Navigating the road ahead

Autonomous driving into a bright future or into the unknown?

by Mandy Soblik 27/04/2023

Stuttgart has a rich history in the automobile industry, going back to the late 19th century when Gottlieb Daimler and Karl Benz invented the first gasoline-powered automobiles. Today, the city is home to some of the world's most well-known automotive brands, including Mercedes Benz, Porsche, and Bosch. Since then, the automobile industry in Stuttgart has played a major role in driving job opportunities and attracting a skilled workforce from around the world. However, with great power comes great responsibility. What if all that just collapsed, all the jobs, all the modern technology, and buildings, what if all that would break apart?

Something similar happened to Detroit in the 1960s after it being a world-leading car industrial city. They went from being the capital of America's most important industry to an abandoned city with abandoned homes and jobless people and no perspectives in the future. Back then the problem that the city had to face were other, more modern, and more automatized car industries that already adapted the newly invented ways of manufacturing, including assembly line work. The installation of assembly lines contributed to a more productive and faster way of production, that did not need highly skilled workers anymore, since one would only have to perform a certain task on the assembly belt.

Today, times have changed and there are, of course, different concerns but the effects are very similar. That is why in the following, Stuttgart's problems will be assessed and compared to Detroit's.

Of course, manufacturing a car today has been modernized since the 1960s but there are still things they have in common, for example, assembly lines. But due to more and more modern technologies and especially newly invented robots, the process of building a car has been simplified and doesn't require as many human hands as before. Most industries have adopted an almost fully autonomous procedure for building cars. This is not only a lot faster, but also saves money and is much more efficient.

However, workers are not needed anymore, and more and more jobs are becoming obsolete, especially simple jobs in the factories and at the assembly belt. People now need higher education in order to keep working in the automobile industry, since there are mostly office jobs available. So, there is no doubt that robots will replace human jobs in the future and that especially the automobile industry will struggle since the unemployment rates of people with a lower educational standard will rise. This could lead to similar problems Detroit had to face, people will struggle to afford the high standard of living in Stuttgart and will move to more affordable areas in the long term. Concluding, Stuttgart will become less attractive to people and could, in the worst case, end up like Detroit, abandoned.

If one considers that the car industry in Stuttgart has to face competition from abroad, especially from China, they could likely fall behind. China's automobile industry is very competitive and focused on success in the future. They are especially working on perfecting autonomous driving and electric engines, in order to have better market potential in the future. In Germany, on the other hand, the process of adapting these new technologies is rather slow and takes time. Time that they would need in order to keep up with an already very modern economic world power.

A goal that not only the German car industry tries to achieve is to reduce carbon dioxide emissions, in order to guarantee a future for generations to come. Therefore, Stuttgart's automobile industries need to adopt new ways to produce more environmentally friendly, with less emissions and higher sustainability. But not only does to process need to be sustainable, but also the cars need to be more friendly to the environment.

But there is hope, since these challenges are not insurmountable, with continued innovation and investment one can develop cleaner fuels and more efficient engines that will help mitigate these issues. Because as we move towards are more sustainable future it is important to explore alternative sources of energy, such as electric and hydrogen-powered engines. But in order to do that, a lot of money is needed, money that people don't seem to find necessary to invest in the already very wealthy car industry in Stuttgart.

Overall, I believe the automobile industry in Stuttgart could have a bright future ahead, but it will require ongoing investment in research and development, innovation, and a commitment to sustainability and social responsibility. Otherwise, they could follow in the footsteps of Detroit and become outplayed by global competition and newer technologies.

What is your take on it, will the automobile industry in Stuttgart master these challenges and drive into a bright future or could they possibly fall behind and end up like Detroit?