RETHINKING RESHORING:

A Guide for 2022

Bright Machines

Introduction

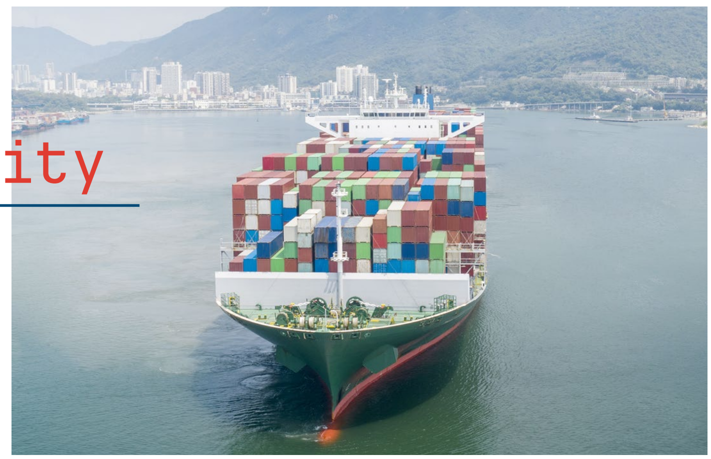
If there's one thing a global pandemic has taught manufacturers and supply chain managers, it's that making products closer to consumers is critical to avoiding shortages and meeting rapidly shifting demand. The realization is helping drive a boom in manufacturing reshoring and foreign direct investment (FDI) in U.S. manufacturing, according to the Reshoring Initiative's [1H2021 Data Report](). The report projects a 38% bump from 2020's already-stellar numbers for manufacturing job postings for 2021.

Is reshoring a priority for your company?

> *"Companies are deciding that it's more profitable to produce in the market for the market than it is to produce somewhere else and ship to the market."*

Harry Moser
President
Reshoring Initiative

Whether it's a U.S. company bringing manufacturing operations back home or a foreign company investing in domestic production, the impetus is the same. In each case, the company figures it makes more sense from the point of view of return on investment to manufacture goods in the actual market for which they are intended rather than make them overseas.



Besides the pandemic, longer-term trends are driving reshoring as well. Lower total costs, rising overseas wages, and newly affordable automation are also shifting the balance in favor of domestic over overseas manufacturing. The trend should only accelerate, providing opportunities for manufacturers to reap the benefits.

Three factors driving reshoring

- Lower total costs
- Rising overseas wages
- Affordable automation

The Current State of Reshoring

According to Thomas' [2021 State of North American Manufacturing Annual Report](), 83% of North American manufacturers say they're planning reshoring initiatives. That's a big jump from the 54% of manufacturers surveyed in March 2020. Let's take a closer look at what that means for the U.S. economy:

579,811: Number of manufacturing companies currently in the U.S.

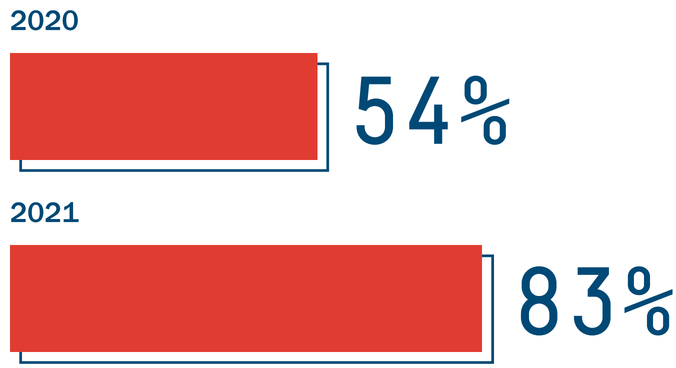
481,243: Number of companies planning to add a new U.S. supplier

$921,247: Average value of a new supplier contract

$443 billion: Amount to be injected into the U.S. economy

How has your company's approach to reshoring shifted in the last few years?

Manufacturers Planning Reshoring Initiatives



The trend should continue to accelerate now that manufacturers have had time to realize the benefits.

Manufacturing initially went overseas to take advantage of lower production costs. Now, however, costs are rising everywhere at the same time that automation grows more affordable. Add to the mix increasing demand for made-in-U.S.A. products and extended supply chains strained to the breaking point, and reshoring or FDI makes sense for most manufacturers.

Overseas costs have steadily risen year over year driving a shift to reshoring even before the COVID-19 pandemic. Then the pandemic, with scrambled supply chains and rapid shifts in consumer demand, put the move on fast-forward.

Today, many manufacturers have realized that overseas production's total costs and risks may outweigh potential savings. According to Harry Moser, president of the Reshoring Initiative, the key to making an accurate assessment is to calculate the total cost of ownership for manufacturing (TCO), not just the most obvious costs such as labor and freight alone.

The Real Cost of Reshoring

According to the Reshoring Initiative, some 60% of manufacturers look solely at the most obvious costs. That's a mistake because it doesn't address the additional hidden costs, which can add up quickly.

Instead, companies should look beyond wages and other easy-to-parse costs and consider such costs as more expensive packaging designed for weeks-long ship voyages rather than relatively short trips by truck. Inventory carrying costs due to long lead times between manufacture and sale and delays due to miscommunications between engineering and manufacturing departments speaking different languages in different time zones also add to expenses.

Altogether, the Reshoring Initiative estimates that these hidden costs add an average of 20% to manufacturing costs. It's no wonder, then, that manufacturers cite TCO as their biggest consideration when considering reshoring, according to the Thomas report.

Do you consider hidden costs when offshoring?

- Overhead
- Balance sheet
- Risks
- Corporate strategy

+20%: % of hidden costs that make up the total cost of manufacturing[1]

The Future of Reshoring is Automated

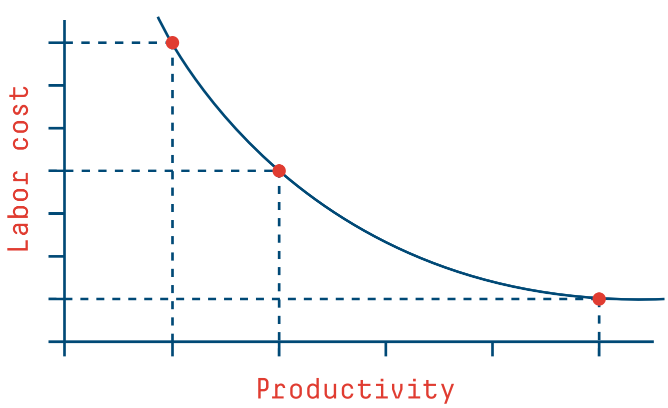
Because companies typically don't just lift and shift their operations from overseas to domestic factories, automation plays a vital role in bringing down TCO. Companies bringing production back to the markets they serve are rebuilding, allowing them to take advantage of advances in digital technologies that can deliver significant cost savings.

New approaches to automation can streamline production and increase flexibility without breaking the bank. While this newfound flexibility can enable manufacturers to meet growing demand for quality products, it also poses the challenge of having the proper tools to do so. This is where modular systems shine. Modular systems are the foundation of software-defined manufacturing and are fully customizable, easily upgradable, and quickly scalable systems that allow companies at all levels to employ automation.

You can think of software-defined manufacturing as similar to software-defined networking or other IT infrastructure. It brings a software-first approach to the factory floor that combines modular-software and hardware together in the cloud. This allows companies to scale production up or down quickly and to retool as needed, giving them the capabilities they need to find additional value in data, take advantage of continuous improvement, and leverage machine learning over time to better serve customers and keep costs under control.

What can automation do for you?

Decreased labor costs + increased productivity



> *"Modularization, which is being driven by end users, offers significant economic benefits both during the engineering and project phase and throughout the lifecycle of the plant or other industrial facility."*

Larry O'Brien
ARC Advisory Group

Take the Next Step

The pandemic has accelerated reshoring and FDI. But the trend was already underway beforehand, as manufacturers faced rising labor costs overseas and found renewed competitiveness in automation — automation that's helping bring jobs back home and made-in-U.S.A. products closer to the consumer.

Remember, rethinking reshoring means:

- Avoiding shortages and meeting rapidly shifting demands by making products closer to your consumers
- Boosting the local economy and meeting demand for made-in-USA products by adding U.S. suppliers
- Calculating total cost of ownership for offshoring to find your true production costs vs. potential savings
- Streamlining production and increasing flexibility with data and automation

Sources:
1. Impact of Using TCO Instead of Price, Reshoring Initiative, 2020.

About Bright Machines

By bringing both “brains” and “brawn” together in an integrated, end-to-end solution, Bright Machines tackles the assembly and inspection manufacturing steps that require a degree of flexibility, adaptability, and dexterity that has historically been out of reach for machines.

Our intelligent automation solutions make reshoring easier by accelerating digital transformation at scale and elevating production in a market that has seen significant changes in global supply chains as manufacturers demand robust and resilient operations.

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