchases made from Sept. 28, 2017 through 2022.</p>
<p>Creating New Intellectual Property (IP)</p>	<p>Developing IoT-enabled products or proprietary solutions to digitize the factory or optimize the supply chain often includes the development of intellectual property.</p>	<p>Proactive management of new and existing IP assets can help manufacturers reduce their overall global effective tax rate.</p> <p>Keep in mind that the tax treatment of IP differs from country to country. Depending on business arrangements, new IP established by multinational companies could impact transfer pricing strategies and overall tax liability.</p>
<p>Talent Management</p>	<p>Industry 4.0 demands more engineers and a skilled workforce to operate a new breed of machines and equipment. Existing manufacturing jobs may also be replaced by automation and robotics technologies.</p>	<p>Any changes to the workforce—whether hiring, firing or reassigning—have implications for employment taxes. Competition for talent is at an all-time high, which may mean reevaluating compensation packages and fringe benefits. Changes to workforce distribution may also impact tax reimbursement for global mobility programs.</p> <p>Due to global demands for skilled labor, manufacturers may need to relocate or hire employees overseas. Doing so requires navigating a complex web of international tax regulations and carefully considering the tax compliance implications of having employees based abroad.</p>

TRACKING AND MONITORING

Just as there is no one-size-fits-all approach to Industry 4.0, there's no single tax strategy to underpin your digital transformation. Every action will have a reaction. One functional change—whether small or large—can have huge consequences for your total tax liability. It's critical to build tax into your Industry 4.0 planning from day one to capitalize on opportunities and avoid surprises down the road.

As your Industry 4.0 pilot speeds up, it's critical to set up monitoring and tracking systems to quickly identify what's working or needs to work better across your product lifecycle and business enterprise. This also means staying close to your tax strategies and considering changes as new opportunities or challenges emerge due to advancements in your business or the regulatory environment in the U.S. and globally.

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