M&A WORLDWIDE

Advanced Manufacturing & Automation Sector

INDUSTRY REPORT 2020 | H1

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Introduction

For manufacturers across the globe 2019 proved to be a challenging year, fuelled by uncertainty within the market.

In particular, the ongoing trade dispute between the US and China, where the imposition of tariffs has significantly impacted trade flows, in addition to the ambiguity surrounding the withdrawal of the UK from the EU, have weighed heavily on the manufacturing sector. While many issues surrounding these matters remain unresolved, the signing of a partial trade deal between the US and China, along with Britain officially exiting the EU, both of which occurred in January 2020, made for a positive start to 2020.

Then the global Covid-19 pandemic hit and we saw the unprecedent peacetime restrictions that governments imposed in order to reduce the expected death toll.

The wartime analogy is apt for the manufacturing sector. Where in wartime, manufacturing facilities re-purposed to produce armaments, now they are re-purposing to support healthcare providers. For example Seaward, a previous M&A Worldwide UK client, has been supporting the new NHS Nightingale Hospitals with testing equipment for ventilators, hospital beds and related medical pumping devices.

COVID-19 is bringing new opportunities for some manufacturers

Also like wartime, COVID-19 is pushing the pace of evolution in industry, such as the implementation of robotics to enable production within the strictures of social distancing guidelines, while also providing enhanced productivity

The trend for increased efficiency we already see as a force for consolidation in the US precision machining sector is likely to be widespread across multiple industry sectors and to accelerate. We expect to see a trend to on-shoring or near-shoring for supply chains whose disruption reflected the global over-reliance on Chinese based manufacturing. We expect that suppliers will try to limit the increased costs of local production by enhanced efficiencies through implementation of Industry 4.0. The costs of this may drive a wave of consolidation as large well capitalized buyers increase their market share.

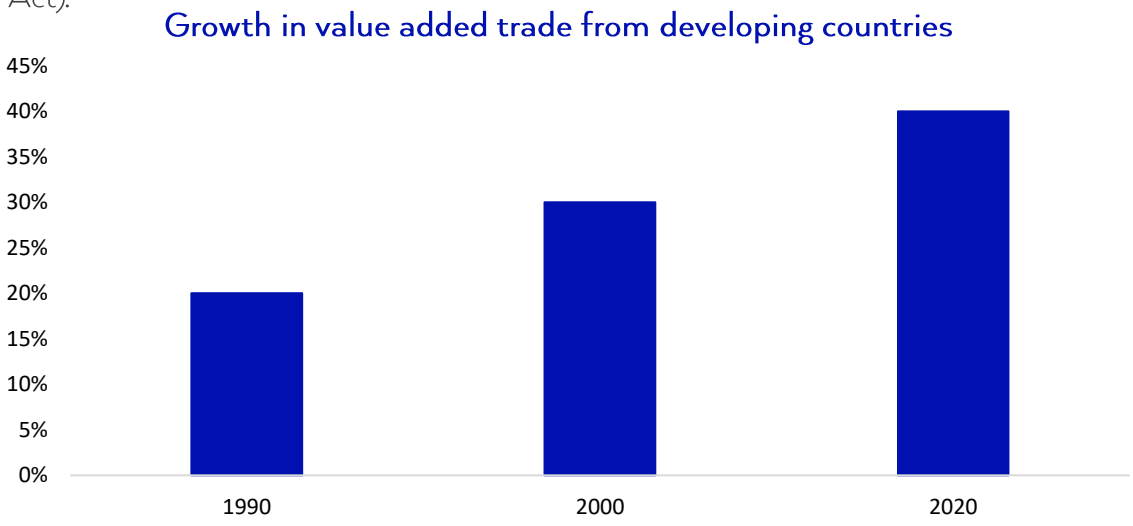
We believe the enhanced rate of change and innovation brought about by Covid-19 is likely to see a wave of investment in automation and on-shoring

01.

COVID-19's impact on global supply chains

It is estimated that Covid-19 will have a negative effect of 13% - 32% on global merchandise trade in 2020. Manufacturers and supply chains have been brought to an abrupt halt, not least in China, which represents 28% of global manufacturing output, ahead of the US with c17%.

News headlines of the global shortage of medical supplies such as facemasks and surgical gowns have led politicians to call for changes to trade policies and the resurgence of domestic manufacturing, with Donald Trump saying that the US 'cannot outsource our independence'. Perhaps counterintuitively there have been concerns about investment by foreign firms in domestic manufacturing of 'critical goods and services' with Canada for example announcing on April 18th, 2020 a policy subjecting investments to enhanced scrutiny (under the Investment Canada Act).



However, there are risks in the reduction in global sourcing, both for the richer countries where the highest value markets are and in the developing countries where the cheapest labour is found.

Advanced manufacturers in developed markets, either independently or under pressure from customers who rely on their output, may look to reduce their vulnerability to long supply chains. For certain low value-added items this may simply lead to higher stocking levels, a more diverse supplier base or even flexible production processes that could temporarily provide (more expensive) cover for these goods.

For higher value-added items it may be beneficial to produce domestically and seek to reduce the cost-disadvantage by investment in advanced process efficiencies, including Robotic Process Automation. The use of robotics, either domestically or in factories located in developing countries, may enable production to continue in the context of higher levels of social distancing and the subsequent reduction in the ability to rely on human workers.

02.

The trend to onshoring

For many years, Western European and American companies have been outsourcing parts of their production to low wage countries. Looking for cheaper production costs and less regulations, they started outsourcing to Eastern Europe, Northern Africa and later the Middle East and Far East. A good example of this tendency is the textile industry. In Belgium for example, more than 75% of the jobs in the textile industry have disappeared compared to the seventies, when this industry was booming.

Many companies went bankrupt and most companies that survived with production entities in Belgium did so by focusing on complex textile products.

However in recent years, in an effort to mitigate supply chain risks and increase flexibility, a new tendency to reshoring production has appeared. Reshoring often takes place by the larger companies and most often in manufacturing companies, where automation help to reduce the salary gap importance.

The reasons of reshoring can be very diverse, but main reasons are increased flexibility, better control of quality, shorter lead time, transport & logistic cost, coordination cost and the “made in” effect.

Apart from the economic impact, reshoring has become highly prominent in political debates in Europe and also in the United States because of employment considerations, aiming to bring jobs back home.

Most cases of reshoring from Western European companies are in machine equipment, fabricated metal products, electrical and electronics, transportation equipment, basic metals, automotive, metallurgy and consumer goods.

The current COVID-19 pandemic crisis increased the awareness in Europe and in the USA of the need to bring back the production of highly sensitive products and components to Europe/USA. The very serious shortage of face masks and of much needed personal protection equipment's for the general population and even for doctors and nurses, and the impossibility to use alternative local sources, because they did not exist anymore, raised the awareness of the need to recreate a domestic manufacturing capability for critical items.

Previously, economic reasons were the driver of reshoring production, but the current reshoring tendency has also the strategic dimension of assuring the availability of sensitive products in case of an emergency. Healthcare products come to mind immediately, but several other sectors will be impacted. The quarantine or lockdown of a Chinese manufacturing region, in a future pandemic, could disrupt the supply chain of several industries like automotive, appliances, electronics etc by stopping the supply of some crucial components.

This tendency will also have an impact on M&A. We can expect that there will be a search for local companies that have retained needed manufacturing skills, to be acquired by solid financial or industrial groups with the aim to rebuild a local supply chain. We at M&A Worldwide, with our unique international footprint are well positioned to assist companies engaged in such projects.

03.

Precision machining: industry consolidation and interest from Private Equity in the US

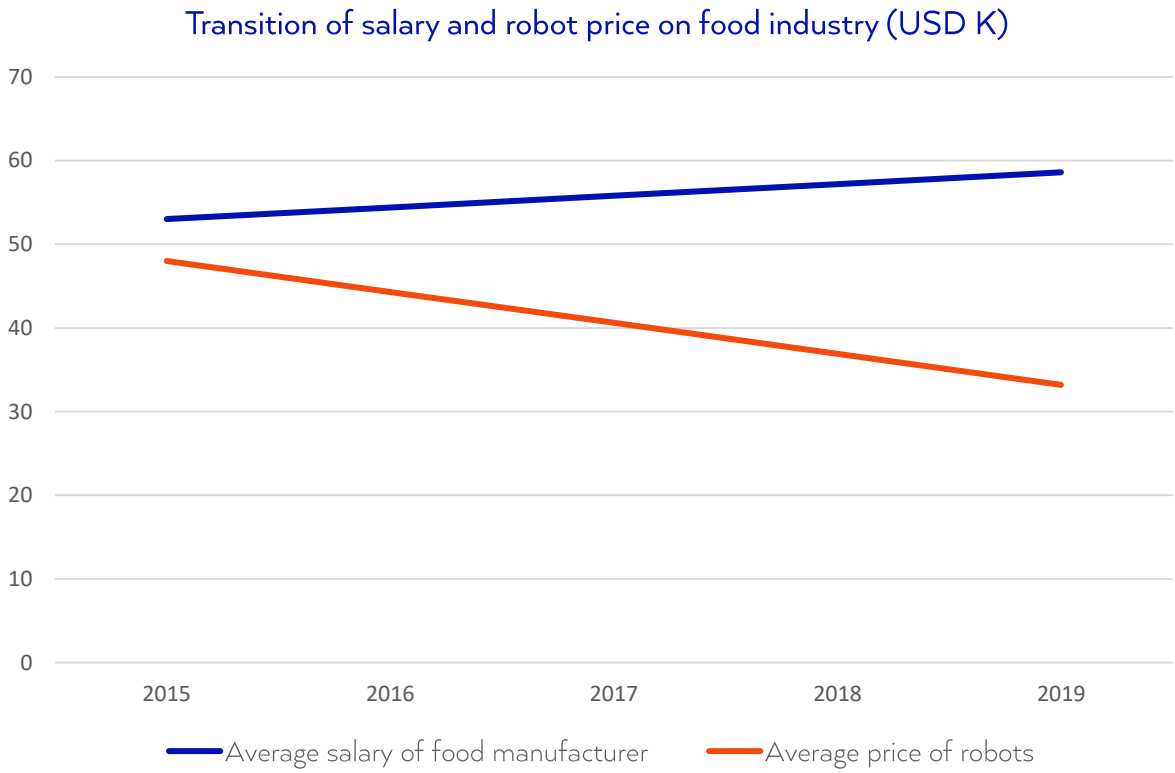
Made in America! That's the watchword of our precision machining industry, which is enjoying a major upturn driven by the need for ever more sophisticated components required to support new technologies in manufacturing, automation, life sciences, aerospace and defence. But faced with increasing demands for new capital equipment, robotic automation and Industry 4.0 transformation, many owners are increasingly concerned that they are at risk of falling behind. Having recently advised on our sixth precision machining industry sale, with a growing number of additional transactions in the pipeline, we see an industry in the early stages of change that will fundamentally reorder its ownership structure over the next few years.

Private-equity players are long time masters of the industry roll-up strategy. The enhanced financial interest in the machining sector is due in no small part to the dramatic success of Arch Global Precision which has grown from a base in cutting tools acquired in a 2011 corporate spinout to a 17-facility national precision machining consortium with over $200 million in revenues. (FOCUS assisted Arch on some of these acquisitions). Strength Capital, a mid-sized private equity group and Arch's initial backer, recently concluded that even this scale of operation was not optimal, and the end game would exceed their resources. This April, Arch was acquired by The Jordan Company. With $11 billion in capital, Jordan eyes a much bigger piece of the machining industry.

For the full report on the precision machining sector in the US download the report at https://focusbankers.com/an-industry-in-play-the-future-of-independent-precision-machining/

04.

Robotics – Recent Developments



Source: SPEEDA

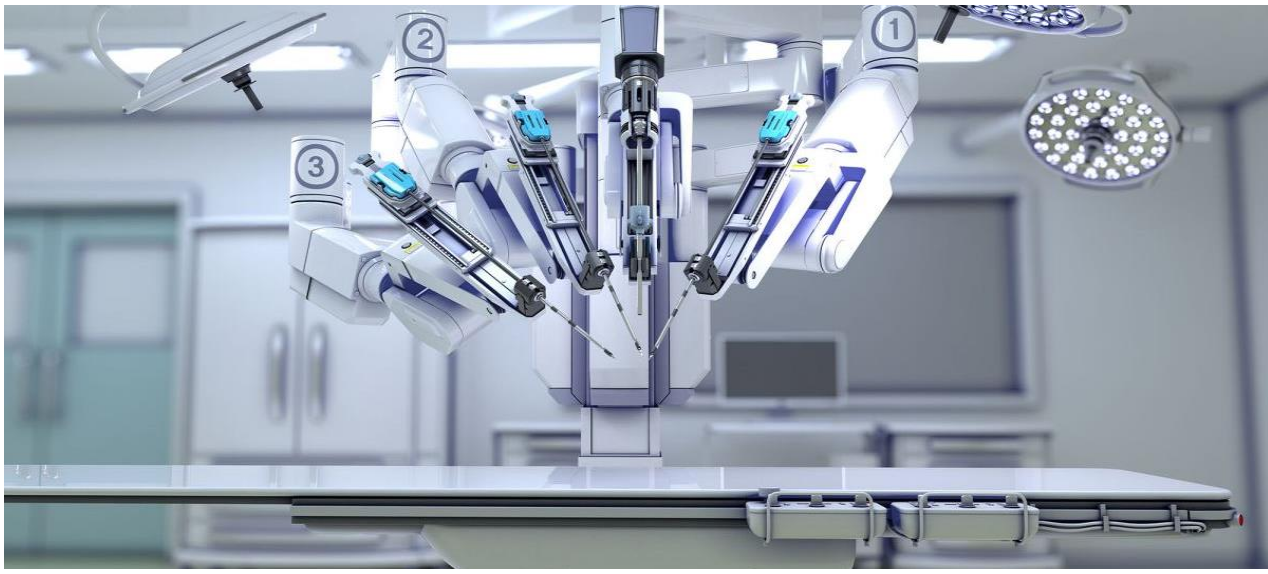
"AndorobGroup is starting a trial of its autonomous cursing robot, FRUTERA. The electronic authentication opens the door and take out the beverages inside, and it also operate at multiple floors using elevators. FRUTERA does not have a refrigerating function, and it is possible to reduce costs by using a method of filling a cooling agent to cool and a method of directly pressing a button with a sensor when moving up and down the elevator instead of interlocking with the elevator system."

The Daily Industrial New, January 24, 2020. https://newswitch.jp/p/20864

Expand to food supply chain and medical industry

The food industry has fallen behind the introduction of robots compared to automobiles. However, this situation is changing gradually, with new applications and advanced robots emerging across the food value chain. For example, restaurants where robots do most of the work have exploded in the last few years. Robots that replace various tasks such as turning over hamburger putty, serving coffee to customers, delivering food, etc. are creating a new life in the industry. Similarly, manual work in food processing, which was conventionally difficult to automate, is being replaced by robots.

Medical robots have the potential to support or substitute the daily work and precision work of doctors and nurses. Diagnosis and surgery with medical robots will reduce human intervention, reduce costs, eliminate human error, streamline the operating room, shorten surgery and recovery time, and help healthcare professionals focus on critical issues.



Robotics – Integration with RPA

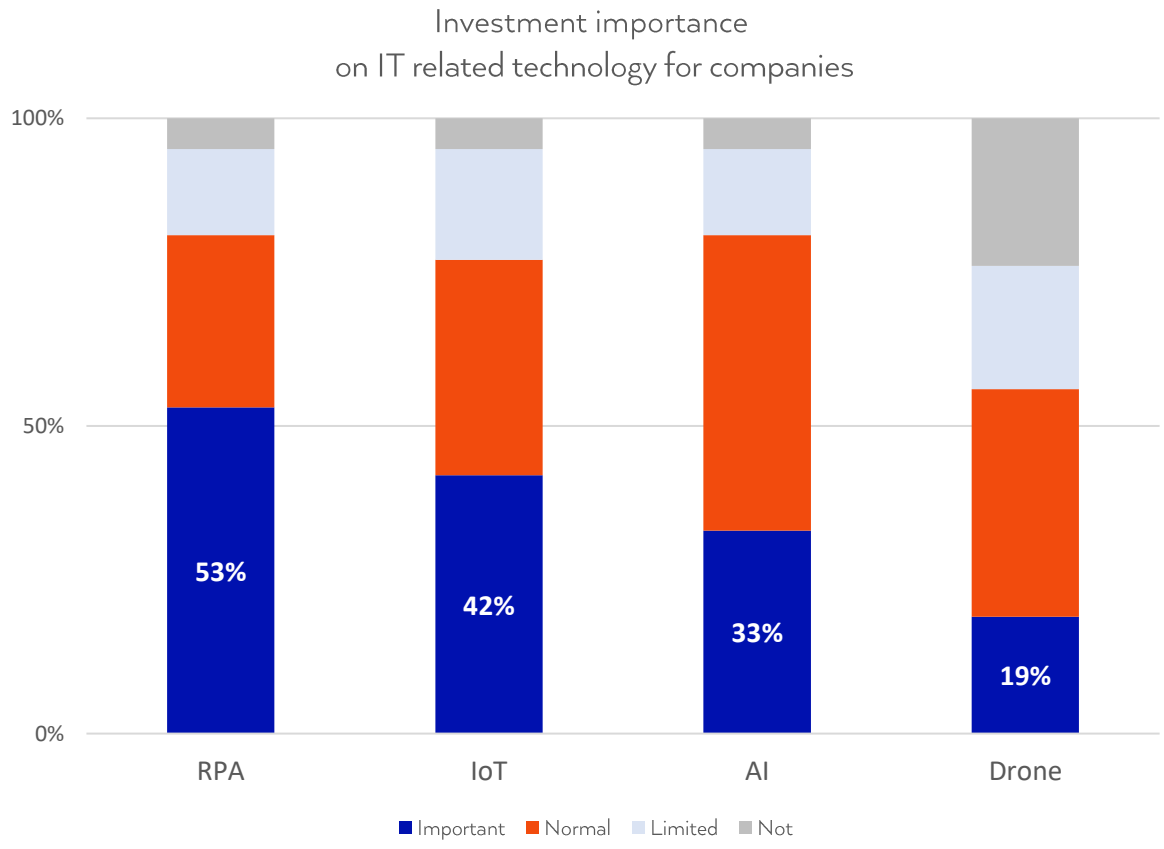
RPA 4.0 extend robot field

The development of Cognitive RPA (RPA 4.0) enabled robots work broader fields. Unlike the traditional RPA, or rule-driven RPA, Cognitive RPA recognize unstructured data, such as picture or hand-written letters. RPA has existed for over 15 years, and recent improvement on NLP (Natural Language Processing) and OCR (Optical Character Recognition) technologies trigger more companies to adopt the RPA.

According to HFS Research, the global RPA market grew 53.9% to $ 1.7 billion in 2018. It is expected to reach $ 10.7 billion by 2027 (the estimated CAGR for 2020-27 of 20.0%). The background of this market expansion includes:

- Strong sales of robot licenses due to extensive training programs and support from RPA service providers
- Increasing number of customers choosing digitalization over outsourcing
- RPA vendors / service providers and partnerships with major ERP software companies such as SAP

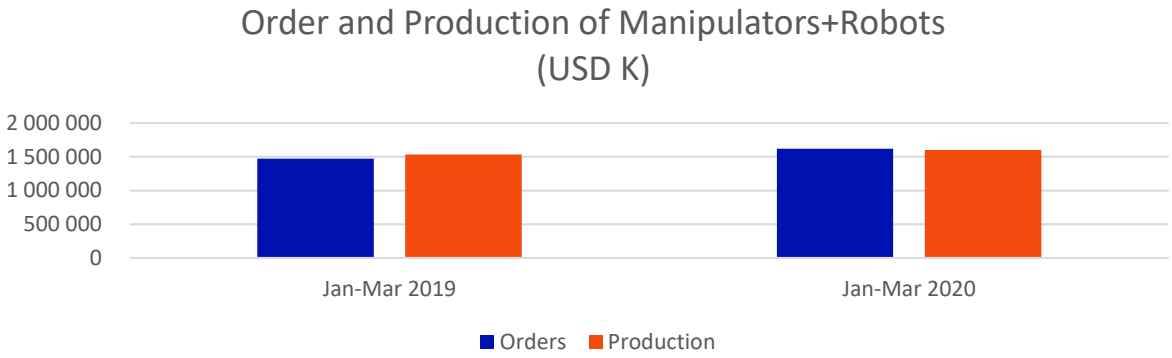
	RPA 3.0 Autonomous RPA	RPA 4.0a Cognitive RPA
Purpose	Automation of end-to-end	Utilization of high-level algorithm and NLP
Limitation	Not able to process unstructured data	No



Source: HFS Research、KPMG
『State of Operations and Outsourcing 2018』

05.

A focus on Japan



"Dip, a recruitment site provider, will investe JPY 50 billion in the field of "robot dispatch" to support the efficiency and automation of corporate operations with software that makes full use of artificial intelligence (AI), etc. in the five years ending February 2024 . By dispatching robots, we will support work style reforms of client companies, mainly small and medium-sized companies."

Nikkei

(2019)

Dip invest 50 billion yen on robot dispatch, Retrieved May 11, 2020, *from:*

https://www.nikkei.com/article/DGXMZO43035190Y9A320C1DTA000/

"In recent years, many human resources, funds, and supplies have been put into the robot field in each country of the world, contributing to the development of the robot industry. In this respect, the Japanese robot industry has started early, and has a major position in the world in terms of market size, industrial application, and technical level."

SPEEDA (2020), China's robot industry has yet to reach Japan,

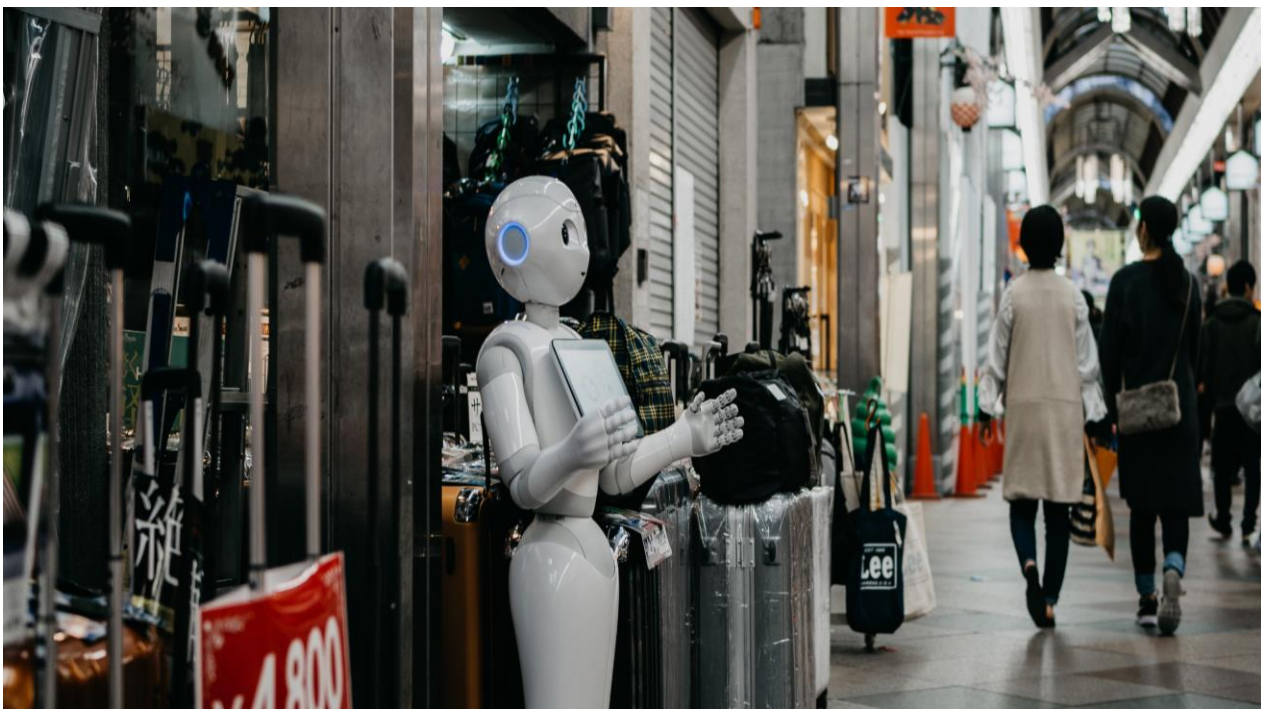
Retrieved May 11, 2020, from:

https://www.ub-speeda.com/article/SCHINA0020200422eg4m0002u?6

Money inflow to robots

According to data released by the Japan Robot Manufacturers Association, orders received for the January-March quarter were USD 1,620 million, up 10% from the same period last year. While the production of industrial products has stagnated due to the spread of the new coronavirus worldwide, the improvement of the demand for China, which is accelerating the investment related to the 5th generation (5G) mobile communication system, has pushed up.

According to Nomura Research Institute, the Japanese medical and nursing robot market is estimated to be 21.6 billion yen ($ 196 million) in 2018 and will reach 76.0 billion yen ($ 692 million) by 2024, with CAGR 23.3%. This growth is mainly due to the increasing elderly population in Japan.



06.

A focus on Germany

The impact of Covid-19 has been hugely significant with the German economy shrinking by possibly 20% this year, according to the IFO. In the German mechanical engineering industry the fall in confidence has been dramatic and severe, with the most negative balance ever seen in the business climate index. The expectations for the immediate future are also dire, with the view for next 6 months ranging from -40% to -69.3%

The balance of positive and negative reports in Mechanical Engineering

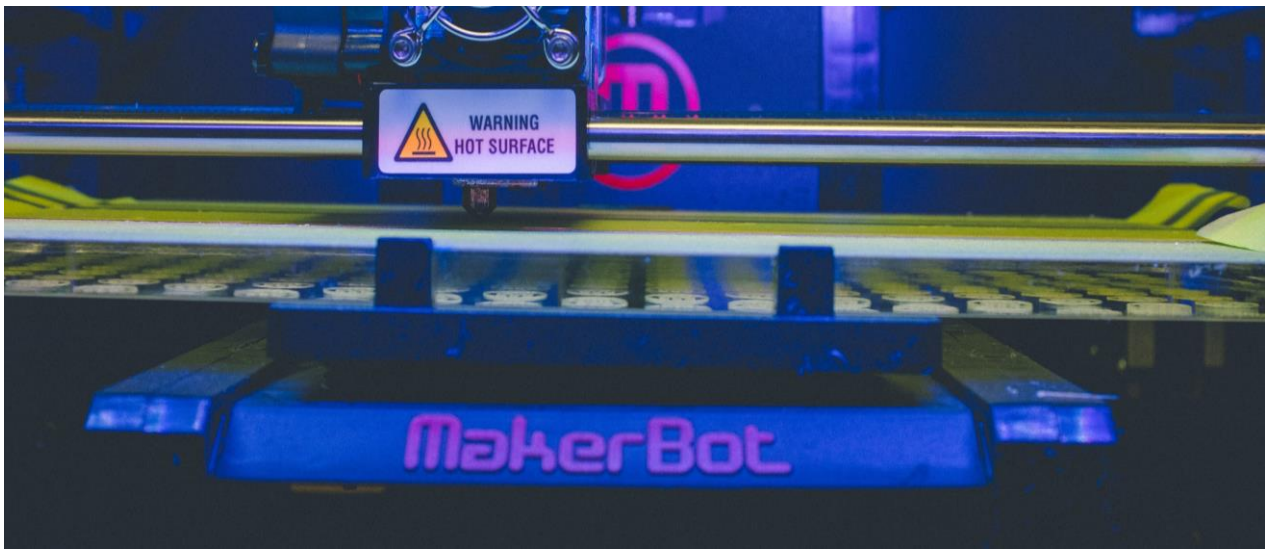
Beyond the pandemic

With certainty we know that humanity will win the fight against this pandemic. The world afterwards will return towards normal, but it is likely that lessons will be learned and that markets will evolve. Manufacturing accounts for nearly 21% of the German economy (ref: Manufacturers Alliance for Productivity and Innovation). In the United States and the United Kingdom this is 13% and 12% respectively. Germany produces over a quarter of EU manufacturing turnover and represents over a 10% of global exports of manufacturing products.

Recapitalisaton with government funding will be substantial in fiscally strong European countries like Germany. With its accounts in good order and with the newly acquired exemption from the EU ban on state aid, Germany will go ahead with robust capital injections into domestic companies. Providing liquidity to companies is the top priority to ensure their survival. Equity capital for investment is essential to the second stage of recovery.

Former major crisis in the past indicate that we should expect an increase of automation in the industry. The transfer of some production back to Germany would result in an increase of robots. In the meantime there are plenty automation tools available like simple Process Automation and smart robots in the factories. There will be an increasing demand for Artificial intelligence (AI) and machine learning.

Already before we were hit by the coronavirus the German industry employed far more robots than any other European country. However, China, North America, Japan and Southern Korea are leading this table.



07.

A global leader in Additive Manufacturing

If near-shoring is implemented to create a more robust supply chain it seems likely that Germany will be one of the beneficiaries, both within German plants and plants owned by German parent companies but located in Eastern Europe. Germany's strong heritage in advanced manufacturing, and in additive manufacturing (3D Printing), may prove the foundation for a robust recovery from the difficulties of today.

Latest Transactions

POLAND 2020

LG Chem

Plastcs
home and professional appliances

Vestel Group

BUY-SIDE

GERMANY 2020

WDM Wolfshagener

Transformation of wire rod into steel products for furniture and shop equipment industry

Midrahtec Drahtwaren

SELL-SIDE

FRANCE 2020

GINGER CEBTP

Acquires LECES, a technical and environmental studies office

LHP Group

SWEDEN 2020

Cell Impact

Manufacturer of components for power cells

Undisclosed

EQUITY-RAISE

NETHERLANDS 2019

Controllux Groep

TDE Lighttech has been acquired by Controllux Groep..

TDE Lighttech

SELL-SIDE

NORWAY 2019

ECT

Electrical engineering for buildings and infrastructure

Norconsult

SELL-SIDE

POLAND 2019

Chemar Rurociągi

Piping systems for Electrical, Chemical and Petrochemical Plants.

MBO: group of private investors

BUY-SIDE

PORTUGAL 2019

Gestgregor

NPL Portfolio

CONSULTING

UK 2019

Project Charge

Textile & Clothing

Westpoint Home

SELL-SIDE

Industry Group Team

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