

NATIONAL REPORT SLOVAKIA

Worker participation in GIG economy - long term scenarios for automotive sector

1. Introduction – Technological changes shaping the future of the labour relations

Economy has over the course of history undergone through many transformations that have fundamentally shifted the way that the business have been operating and the way they hired their employees. Some of the transformations have happened through the increase of mobility allowing for the increase in the demand that producers faced allowing them to increase their production and trade with partners from other regions. Others have been technological and increased the capacity and production as well as the ways that labour had to be organised. From the first industrial revolution that changed the agricultural economy to the industrial one, through mass production to the introduction of computers and electronics, the end of twentieth century saw most of the employees affected by these transitions¹. These eras have also brought the phases of job security or at least labour rights associated with long-term stable contracts and the social rights associated with them.

In the recent decade two such changes have occurred, which have moved the economy in a very speedy manner towards a term called ‘gig-economy’, which might question the very aspects of labour stability that people got used to. These two factors have been the Industry 4.0, or the fourth wave of the industrial revolution and the slow but steady development of the sharing economy. This analysis looks at the definition of the gig economy, its gradual development in Slovakia in particular through technological advances and the potential effect of this phenomenon on the automobile industry, which is the leading export sector of Slovakia. The issues concerning Slovakia are numerous, mainly associated with the fact that the automation threatens to make many of the technological jobs obsolete, and thus resulting in a risk of an abundance of people facing the job insecurity and the need to transform to contractual labour².

2. Definition and trends– the Gig economy

Gig employment means a form of stand-in or substitute employment, based on the irregular or flexible labour, which has been growing since the growth of the sharing economy. There are multiple terms that are interchangeable with the term “gig economy”, such as temporary work, or occasional work, where the common denominator is not a predetermined amount of work contracted to the employees. This has been frequently manifested also in the so -called *zero hour contracts*. These flexible irregular labour arrangements has existed even in the past, but has been based mainly through personal relationships or the use of agency. This form of labour contracting has been revolutionised with the use of website and mobile applications³. The most famous cases of the use of this mode of

¹ Sentryo (2017) “The 4 industrial revolutions”, *Sentryo*, 23rd February 2017, at <https://www.sentryo.net/the-4-industrial-revolutions/> (accessed 20th July 2017)

² Rainnie, A. and Dean, M. (2019) “Against Industry 4.0: Putting the fourth industrial revolution in its place”, *Futures of Work*, Issue 7, 24th May 2019, at <https://futuresofwork.co.uk/2019/05/24/against-industry-4-0-putting-the-fourth-industrial-revolution-in-its->

[place/](#) (accessed 20th July 2017)

³ Tvardzik, J. (2017) "Príklady slovenskej gig ekonomiky: Ponúka prácu za pár eur a často z domu", *eTrend.sk*, 15th October 2017, at <https://www.etrend.sk/trend-archiv/rok-2017/cislo-41/gig-ekonomika-ponuka-pracu-za-par-eur.html> (accessed 20th July 2017)



work has been in the shared ride or the shared accommodation and has been transforming business models in these sectors⁴⁵.

“Gig economy” as a term then means an economy based on projects offered through these digital platforms eventually replacing a regular full-time employment completely. These employees are then transformed to freelancers or gig workers choose this often voluntarily, but a considerable segment of these workers are forced to this status due to the lack of permanent employment opportunities on the market. Furthermore, with the transformations brought by Industry 4.0. it is likely that even large sectors will get more used to this form of employment. Currently this includes people like high-class IT specialists or on the other hand drivers and providers of short term accommodation⁶. The term “gig economy” originated in Silicon Valley and has since spread to other areas, however, there have been risks about this leading to a growing inequality among the high-skilled and low-skilled ends of the sector. There is an expectation as well that these trends in the countries of Western Europe will lead to a considerably more stratified society compared with the Central European region, where the inequality will come, but may only be more limited. Therefore, what is at stake is the permanent redefinition of the term job, from a fix work for a company on a fixed schedule to a new setup, where most of the workers will no longer fit in that category. While they may still work for a single company, they still could have a self-employed status and irregular hours. Alternatively, they can work for multiple companies on a series of short-term jobs coordinated through a mobile application⁷.

The development of this mode of working across the economy as a whole has been substantial. This can be seen mainly in the U.S. economy, where up to 35 percent of the US working population (which amounts for up to 55 million people) are engaging to a certain extent in a form of temporary work and it is expected that this percentage may reach 50 percent of all the workers in the U.S. in 2027. This trend will also be followed in France, Germany and the United Kingdom with such supply of labour exceeding the average rate of employment growth in these countries. However, while the rate of the people engaging in gig economy in Europe has been growing steadily, the gig economy as a main source of income has not been that frequent and has been a case for only several percent of the total number of employees in the developed countries as a whole (amounting up to 3.8 percent on average in 2017 in Europe), a bit lower than the 10 percent in the emerging markets⁸. According to the PwC surveying

⁴ Crouch, C. (2018) “Redefinovať pracovné vzťahy akapitál v digitálnej ére” in Daubner, P. (ed.) *Budúcnosť Európy: cesta k post-kapitalizmu?*, Bratislava: Občianske združenie POLE at https://www.researchgate.net/profile/Jan_Kosc2/publication/329309625_Buducnost_pracovneho_trhu_na_Slovensku_v_kontexte_demografickych_zmien_a_priemyslu_40/links/5c04d69e299bf1a3c15e4a1c/Buducnost-pracovneho-trhu-na-Slovensku-v-kontexte-demografickych-zmien-a-priemyslu-40.pdf (accessed 20th July 2017)

⁵ Beňo, M. (2018) “Apps Transform the Taxi Industry, a Case from Austria and Slovakia”, *10th International Research Conference, Services in the Digital Era: Problems and Prospects*, Bratislava, April 25th, 2018, School of Management in Trenčín, at <http://www.vsm.sk/files/us/research/conferences-seminars/management-challenges-21st-century-2018/zbornik-prispevkov2018.pdf> (accessed 20th July 2017)

⁶ Cieselski, M. (2019) “The gig economy is becoming increasingly global”, *FinancialObserver.eu*, 1st May 2019, at <https://financialobserver.eu/poland/the-gig-economy-is-becoming-increasingly-global/> (accessed 20th July 2017)

⁷ Pichanič, M. and Staňková, A. (2016) ““Can the globalization reduce inequality among the Central European countries?” (The Case of Czech Republic)”, *16th International Scientific Conference Globalization and Its Socio-Economic Consequences*, University of Zilina, The Faculty of Operation and Economics of Transport and Communication, Department of Economics, 5th – 6th October 2016, at https://globalization.uniza.sk/wp-content/uploads/2018/12/proceedings_globalization_2016_part_4.pdf

⁸ Cieselski, M. (2019) “The gig economy is becoming increasingly global”, *FinancialObserver.eu*, 1st May 2019, at <https://financialobserver.eu/poland/the-gig-economy-is-becoming-increasingly-global/> (accessed 20th July 2017)

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nearly half of the HR directors of global companies, there is an expectation that by 2025, up to 20 percent of all the employees will be external contractors⁹.

3. The impact of Gig economy on the automobile industry in Slovakia

Focusing specifically on the automobile sector, there have been impacts of the shared economy on this sector in numerous ways already. The first wave there have been changes in the way that automobiles can be bought, where the new trend has been digital stores with virtual reality showrooms. It is expected that the automobile sector alone will invest in this form of sales €66.6 billion indicating that this interest may spill over also into the changing modes of production and the way they approach the labour market. This digital transformation will also affect the entire supply chain that will lead to the lower costs through the data collection that will allow the suppliers will adjust to the demands of the consumers. The next step in the development of the digitalisation of the production is the creation of the Smart Factories, where there will be a greater use of algorithms and artificial intelligence for the plan of production. While this process may be costly in the beginning, Smart factories will lead to a great efficiency and *flexibility* of production. These processes are associated with the deployment of the artificial intelligence, which could provide additional revenue of about €175 billion. The impact of this on productivity can be in terms of 1.3 % growth per year¹⁰.

This has led to an expectation of the impact of these transitions on the use of labour force in their production capacities. According to expert estimates just in the European automotive industry there is 35 to 40% of excessive production capacity in terms of labour force. At the same time, we can see that there are new production capacities being built simultaneously, but this may be only due to the fact that these new production capacities grow in areas with significantly lower labour costs¹¹. The future can come in the form of the factories with significantly lower regular labour force. After all, the factories producing without a direct input of human labour already exist even today. Japanese company for the creation of robots FANUC constructs robots without human presence, leading to savings in lighting, air-conditioning and direct labour costs. There is a similar trend among the other technological factories in the electrotechnical sector, or cell phone production, where the Chinese companies have substituted 90 % of their employees. The error rate has dropped by 80 %, while the productivity has increased by 250 %. The automotive sector is not different in this regard. General Motors currently employs a third of their original 600 000 employees, although this is in comparison with the 1970¹²¹³. Technological advances take multiple forms in these companies resulting in

⁹ Cieselski, M. (2019) "The gig economy is becoming increasingly global", *FinancialObserver.eu*, 1st May 2019, at <https://financialobserver.eu/poland/the-gig-economy-is-becoming-increasingly-global/> (accessed 20th July 2017)

¹⁰ Maňovčíková, D. (2018) "The impact of digitalization on the financial health of the enterprise", *Management Challenges in the 21st Century: 10th International Research Conference, Services in the Digital Era: Problems and Prospects*, Bratislava, April 25th 2018, School of Management in Trenčín, at <http://www.vsm.sk/files/us/research/conferences-seminars/management-challenges-21st-century-2018/zbornik-prispevkov2018.pdf> (accessed 20th July 2017)

¹¹ Staněk, P. and Ivanová, P. (2018) "Digitalizácia spoločnosti a Industrie 4.0 (systémové dôsledky)" in Daubner, P. (ed.) *Budúcnosť Európy: cesta k post-kapitalizmu?*, Bratislava: Občianske združenie POLE at https://www.researchgate.net/profile/Jan_Kosc2/publication/329309625_Buducnost_pracovneho_trhu_na_Slovensku_v_kontexte_demografickych_zmien_a_priemyslu_40/links/5c04d69e299bf1a3c15e4a1c/Buducnost-pracovneho-trhu-na-Slovensku-v-kontexte-demografickych-zmien-a-priemyslu-40.pdf (accessed 20th July 2017)

¹² Wiseman, P. (2016) "Why robots, not trade, are behind so many factory job losses", *Associated Press*, 2nd November 2016, at <https://www.apnews.com/265cd8fb02fb44a69cf0eaa2063e11d9> (accessed 20th July 2017)

¹³ Frič, M. (2018) "Vplyv technologického pokroku na prehlbovanie ekonomickej nerovnosti", in Daubner, P. (ed.) *Budúcnosť Európy: cesta k post-kapitalizmu?*, Bratislava: Občianske združenie POLE at https://www.researchgate.net/profile/Jan_Kosc2/publication/329309625_Buducnost_pracovneho_trhu_na_Slovensku_v_kontexte_demografickych_zmien_a_priemyslu_40/links/5c04d69e299bf1a3c15e4a1c/Buducnost-pracovneho-trhu-na-Slovensku-v-kontexte-demografickych-zmien-a-priemyslu-40.pdf



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automation across multiple aspects of the Smart factory. One of them is the use of sensors, creation of the internet of things, automation of processes and communication between different parts of the factory¹⁴¹⁵.

In terms of the specific numbers for Slovakia, the automotive industry is currently responsible for 13 percent of the Slovak GDP and directly employs 130 000 employees. This has meant a production of roughly 1 080 000 cars in 2018 and the expectation of 1 150 000 cars for 2019. This is still without a specific number from the Jaguar Land Rover, which has not released any expectations for 2019, although the expected capacity is roughly 150 000 cars per year. This makes Slovakia the top country in terms of per capita car production¹⁶. This growth, however, has not happened without an increased use of the contractual labour for a short-term gig in their factories. It has created unequal standing for regular full-time employees and short-term agency workers without the same social rights and company benefits. The contractual employees are employed only for a limited contract and according to some media, the contracts may even be legally questioned, although this used to be the case mainly before the EU accession¹⁷. This trend has, therefore, existed for a long time in Slovakia and the automation trends have only greatly increased the existing pace.

3.1. The possible scenarios of the future of automotive workers

This chapter identifies four possible scenarios for the development of the automotive industry in Slovakia with a view to integrating firms into global production chains and impacting on working conditions and social dialogue. There are overall four scenarios of the development of the automotive industry in Slovakia from the perspective of future work. The following scenarios are based on the underlying qualitative attributes of labour change due to the introduction of new technologies. The emergence of new technologies is considered next to the action of the relevant actors to be an endogenous factor in accordance with the conceptual framework of this chapter:

- companies (multinational corporations) and their location decisions
- the public sector and its strategies towards foreign capital and policy of research, development and education system (role of state institutions and self-administration)
- trade unions and their representation of employees' interests

The four scenarios stem from the comparison with 1. The no change option, i. e. the preservation of the status quo, and further outlines three options for development: 2. A shift towards higher value-added activities; 3. Preservation of the production function of the site with the ability to adapt to new production processes; 4. The departure of foreign capital and the need to restructure the economy.

Scenario 1: Maintaining status quo in state, business, and union access

The scenario is based on the current analysis of the automotive industry in Slovakia, where we identified its integration into global production networks in a dependent position, with a dominant position of foreign capital with activities with lower added value. In this situation, from the point of view of companies, Slovakia will cease to be interesting for further investment because of the increased cost of labour and the structure of workers (different skills will be required at present). The

¹⁴ Wakefield, J. (2016) "Foxconn replaces '60,000 factory workers with robots'", *BBC News*, 25th May 2016, at <https://www.bbc.com/news/technology-36376966>

¹⁵ Madleňák, A. (2018) "Prenos informácií cez QR kódy ako determinant automatizácie podnikových procesov" in Švec, M. and Bulla, M. (eds.) *Práca 4.0, Digitálna spoločnosť a pracovné právo*, Bratislava: Friedrich Ebert Stiftung, at <http://library.fes.de/pdf-files/bueros/slowakei/15444.pdf> (accessed 20th July 2017)

¹⁶ Šebesta, M. (2019) "Ako je na tom slovenský automobilový priemysel v skutočnosti? Pozrite si dôležité štatistiky.", *Autoviny.sk*, 9th March 2019, at <https://www.autoviny.sk/reportaze/119380/ako-je-na-tom-slovensky-automobilovy-priemysel-v-skutocnosti-pozrite-si-dolezite-statistiky> (accessed 20th July 2017)

¹⁷ Začková, K. (2003) "Riziká dočasného zamestnávania berú na seba kontraktori", *eTrend.sk*, 13th October 2003, at <https://www.etrend.sk/podnikanie/rizika-docasneho-zamestnavania-beru-na-seba-kontraktori.html>

(accessed 20th July 2017)



public sector will not create conditions for upgrading or local businesses, nor will it create sufficient incentives to sustain investments and attract new ones. Trade unions will continue to focus on raising the standard of living of employees through raising salaries, but less on training and reporting on upcoming changes in new technologies. Slovakia will also cease to be an attractive location for production activities, new investments are being redirected to other locations. This outflow may not be sudden, it may take several tens of years, which in turn may allow the implementation of strategies for a different orientation of the Slovak economy (see scenario 4).

The effect for the setup of the gig economy going forward could be that, while the companies could practically leave most of their operations in terms of the lower skilled positions, the highly skilled persons could be either asked to move with them or offered an arrangement of the long-distance employment on a contractual basis.

Scenario 2: Successfully Integrating Higher Value Added Activities (Functional Upgrades)

According to this scenario, R&D and other higher value-added activities are more localized, and domestic actors themselves are also able to create this added value and thus be included in global production networks. This scenario means that the public sector has successfully started the education system for the needs of the Fourth Industrial Revolution, and that school and employer cooperation has also been successfully launched. Employee participation in lifelong learning has also increased. However, this scenario also assumes a loss of jobs in low-skilled positions and an increase in demand for qualified positions.

This scenario is the most positive to the allowing for the greater use of the gig economy with the benefits falling on most of the high-skilled positions that would remain in Slovakia. Given that, as mentioned above, these positions are likely to do financially better in comparison with the current situation, it would lead to a further pull for the improvements in the education as there would be a direct link between the education achievements and the financial rewards that the contractual employees receive.

Scenario 3: Maintaining Activities mainly in Production (Process and Product Upgrading)

This scenario means maintaining Slovakia's competitiveness, mainly in the production of mobile phones, specializing in manufacturing and logistics activities in GPN. This will mean maintaining a large part of the production capacity with low value added and job polarization, again increasing demand for high-skilled positions and reducing jobs in low-skilled positions. For public policies, both scenarios 2 and 3 mean the need to successfully initiate changes in the education system, especially in cooperation with employers who will find the knowledge and skills they need in the labour market. Much of the workforce will have to adapt to the new qualification requirements, and another is likely to move to the service sector with low value added and worse working conditions.

This scenario creates significant risks for the low-skilled end of the job sector, which would find itself on the losing side of the development in case that the gig economy becomes a standard for not just the high-skilled, but for general employment across different sectors. While, this is still slightly better than if those positions left Slovakia altogether, it would be an untenable position that would later result either in Scenario 2 (a full functional upgrade) or in the Scenario 4 (reorientation of the economy with a potential transition through Scenario 1 of the automotive sector leaving the country).

Scenario 4: Reorienting the Slovak Economy to Other, Related Industries, Obtaining a Competitive Advantage from Specialization (Cross-Sector Upgrading)

Interbranch upgrading implies a shift to production in a related sector with higher added value, where at least in part the activities of higher value added will be located in Slovakia, i.e. research and development, design and marketing of the given product. In the context of automotive industry, this

could be a specialization in the improvement of alternative car drives (e.g. development and

production of fast car batteries). This scenario is probably the most difficult to fulfill, because it is a purposeful public policy strategy in cooperation with other stakeholders to achieve such a change, coupled with risky investments in product development. These scenarios show that, in all cases, the number of jobs in low-skilled activities will decrease as the value added of such work decreases further. On the contrary, the demand for highly qualified staff capable of dealing with complex tasks will increase, creating the need for employee retraining and change in the education system.¹⁸

This is a very difficult scenario to assess, as there could be a complete restructuring of the economy regarding the sectors that would rise as dominant as well as the structure of skills that would be needed.

4. Results of the survey in Slovakia

A survey was conducted as a part of this project in Slovakia focusing on the experience of people in Slovakia with the gig economy and their direct participation in it. The questionnaire compared the experience of the internal and external employees with their work satisfaction and included also the views of the employers. The questionnaire focused on the satisfaction of the three groups with their working life and aspects related to the gig economy. Overall, the results show that the overall differences between the experience of these three groups are relatively low, but at the same time there is a slightly higher level of dissatisfaction present among those external workers that have been forced into this position. Furthermore, there is also a differentiation between those thinking that the gig economy should become more regulated and those believing that the regulation is not necessary.

When breaking down the numbers, it must be said that the plurality of the responses came from the employers. They expressed particularly high level of satisfaction with the following aspects: tasks performed on the job, the opportunity to influence the things around them, creativity applied in job and income stability. There is also an expectation among the employers that the number of external employees will increase in the future. They also agree with the proposition that such external employees should not become members of the union organisations as the internal employees. So overall, there is an agreement that the extent of the gig economy will be growing in the Slovak society. On the other hand, there is generally only a moderate agreement about the reasons for this related to the economic benefits provided by employing the workers externally. For example, in terms of the economic benefits, there was a generally low level of agreement that the gig economy would secure better products, lower transaction costs for consumers, or through higher labour participation rate. There is also a disagreement with the expectations of the gig economy providing an easy opportunity to gain new working experience for those entering the labour market. Equally there is an agreement that the gig economy is not the suitable option for the university graduates in terms of the income opportunities or development of their careers.

The view of internal employees is very positive in terms of their job satisfaction. They positively evaluate their professional life, their tasks performed and the number of hours worked. Slightly lower levels of satisfaction were given by internal workers regarding the independence in their working life. On the other hand, employees rated highly their satisfaction with their employers (4.4 out of 5) and with the work benefits such as health care, maternity leave and minimum wage (4.0). Similarly, satisfaction with the stability of income was assessed very positively (4.4). Despite this high level of satisfaction, internal employees are aware that the number of external employees in their companies is likely to increase in the near future. Despite this expectation, the internal staff sees the benefits of external staff in terms of scalability and flexibility in adding experts in areas where they are needed, as

¹⁸ Martišáková, M. (2018) *Budúcnosť pracujúcich v automobilovom priemysle na Slovensku*, Central European Labour Studies Institute (CELSI), October 2018, at



http://www.fes.sk/fileadmin/user_upload/FES_Buducnost_pracujucich_v_autopriemysle_SR.pdf



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well as in providing new opportunities and capacities for companies not covered by their own resources. Similarly, internal employees see the advantage of gig economy in terms of the potential for greater participation of people in the labour market. Negatively perceived is the fact that these external employees are not part of the trade unions, from which internal employees could have a better bargaining position. Despite the many positives, most respondents are more afraid to work as an external employee and would therefore not prefer such a change. Last but not least, internal staff perceive an increase in the number of external staff as a potential unrest in terms of labour rights and an overall threat to their internal positions. Nor do they find this form of employment suitable for graduates in terms of earning income or work experience.

The responses from the external employees were less positive on average. Compared with the internal employees the responses did not exceed 4 out of 5 points on average in either question. Overall, in terms of the job satisfaction is highest (3.66 out of 5) in terms of the independence of their working life and the tasks performed by the external employees. The satisfaction with the employer remains at 3.33 points. Despite these factors, two thirds of the respondents listed that they are external employees based on their choice and for them the gig economy also provided a core of their earnings. It is also relevant to note that those that listed their external status as the result of the necessity only had a secondary education achieved. The university graduates appreciated a high level of autonomy in terms of the control and flexibility. The satisfaction with the income remains moderate at 3.66, while the overall impact of the gig economy has been seen as positive (4.5) for the university graduates, while negative (2) for the high school graduates. This directly impacted on the view of the external employees regarding the benefits of the gig economy. The persons that have been employed externally by choice viewed the economic benefits, such as the lower transaction costs, better quality of products and scalability in terms of operations for the company. Despite these, the respondents still generally do not approve that the gig economy is suitable for the fresh graduates.

5. Conclusions

This paper focused on the description of the gig economy and its context in the framework of the automobile sector. The findings show that the impacts of the gig economy within the car manufacturing can be considerable and their effects are already starting to be felt in Slovakia as well. The processes are likely to be swift as there is an expectation that within the next six years up to a fifth of the labour force will be working based on the external contracts. For Slovakia this development can have considerable consequences and there are four specific scenarios, in which Slovakia can fall and that will determine the severity of the consequences of this transformation on the labour market. The majority of the impact in terms of the external employment or the gig economy is expected among the high skilled force (IT skills, supervisors) but also the very low-skilled or unskilled labour force. Slovakia needs to transform the focus of its employment structure and the education sector accordingly so that the vast majority of the population avoids the trap of the unskilled work, which could under the gig economy suffer considerably. On the other hand, if the transformation is successful the skilled workers can be better off under the new scenario.

The questionnaire undertaken in Slovakia shows that there is an overall agreement about the expectation of the larger deployment of the gig economy in Slovakia. The experience of the current external employees show a slightly mixed picture as their satisfaction seems to be lower than that of the internal employees. However, as state above, the story is better among the university graduates as they even currently work in the gig economy based on their own preference. Employers have positive experience with these external employees, but it must be said that apart from the flexibility and scalability, there is no overall agreement regarding the economic benefits of the gig economy for the companies. It is clearly still a matter for the future and better experience to make the best use of the gig economy, where possible, while protecting the job security, where the gig economy is not

appropriate, medium skilled or low skilled positions, where the familiarity with one environment may bring more benefits compared with the risks involved in the job insecurity for these employees.

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