



STICK OR TWIST

The gamble for car industry suppliers as electric vehicle sales rise

AUTOMOTIVE CROSSROADS

The car industry has generated wealth for generations of family-owned component manufacturers and well-paid jobs for millions. Now, this delicately balanced ecosystem is facing an existential challenge with the rise of electric vehicles.

Companies that have become world leaders in the development and production of specialist components for traditional petrol and diesel cars have a dilemma: to continue with the successful formula that has served them well for decades or divert significant financial resources to the entirely different technologies required to power electric vehicles (EVs).

Three million electric cars were registered in 2020, according to the International Energy Agency and that pushed the total number of EVs on the roads past 10 million, with the main concentration in Europe. However, with around 90 million vehicles being produced globally each year that means the majority of markets are still buying traditional fossil-fuelled cars.

"The shift we see in Europe is driven by EU regulations that oblige the big car brands to change their product portfolio but unless there is the same regulatory change in other countries, they simply will not do that," says Thomas Ziegler, leader of Moore Global's automotive group. "I think the US will be the next to adopt EVs in big numbers but India, China and large parts of the world will stick with combustion technology for quite a while."

His views were echoed by Will Fernandez, co-leader of the automotive practice at Citrin Cooperman, part of Moore North America: "They are growing in popularity in some cities but people here have long journeys to make and until range goes beyond 300 miles it is going to be a while before consumers really get into EVs in the US. Maybe, it will take 15 years."

10 million

Total number of EVs on the roads – 30% of them registered in 2020

"The shift we see in Europe is driven by EU regulations. I think the US will be the next to adopt EVs in big numbers but India, China and large parts of the world will stick with combustion technology for quite a while." Thomas Ziegler, leader of Moore Global automotive group South Africa occupies a unique position in the global car manufacturing world, producing vehicles not only for domestic consumption and other sub-Saharan countries but also for export to other right-hand drive markets around the world.

As a result, it has a sophisticated automotive supply chain but has very little direct involvement in EV development. However, there have been several innovations in battery technology aimed at increasing the efficiency of hybrid models which are driven by a more climate-friendly combination of electricity and fossil fuels.

"Nigeria and Ghana are ahead of the game in Africa on electrification but in sub-Saharan Africa nothing is happening EV-wise now and I still believe it is still a long way down the track," says Candice Whitefield, director at Moore Johannesburg.

"We have a growing lower middle class but they can still only afford an entrylevel vehicle. To replace a battery pack in a BMW is probably the same as the cost of the vehicle so that is a huge barrier to entry for EVs on the African continent."

For the vast majority of car markets, suppliers can look forward to largely business as usual for years to come, albeit with a need for incremental improvements to existing combustion engine technology.

In Europe there is a legally mandated imperative to move towards electrification. Driven by stringent CO2 emissions targets, European governments and automotive players in 2019 committed to €60 billion in investments to produce EVs and batteries, according to Accenture. That is 3.5 times higher than in China.

These massive investments have been promised at a time when the industry is reeling from disruption caused by the knock-on effects of Covid. The big car brands cut back production sharply last year when the pandemic struck and cancelled orders for huge volumes of components, most notably silicon chips. "In sub-Saharan Africa nothing is happening EV-wise now and I still believe it is still a long way down the track"

Candice Whitefield, South Africa



to China



Even the most modest modern family cars rely on microchips to power a vast array of electronic systems from the dashboard to the braking system.

However, when car industry demand dried up chip manufacturers turned to alternative customers such as laptop and games console makers to fill the gap. Now, when car companies want to crank up production to meet pent-up demand, the supply of chips is not there. This has led to many assembly lines being halted and the situation may not return to normal until spring 2022.

This is bad news for suppliers for two reasons: their own revenues are down if no cars are being built and car manufacturers are trying to balance lost revenue caused by shutdowns by screwing down prices of components. This financial squeeze comes at exactly the moment they are looking to commit to major investment in new technology to help them grab a foothold in the burgeoning market of 'electromobility'.

The dilemma is particularly hard for the so-called Tier 2 suppliers at the heart of the supply chain, companies which typically generate revenues up to €500 million and employ as many as 2,000 people. "They are more focused on specific parts of combustion engine technology so don't have enough resources to shift to EV technology quickly," says Thomas Ziegler, who is a partner at Moore Intaria in Munich.

"They are more locked into a particular part of the market which makes it much harder for them to switch over. Some will have real problems if they are not able to create new products or adapt their existing output to an EV-driven world."

Many of the owners of these Tier 2 firms are reaching the end of their careers and worry about their legacy.

And for those who decide the move to EV development would be too much upheaval, Ziegler offers an alternative solution: investment from Asia where traditional technology is much in demand.

"The activity of Chinese investors has increased and, certainly in Germany, there have been a lot of acquisitions and investments from China," he says. "Suppliers in countries where the combustion engine will survive may well be looking at acquiring European technology. There are plenty of owners who do not see a good future and may be willing to sell." For those Europeans that choose to remain there is a fine balance of threats and opportunities to consider.

Stefan Peintner set up and ran the Slovakian production plant of Italianowned supplier Intercable, which began investing into automotive wiring and energy transfer equipment in 2012. He has been an eyewitness to the evolution of EVs.

"The manufacturers want to bring costs down and they want to do it on the backs of suppliers," says Peintner, who is setting up his own consultancy. "If you want to survive in Europe as a supplier, the main thing is to be able to automate processes. It is not easy but if you have developed a good product and you have no problems in production, then you can still get a fair price for it. "Suppliers in countries where the combustion engine will survive may well be looking at acquiring European technology." Thomas Ziegler, Germany





"The demand for EVs is so intense that you have to be very fast in developing new concepts. In the standard car market the product cycle is seven-to-nine years – in EVs the cycle time is about four years. It is more like software development where something is state-of-the-art today and obsolete next week."

His comments reflect another feature of the new world of electromobility: software engineering and data analysis are vital to future model development but many traditional suppliers simply do not have the necessary skills.

The investment in research and development and people, many of them graduates on higher wages, puts a big burden on what are often privatelyowned family companies with limited access to bank lending or other lines of credit.

Moore has built a strong reputation in helping Tier 2 suppliers fund their future needs through banks, private equity investment and tapping into state aid. Martin Kiňo, partner at Moore BDR in Bratislava, has helped dozens of multinational clients locate production in Slovakia, including Intercable. The country now produces more cars per capita than anywhere in the world but Kiňo believes more suppliers could take advantage of generous tax and funding packages. For example, tax deductibility on capital expenditure was recently increased to 200% and various European Union stimulus grants are available.

"The majority of suppliers are not shifting enough into the new environment," he says. "They are going with the flow and there are only a few that are investing enough in this area. There are a lot of state programmes but often companies see it as too much administration to apply.

"However, clients that joined the programmes received a lot of benefits. One part is the funding but, more importantly, it allows you to put people into developing a product that the market is looking for."

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Martin Kiňo, Slovakia While expense is one barrier to developing EV technology, another is the ability to attract and retain IT-literate young graduates and bring the fast-paced ethos of Silicon Valley to the more hierarchical world of automotive product development.

Of course, many of these graduates will also be on the recruitment radar of technology companies, electronic games manufacturers and app developers – which, themselves, are eyeing up new opportunities to expand into the car industry.

Mobile phone companies are creating ever more sophisticated apps that control all aspects of a car's performance and entertainment systems. Waymo, a division of Google parent company Alphabet, is developing autonomous driving systems while Apple has toyed with developing its own car brand for several years.

In Poland, another major European centre of traditional car production, Krzysztof Oczko, partner at Moore Rewit Południe, sees big changes ahead. "With new technologies coming though and shifts in supply chain relationships there are opportunities for younger and more innovative companies to grow and win market share, to challenge the bigger and more established players."

It is not just in-car systems where technology is set to expand – a whole new industry is growing up around the increased demand for battery manufacturing and recycling. This is already attracting large multinationals that previously had little exposure to the industry.

Existing battery manufacturers from Asia and the US are investing heavily across Europe in order to honour their longterm supply contracts with key European auto manufacturers. But at the same time, Europe is witnessing the ascent of its own new battery champions, such as Northvolt of Sweden, SAFT in France and Lithiumwerks, based in the Netherlands.

Traditional companies have been the backbone of the automotive industry and helped build a sector that is responsible for 1.6% of global GDP.

Now, with the whirlwind of change gathering force, they are left wondering whether to stick or twist: stick with their focus on the internal combustion engine or twist and gamble on a new future as EV innovators. "There are opportunities for younger and more innovative companies to grow and win market share, to challenge the bigger and more established players."

Krzysztof Oczko, Poland



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