

# Automotive Supplier Survey 2018

In cooperation with the Automotive Industry Association of the Slovak Republic and the Slovak Automotive Institute, PwC surveyed the current situation, key factors and the future expected development in the automotive supply segment in Slovakia.

Most automotive suppliers expect a revenue increase of more than 5% this year and significant technological investments over the next 3-5 years. A quarter of respondents are considering the relocation of additional production to Slovakia, and nearly half of them expect an increase in staff numbers in 2018.



SLOVENSKÝ AUTOMOBILOVÝ INŠTITÚT





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Dear Friends and Business Partners,

Globalisation continues to support technological developments, including big data topics and digitalization. Industry 4.0 is connecting value chains around the world, while political developments may have adverse impacts on global trade. Just as technology is impacting operations, political decisions such as customs regulations and the establishment of trade barriers is making it harder to predict business opportunities. This is why strategic decision-making is likely to become even more of a challenge for global business leaders.

Slovak CEOs currently have strong confidence in economic growth and in the success of their companies. They have a high degree of trust in their business and capabilities. Slovak CEOs and global leaders are alert to the challenges of technological transformation.

Digital transformation requires new skill sets, and the importance of HR management continues to increase. The ability to recruit the best people and to retain the talent organisations want to keep remains a priority. Dealing with these topics goes beyond discussions about salary levels, which are already becoming more and more of a challenge for the automotive sector in Slovakia. It is also about dissatisfaction with the quality of education in Slovakia and the relevance of science for the industry including the automotive sector.

2017 was another year of success for the Slovak automotive industry and going forward, the impact of the automotive sector on the GDP of Slovakia will continue to grow. The pipeline of new models made in Slovakia is robust, and future success will depend on the ability of the country to adapt. PwC expects that the transformation of the automotive industry will accelerate, driven by several factors: electrification, autonomous driving, car sharing, and ongoing connectivity and there will be many challenges and opportunities.

This is the sixth Slovak Automotive Supplier Survey, whose results were published in May 2018. Slovak automotive suppliers remain positive about the business environment and investors continue to be confident. The competition continues to be high and productivity needs to match costs. We hope you will find the survey interesting reading. This year, the analysis also includes the results of PwC surveys conducted in Hungary and Austria, and features information about the differences and similarities in these countries. I feel certain you will find the results useful and that they will add value to your business.

For the third consecutive year, the Slovak automotive industry produced more than 1 million automobiles, which confirmed the current stability of this industry in Slovakia. In April 2017, the 10,000,000th passenger car came off the production line in Slovakia. The perspective of further growth is supported by the plans for a fourth automobile producer, which should start its operations in Nitra at the end of 2018, and the positive effects of this production should be felt in 2019. However, the automotive industry needs to look further ahead, and to continuously evaluate the specific factors impacting internal and external competitiveness.

The Automotive Industry Association of the Slovak Republic and PwC have long cooperated in undertaking the Automotive Supplier Survey. I firmly believe that this activity is beneficial, as it brings us useful information about fundamental issues regarding the supply chain in Slovakia and its development over time.

This year's survey is focussed more on training and education of the workforce which is, due to the absence of a system for transferring scientific and technical knowledge into practice, the basis of future competitiveness of the automotive industry and industry as a whole in Slovakia. It is well understood that the industry cannot prosper in the long term without a sufficient number of skilled people willing to work and create value. The Automotive Industry Association of the Slovak Republic has long been part of initiating change in the education

system. We have been engaged in developing legislation on vocational education and training, and the introduction of dual education. After two years of experience with its implementation in practice, we are cooperating on amending the legislation on dual education. Based on practical experience, it is clear changes are needed, and they should support a more robust implementation of the dual education system in Slovakia. Our interest is to improve the quality of secondary vocational education system and to better prepare its graduates, and we want to increase the employability and practical preparedness of higher education graduates. In cooperation with selected universities, we have started to develop study programs which will be closer to actual practice and should ensure that university graduates have practical experience and are immediately ready to start work in the industry. Revolutionary changes in automobile construction and production processes, the utility properties of automobiles, and related services necessitate changes as regards the competencies and structure of university graduates, particularly in the technical and natural sciences. Only graduates that have been trained and educated in line with the latest knowledge and practical needs will be able to cope with digitalization and the requirements for the development of modern transport systems. Similarly, the need for research and development activities, particularly in the supplier industry, faces a lack of qualified experts as well as graduates ready for creative work and innovations. This is the irreplaceable task of higher education.

The task of the academic community is also irreplaceable as regards research and development. It is our obligation to support the creation of an environment suitable for cooperation between the industry and scientific institutions to jointly solve the problems of the industry. Our scientists are aware they are also responsible for the future of the industry in Slovakia, and for sustainable economic growth. Nevertheless, the established rules may mean there is a lack of motivation as regards the much needed cooperation with industrial practice.

This is the reason why the latest automotive industry survey is focused on higher education. Together with PwC, we sought to initiate a discussion on cooperation between industry and universities and on the current situation, possibilities and ideas of the industry to change the present situation and initiate a change. We are pleased that major automotive companies in Slovakia have joined this discussion, and helped us obtain a great deal of valuable information about the current relation between the industry and the universities – how the industry sees the universities, and what barriers the industry faces. The survey results provide much food for thought, and I hope they will help us find optimal solutions when setting conditions so they will be sufficiently motivating for both parties to become engaged in mutually beneficial cooperation and projects, whether in education or applied research and development.

**Alexander Matušek**  
President of the Automotive Industry  
Association of the Slovak Republic









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# The automotive industry must focus on continuous innovation and cooperation with schools



52%

Suppliers with significant investments in new technology & digitalization in 3-5 years



94%

Suppliers report lack of labour resources in the market



**Peter Mrnka**

Director, specialist for the automotive industry



The strong position of the automotive industry in Slovakia and its success is well known. Positive messages are expected about companies' production growth and their contribution to higher employment in the regions – and the results of our current survey again demonstrate this. In all of our surveys over the last five years, we have seen more than half of suppliers reporting a substantial increase in their revenues as well as a related rise in staff numbers. This is an achievement which the management of automotive suppliers in Slovakia can be proud of.

As in previous years, the positive development of suppliers' production have been driven by higher volumes for OEMs, new nominations and the relocation of production to local plants. This also reflects a recognition of Slovak suppliers' product quality, manufacturing effectiveness, safety and other KPIs at their international groups. However, continued expansion of production is a difficult task and requires strategic decisions on new investments in technology, and in innovation and labour, which remain the most pressing current challenges.

In this year's survey, we focus on suppliers' long-term plans, how they are coping with the labour market situation and how they support innovation at their companies. We also asked suppliers about their plans for cooperation with secondary schools and universities.

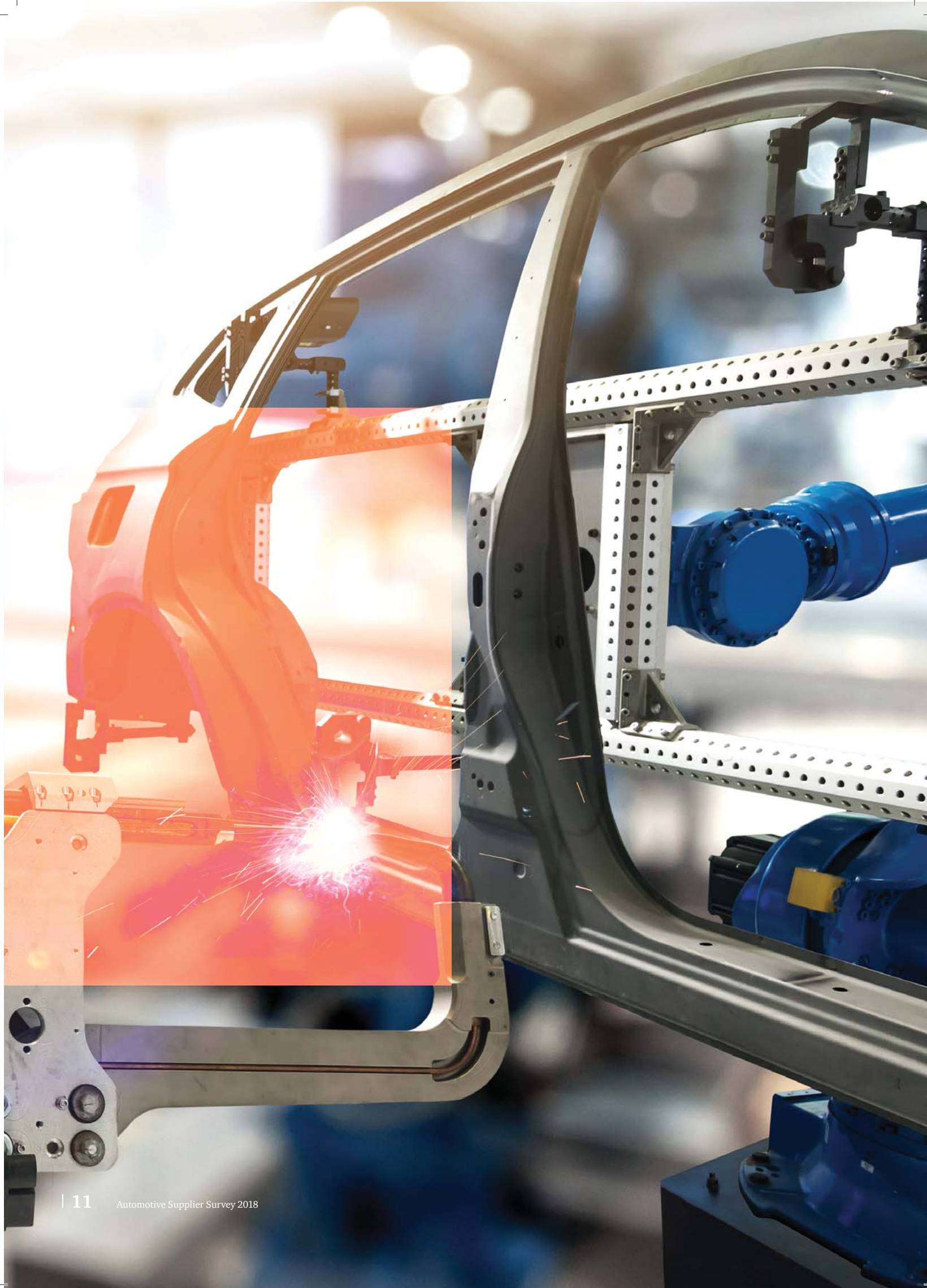
What are the key findings of the survey? Suppliers in Slovakia are set to increase production volumes and hire new staff, despite customer pricing pressure and labour market conditions. Their long-term

plans include new investments and continued cost control and productivity efforts. Companies have a different approach to local innovation process, its justification and implementation efficiency. The dual education system is an agenda where companies lack experience and resources and are calling for more support from schools and municipalities. Similarly, cooperation with universities is limited and may require changes to the legislative framework. As a result, closer cooperation of automotive companies with educational institutions is becoming a critical factor as regards the industry's future success.

We recently performed independent surveys in Hungary and Austria and we noted some interesting benchmarks. Respondents in both countries report - similar to Slovakia - growth for the past and current years, and are running at almost full capacity, a focus on technologies, and on issues regarding limited labour supply and HR management challenges. Companies there have more extensive R&D activities and different expectations for production transfers and the need for new labour.





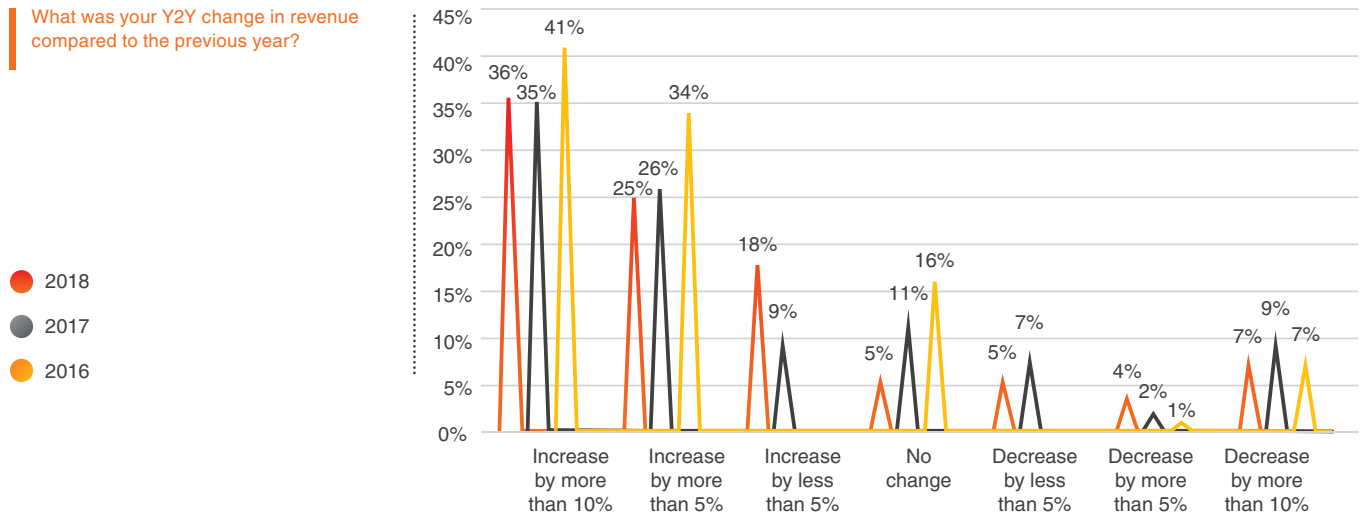


# Analysis of 2017 company results

The automobile industry in Central Europe is experiencing a boom that is outstripping the strongest period of the industry globally. In 2017, more than one third of automobile suppliers recorded revenue growth of more than 10%. A quarter saw growth by 5% to 10%, and almost 18% increased their revenues by up to 5%. In total, less than one sixth of the companies recorded a revenue drop year-on-year. However, despite overall growth, there was a factor present last year that reduced production. Some production plants were preparing to launch new models and that had an impact on some supplier's orders. This also had an impact on supplier's orders. In spite of this, there was production growth in the supplier sector in last year, which also confirms the relatively high level of production diversification towards the foreign consumers.

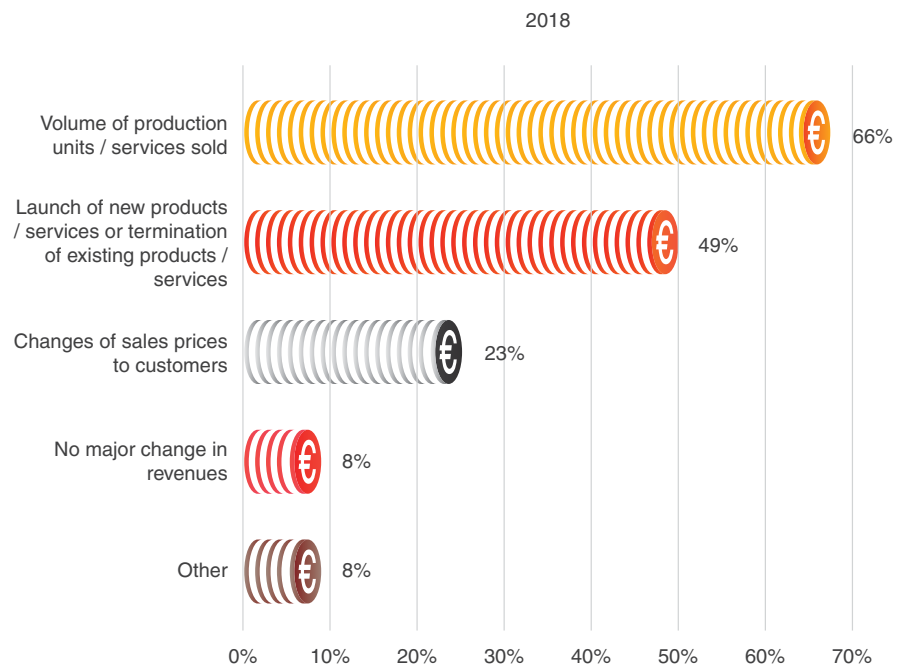
### Question No 1

What was your Y2Y change in revenue compared to the previous year?



### Question No 2

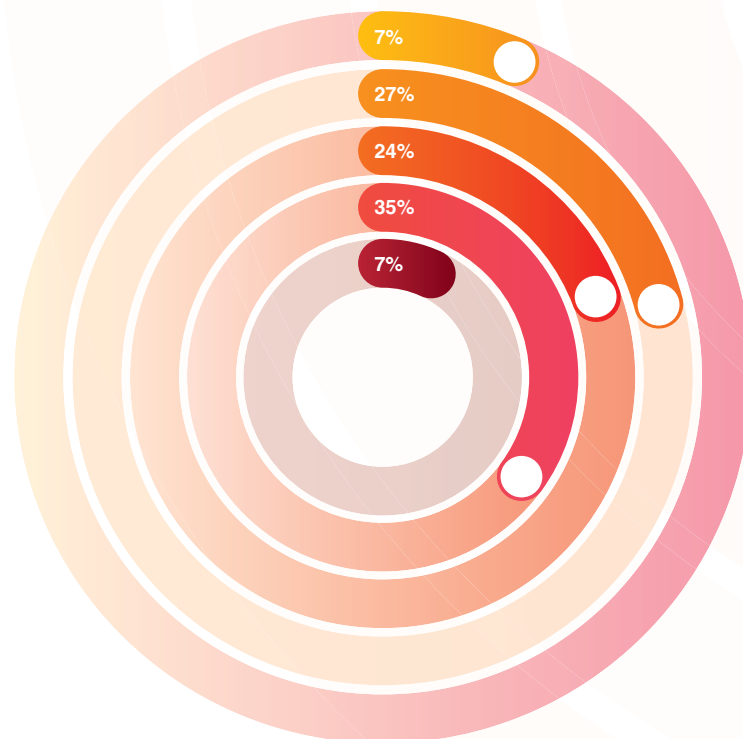
What were the main factors for the 2017 revenues change? (Please mark all that apply)



Changes in the production portfolio of automobile producers to who the Slovak automobile industry delivers significantly impacted utilization of capacity. Almost two thirds of respondents utilized their capacity at more than 80%, which is a general precondition of a profitable operation. One third of the suppliers almost fully utilized their capacity, and more than 7% of surveyed companies produced higher volumes than the volumes achieved by normal utilization of their capacity, which indicates a particularly high volume of orders from their customers. If this trend continues, the suppliers are likely to make additional major investments in building new operation units and production lines. Most of the other companies used their capacities at 60% to 80%, which is also relatively high.

**Question No 3**

What is your current production capacity utilisation?



- Below 60%
- 60 – 80%
- 80 – 90%
- 90 – 100%
- Above 100%





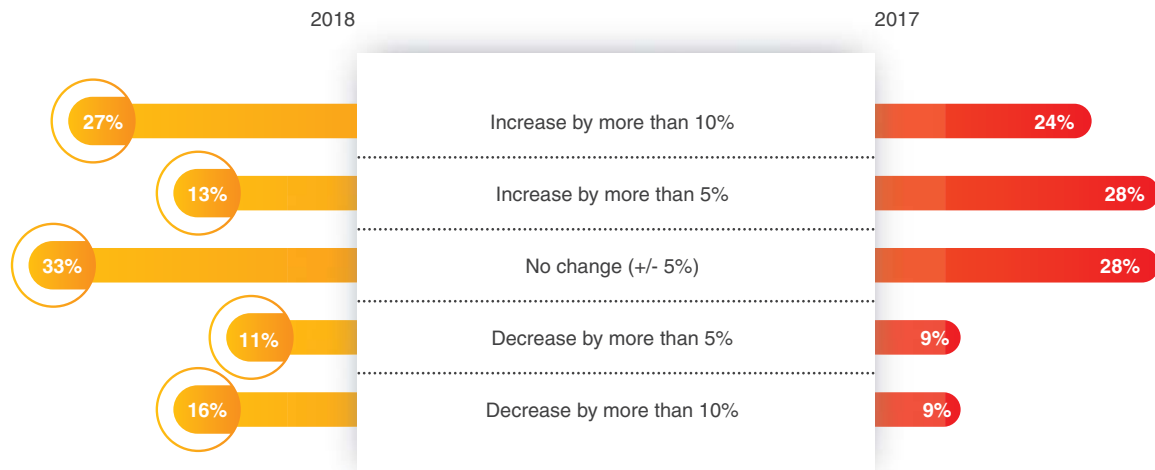




The positive development of automobile production is also reflected in profit development at the surveyed companies with a slightly lower degree than in production volumes. Operational profit growth of more than 5% was recorded by 40% of the surveyed companies, and the companies with profit growth of more than 10% were in the majority. Almost one third of the companies did not experience any change in their operational profit, and approximately one quarter of the respondents recorded a drop in profit. Challenges to profitability might also be related to increasing labour costs.

**Question No 4**

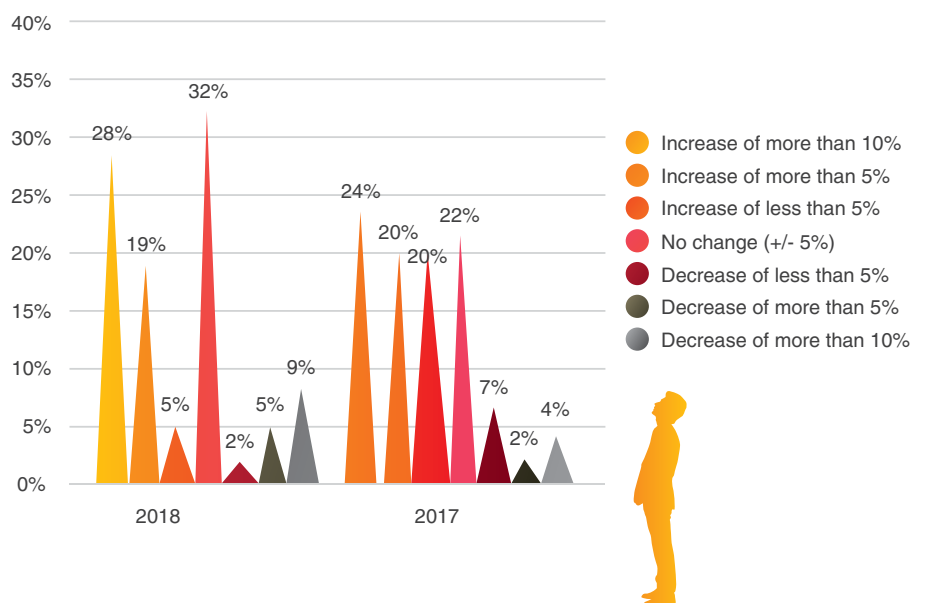
How did your operating profit change in 2017 compared to the previous year?



The increase in production volumes was also reflected in the need for new hires. Companies whose production growth was slower also needed new employees for production preparation and the launch of new products. More than 28% of respondents reported a growth in the number of employees by more than 10%, and this number includes internal employees and employees hired via employment agencies. Another one fifth increased their headcount by 5% to 10%. Labour productivity confirms to grow, as revenue growth at the majority of the suppliers outpaced headcount growth. Almost one third of the companies maintained headcount without any changes, and less than one sixth of the respondents reported a reduced headcount.

**Question No 5**

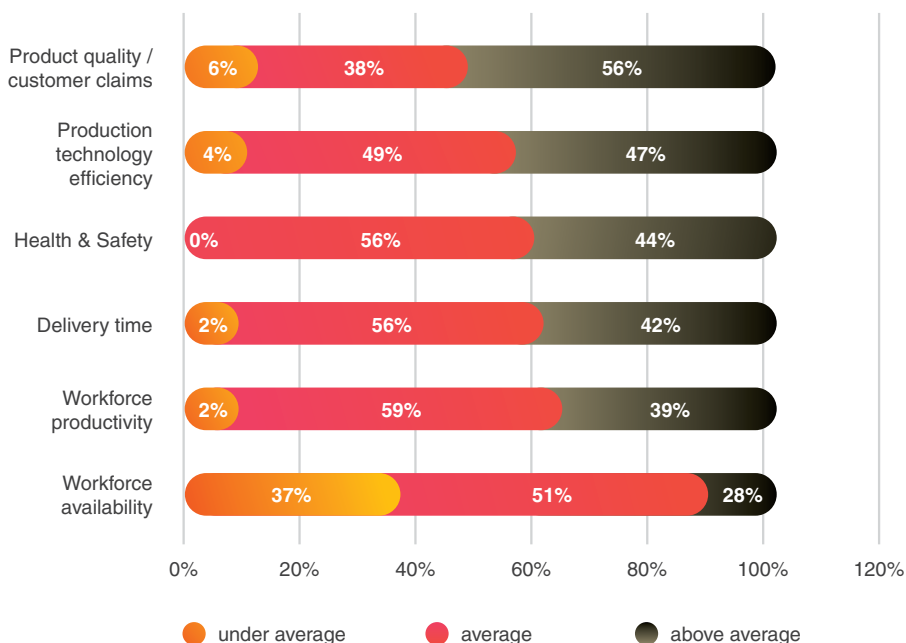
How did total staff numbers (own and external) change in 2017 compared to the previous year?



According to the respondents, the difficult situation on the labour market, where a number of companies face the problem of a lack of qualified manpower, is also reflected in their competitive positions within their parent groups. This parameter is one of the worst for Slovak suppliers as almost 37% stated their position was worse than the group average, and 50% reported a situation at least comparable with that of the rest of the group. With regard to other indicators, they described their situations as above average most often in connection with production quality, where 56% of the surveyed companies considered themselves to be top producers, and the efficiency of production lines, where the position of almost 48% of the surveyed companies is better than the group average. Good positions were also achieved as regards efficiency of manpower utilization, as 59% of the companies achieved average values, and 39% better results than the average of their parent group. When asked about trouble-free areas, the surveyed companies stated on-time deliveries and occupational health and safety, where 56% of them achieved the average group results and 42% of them recorded better results than the average. Going forward the challenge will be to keep high quality levels despite the scarcity of skilled labour.

**Question No 6**

How does your plant benchmark in comparison with other group plants in the following areas?



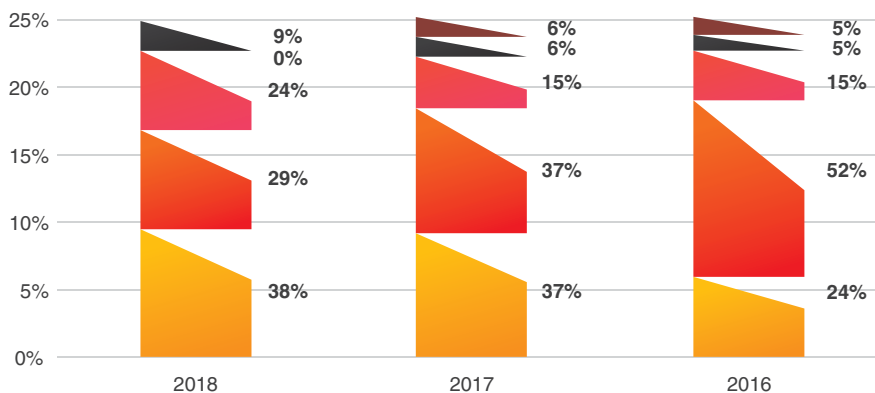
## Supplier`s plans for the future

According to the expectations of the suppliers, the growth of the automobile industry in Central Europe will continue in 2018. A number of new products of automobile producers in the region will be a strong factor impacting this positive development, and two of the three automobile producers with plants in Slovakia have launched new models this year. Moreover, at the end of the year, the production of the Slovak plant of Jaguar Land Rover is scheduled to start. The impact on total production volumes will be relatively low this year. Almost 40% of the surveyed companies expect year-on-year revenue growth of more than 10%. Almost 30% expect growth by 5% to 10%. Almost a quarter expect no major changes in their revenues, and less than 9% of the companies expect a drop this year.

**Question No 7**

What revenue change do you expect in 2018?

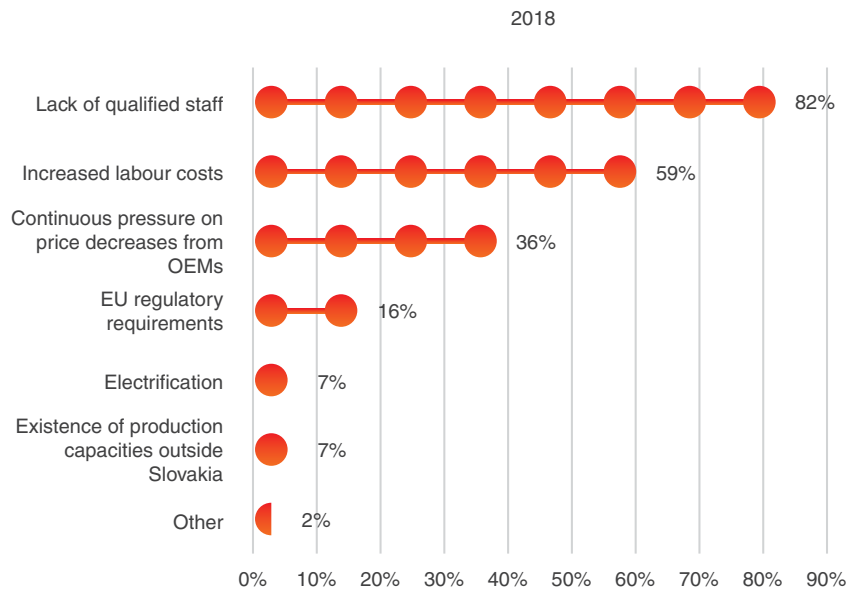
- Increase by more than 10%
- Increase by more than 5%
- No change (+/- 5%)
- Decrease by more than 5%
- Decrease by more than 10%



Staff shortages is the main concern for most of the industrial sectors across Europe. The automotive sector in Central Europe is no exception, as confirmed by the opinions of the surveyed companies. The large majority of the companies participating in the survey – 82% of the companies - perceive staff shortages as the main risk to their business. As more than 50% of the respondents are concerned about increasing costs, an indirect impact of staff shortages – a combination of this factor and the growing requirements of trade unions at a time of industry growth is likely to be reflected in marked increases in wages. About one third of the companies believe there is also a risk of pressure from automobile producers on suppliers to reduce prices. In addition, some companies are worried about the impacts of regulatory requirements of the EU and the member states. To a large extent, this concerns companies involved in the production of components for combustion engines.

**Question No 8**

Which of the following risk factors may affect your future growth prospects?

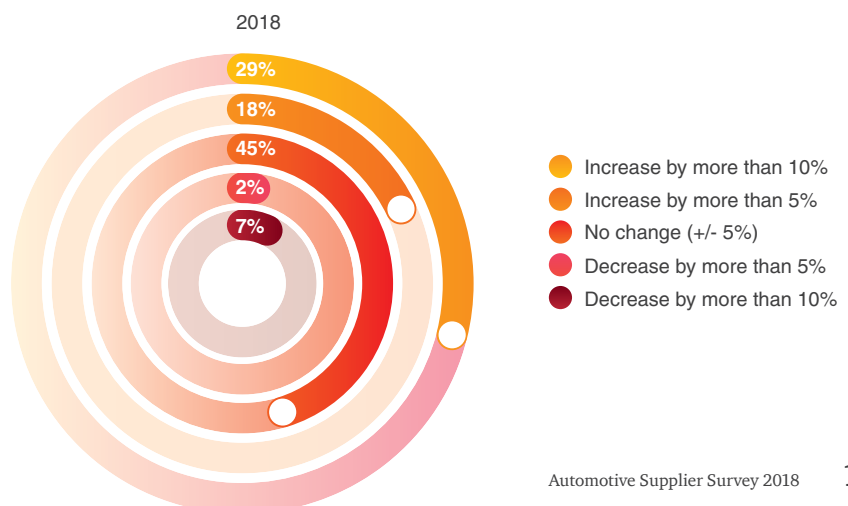


The suppliers also identified other areas that may threaten the efficiency of their operations. In addition to competition regarding production capacities, the impact of regulation and legislation is particularly important. 50% of the surveyed companies referred to transfer pricing, personal data protection and tax requirements as risk areas. A large group of requirements is linked to employees, as almost 40% of the companies are experiencing risks as regards the application of labour market legislation, which involve considerable costs for little perceived return. This refers mainly to the implications of the Occupational Health Service, activities of the Labour Inspectorate, and impacts of environmental legislation for packaging. Some respondents also perceive requirements and the receipt of state aid as problematic.

According to the survey results, Slovak automobile suppliers continue to require additional resources the most in the region. While in Hungary, an unchanged situation prevails as regards expectations, and in Austria, slight growth is expected, almost 50% of Slovak respondents expect further growth in employment. In addition, almost 29% of suppliers expect to increase their headcount by more than 10%. Given the expected development in revenues and headcounts, labour productivity is also expected to increase this year.

**Question No 9**

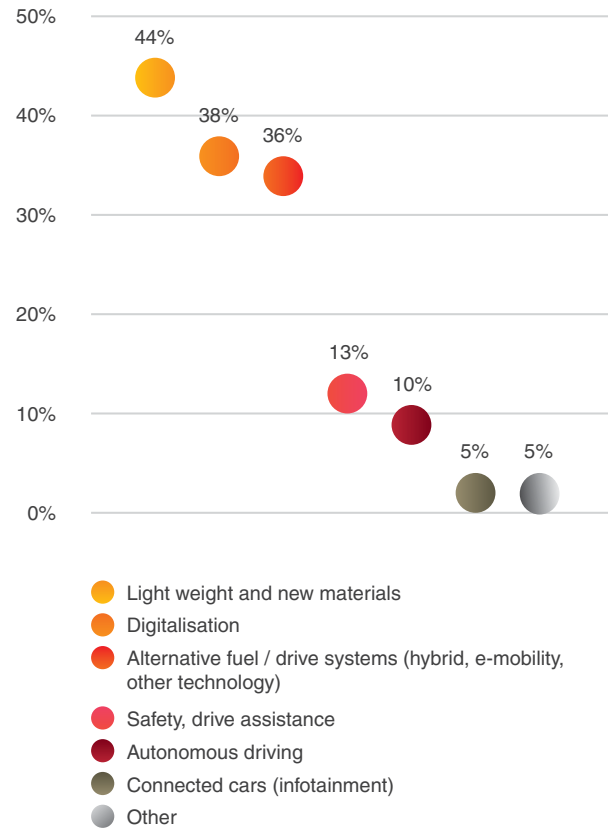
What headcount changes do you expect in 2018?





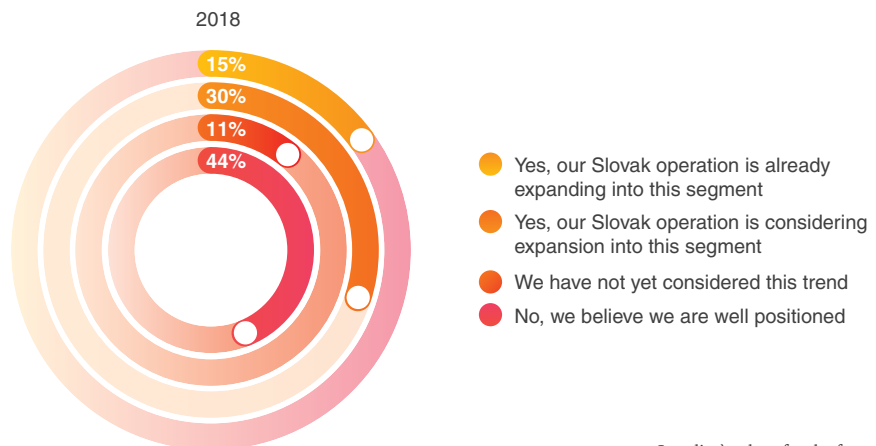
The automotive industry is currently one of the industries being subject to technological change. The most noticeable change is the trend of increased efficiency of automobile performance, particularly by reducing consumption, which is the result of economic requirements of customers and strict EU environmental requirements, of the member states, and in some countries, municipal policy. Therefore, it is not surprising that more than 40% of the surveyed companies consider new materials, particularly those of low weight, to be an important innovation area, and one quarter of companies want to apply alternative driving technologies, in particular electrical and hybrid technologies, based on innovations. One quarter of the companies named digitalization as a significant area of innovation with an impact on their business. Digitalization is related to product innovation, particularly various assistance systems, as well as to changes in production processes, particularly as a result of automation and application of Industry 4.0 principles.

**Question No 10**  
 What global automotive trends does your company follow via product innovation?



Electromobility is having a considerable influence on products and on production capacities of automobile producers and suppliers. As a large number of automobile producers have announced that they plan to launch several new models with an electric or hybrid drive, suppliers have had to respond. Almost 15% of the companies included in the survey have started expansion in this field, and another 30% are considering modifying their production portfolio to reflect the development of electromobility. Approximately 50% of the companies are not involved with electromobility, or believe their position in this field is already satisfactory. This is connected particularly with production portfolios that are not directly linked to the drive, or have not been affected by changes to production portfolios of their customers. Given the fact that in the existing production portfolio of automobile producers to which suppliers in Slovakia deliver, vehicles with a partial or full use of the electric drive do not yet play a substantial role, the increasing interest of suppliers in production technologies in this field is a positive message for the future.

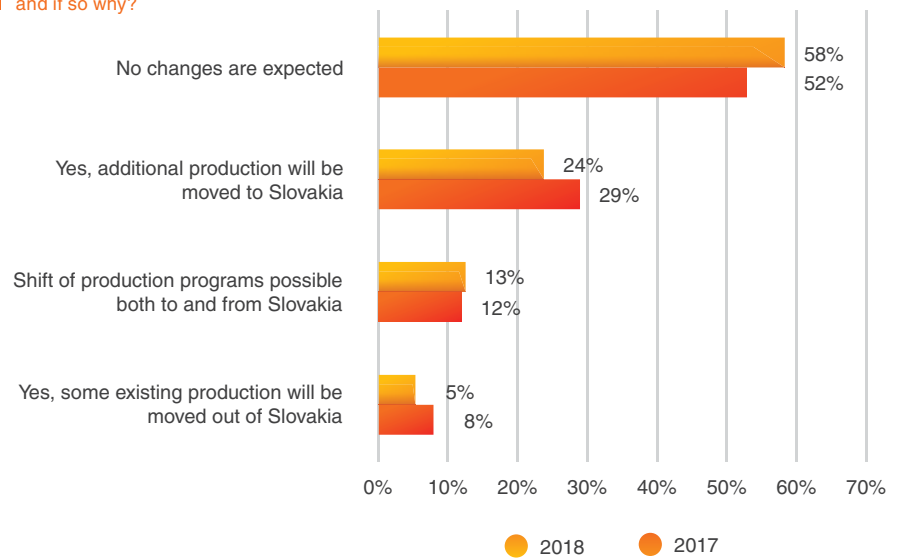
**Question No 11**  
 Do you expect electromobility (hybrids, electrics) will change your strategic focus in the near future?



Automobile production development in Central and Eastern Europe is impacted by decisions of multinational producers of components regarding moving production. In the Austrian supply network, companies do not expect change, but a number of companies in Slovakia and Hungary are considering relocating capacity. Almost one quarter of the companies included in the Slovak survey believe that their parent companies will move some of the production processes to Slovakia. About 13% of the respondents expect a move of capacity in both directions, and 5% of the respondents expect a move of capacity out of Slovakia.

**Question No 12**

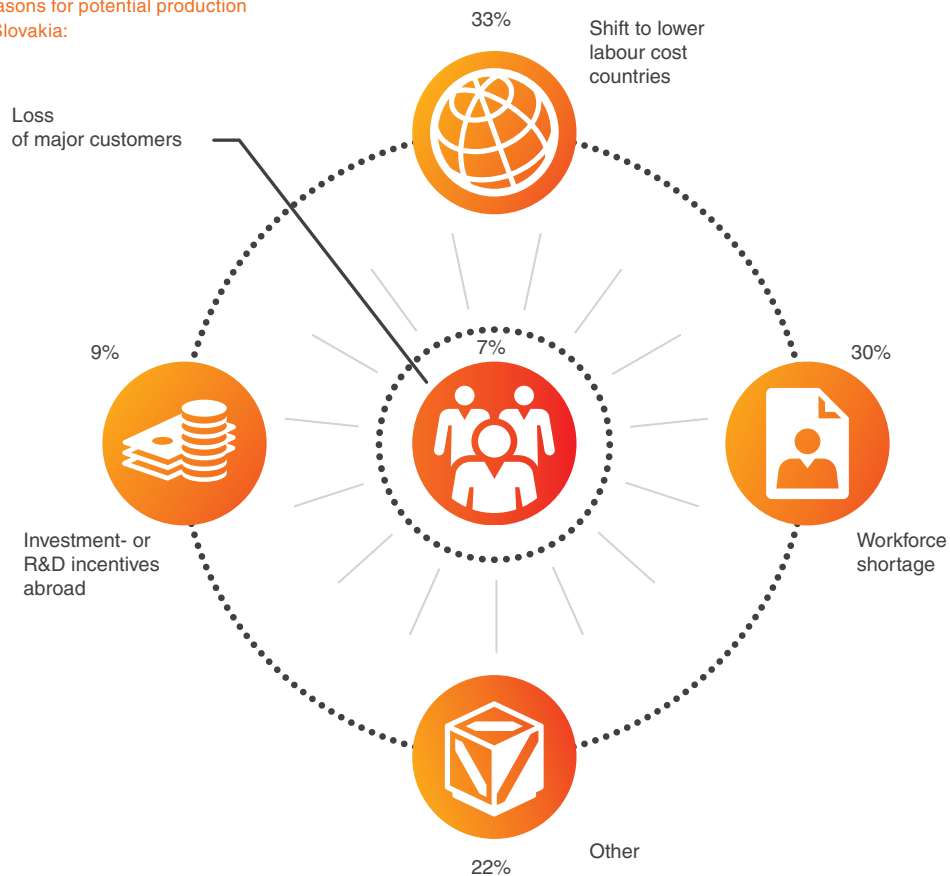
Is the shareholder/group planning to transfer production in the next 12 months and if so why?



The development of automobile production and the strengthening of the Slovak economy has changed the position of the country, which is no longer a lower cost production destination. This is why the level of production costs in other countries is a reason for a potential move of production from Slovakia. This was stated as a relevant reason by almost one third of the companies. Only slightly fewer companies mentioned staff shortages as a reason for a move. A few companies mentioned state incentives for production or research and development as a reason for moving production. In this respect, some companies referred to a loss of major customers.

**Question No 13**

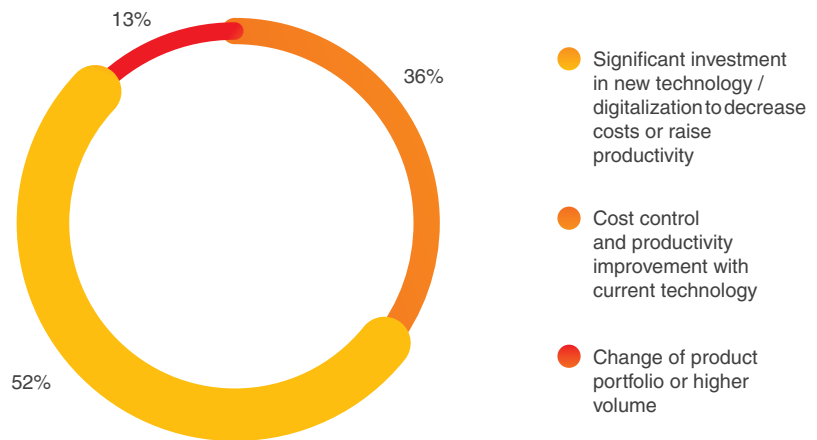
Please state reasons for potential production transfer out of Slovakia:



The good news is that technological development is a main factor behind the decision of the majority of suppliers to continue operations in Slovakia. More than 50% of the surveyed companies mentioned important investments in new technologies and/or digitalization to reduce costs or improve productivity. To a large extent, this will be the key aspect for the competitiveness of suppliers in the Slovak automobile industry. Almost 36% of the respondents intend to control costs and to improve productivity using current technologies. 13% of the companies are considering changing the portfolio of their products. This is usually connected with technological investments, as it most often relates to the relocation of the production of technologically challenging products.

**Question No 14**

If you intend to continue operating in Slovakia, how would you describe your major focus for the next 3-5 years?

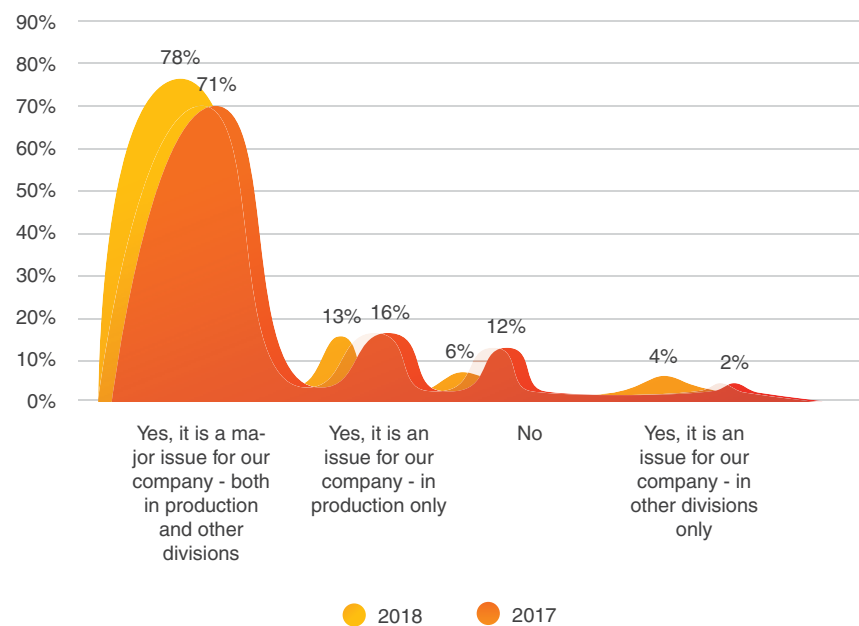


## Human resources challenges

The availability and quality of skilled labour is currently the main determining factor for the growth potential of automobile suppliers. The surveyed companies included only a few companies that are not having to deal with this issue. For almost 78% of the surveyed companies, staff shortages is an issue for production as well as other activities. A further 13% of respondents referred to the lack of staff as a problem only for production, but some companies are also facing a lack of staff in other areas.

**Question No 15**

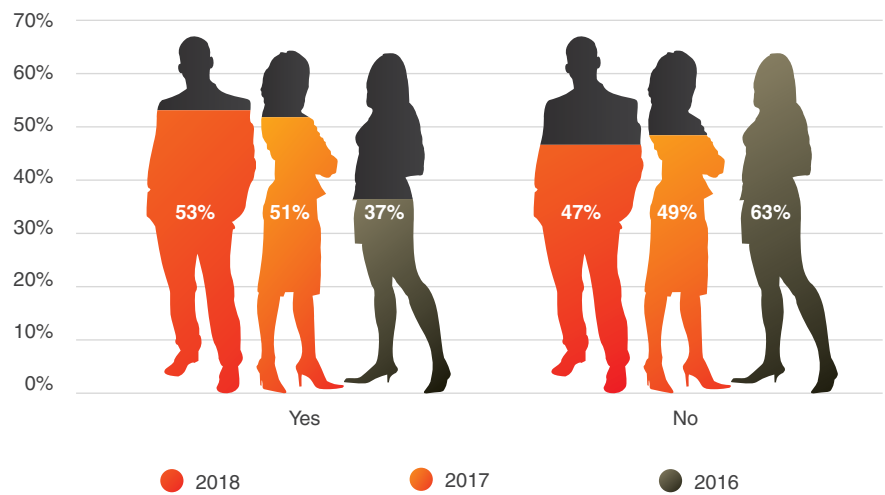
Do you consider the availability and quality of labour as an issue for your company?



The importance of the availability of skilled labour is also reflected in the ability to win new projects. 53% of the surveyed suppliers – about the same number as in the previous year - stated that the lack of skilled labour is limiting their possibilities to win new contracts. A comparison of Slovakia with neighbouring countries gives some surprising results. According to the outputs of a similar PwC survey, Slovak suppliers face similar problems to Austrian suppliers that are even more limited as regards their development by staff shortages. For Hungarian suppliers it is a less important factor in winning new projects.

**Question No 16**

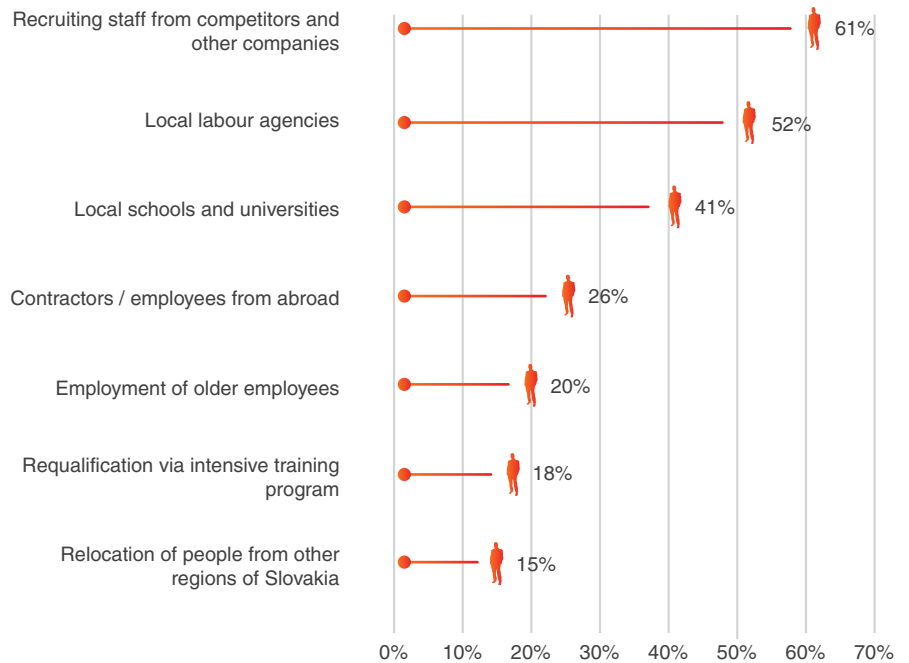
Does a lack of labour restrict your ability to accept new projects ?



The companies are seeking to tackle the problem of staff shortages by all possible means. In Slovakia, unlike Austria, there is no well-established system of vocational education, which could be used as a source of labour, and as a result, the competition among employers has been increasing. Poaching employees from competitors and other companies is the most common source used by almost three fifths of the surveyed companies. More than 50% recruit their employees via labour agencies. For less than 50% of the companies, schools and universities are a significant source of staff. Compared to other countries, Slovak suppliers are lagging behind as regards obtaining new employees by employing older people, or training staff via educational programs, and relocating staff from others regions of Slovakia.

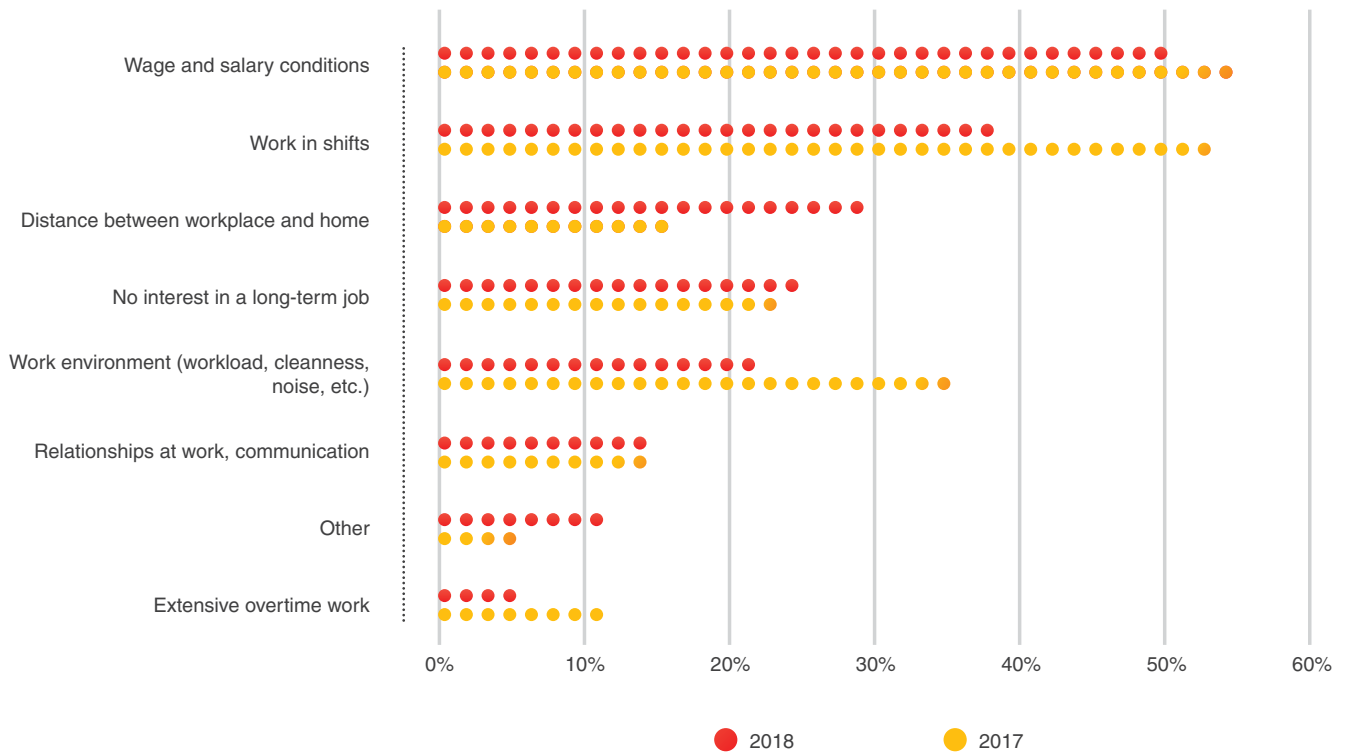
**Question No 17**

What are the key sources of new labour (own or external)? (Please mark all that apply)



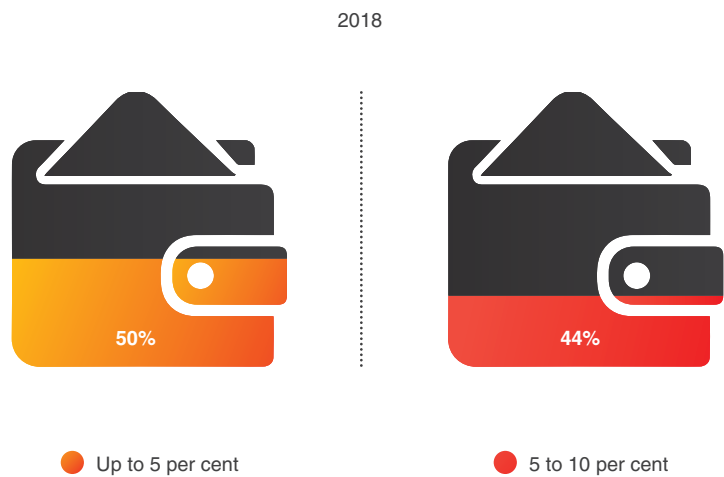
**Question No 18**

What are the main reasons for qualified labour fluctuations at your company?  
(Please mark all that apply)



**Question No 19**

Do you plan to increase wages in 2018?

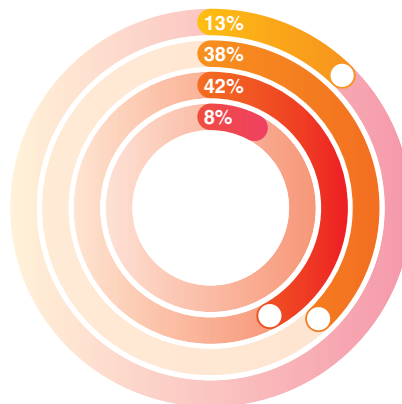




As a result of the increase in wages and developments on the labour market, the companies expect that average labour costs will substantially increase in the next three years. Almost 38% of the companies expect labour costs to increase from 5% to 10%, 42% expect them to increase by 10% to 20%, and 8% of the companies by more than 20%. These scenarios generate very high pressure to revise the original business plans of suppliers, adjust important strategic decisions and introduce intensive robotization and automation. Productivity is a key performance indicator to assess whether suppliers will stay competitive.

**Question No 20**

What is your estimate of the increase in cumulative personnel costs over the next 3 years?

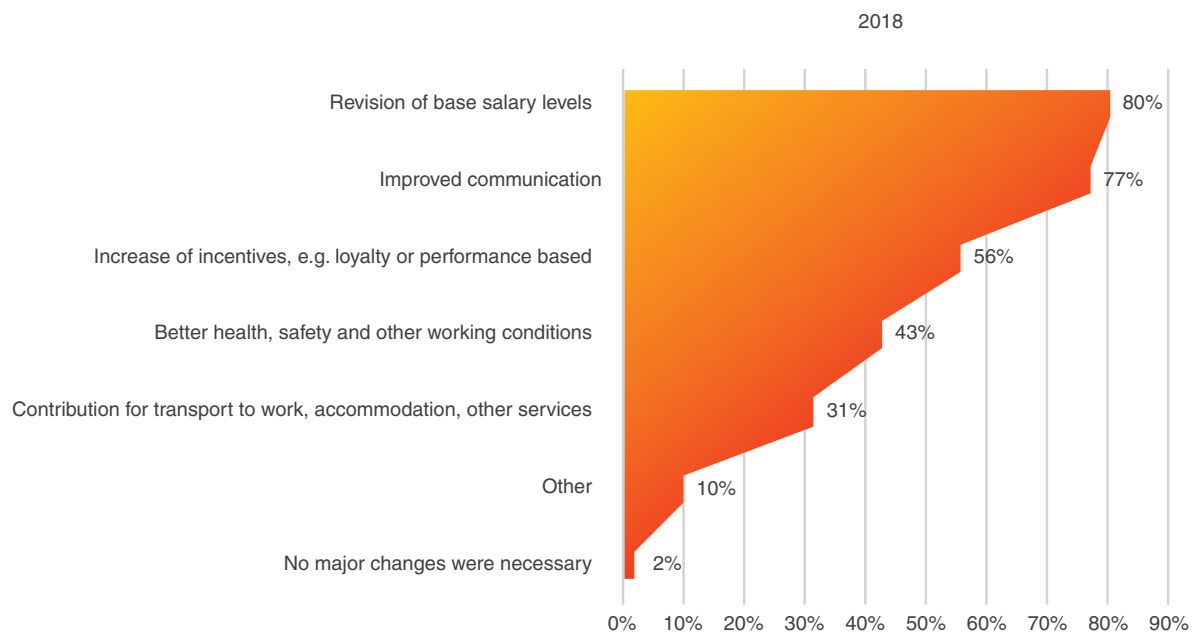


Nárast priemerných osobných nákladov

- Up to 5 per cent
- 5 to 10 per cent
- 10 to 20 per cent
- Above 20 per cent

**Question No 21**

What measures have you taken to increase your attractiveness as an employer? (Please mark all that apply)

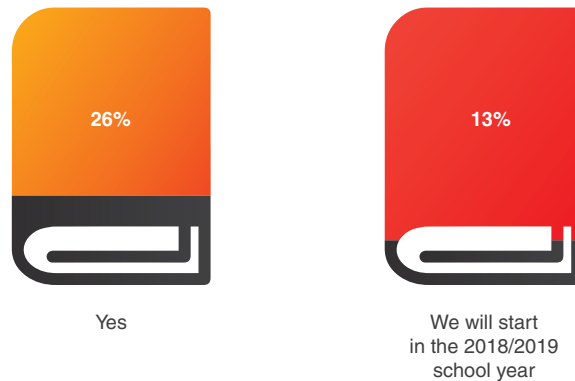


## Cooperation with schools

Increasing the number of skilled staff for the labour market is the main rationale of the dual education system implemented in 2015. The objective of the dual education system is to extend the practical experience of the students of the vocational schools by working at the companies. This is only gradually being established. Several objections have so far prevented suppliers in joining the dual education system. A quarter of the companies have already joined the system, and 13% of the companies plan to join the system in the next school year of 2018/2019. Even though the experience from Western Europe clearly confirms the economic benefits of the dual education system, the benefits experienced by suppliers in Slovakia will only be seen gradually.

### Question No 22

Do you participate in the dual system of education?

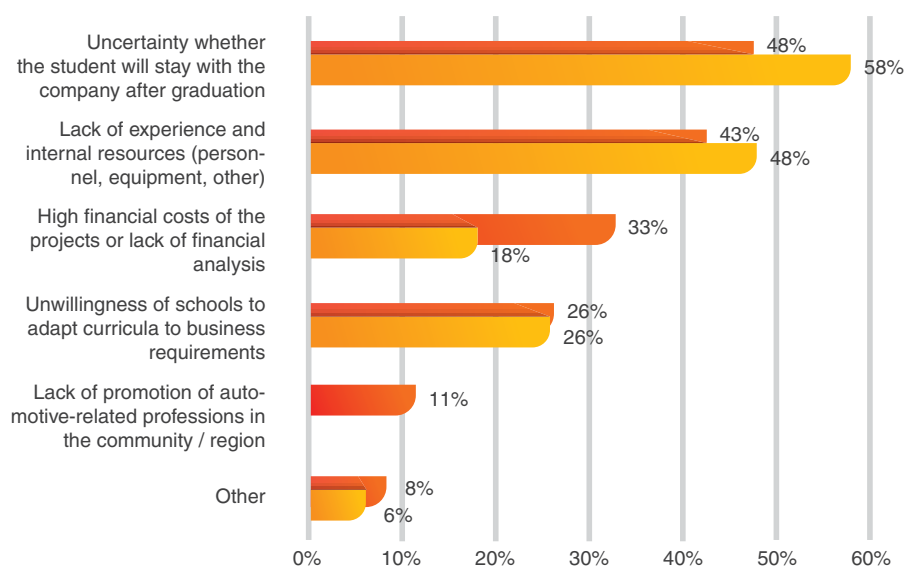


The major barriers and factors complicating the participation of the companies in the dual education system are related to its short existence and a relatively slow start-up due to a lack of experience in industry. In addition, to a significant extent, this is also a result of a lack of communication of positive examples. This is also why as the most common factor, the companies mention uncertainty as to whether graduates will remain and work at the company after graduation. This is a concern of 50% of the surveyed companies. A lack of experience and a lack of internal resources for education, i.e. a lack of competent staff and equipment for training workplaces, accounts for a slightly lower share. According to one third of the companies, the perception of high financial costs of the dual education system or missing analyses of their costs are barriers for them to participate in this system. More than one quarter of the companies claim that a problem is that the schools are not interested in adjusting their syllabuses to meet the practical requirements of the companies. Therefore, a major role in the further development of the dual education system will be played by the preparedness of vocational schools to join the system, as well as the support and promotion of dual education by local municipalities.

### Question No 23

What are the biggest challenges for the dual system of education? (Please mark all that apply)

● 2018  
● 2017

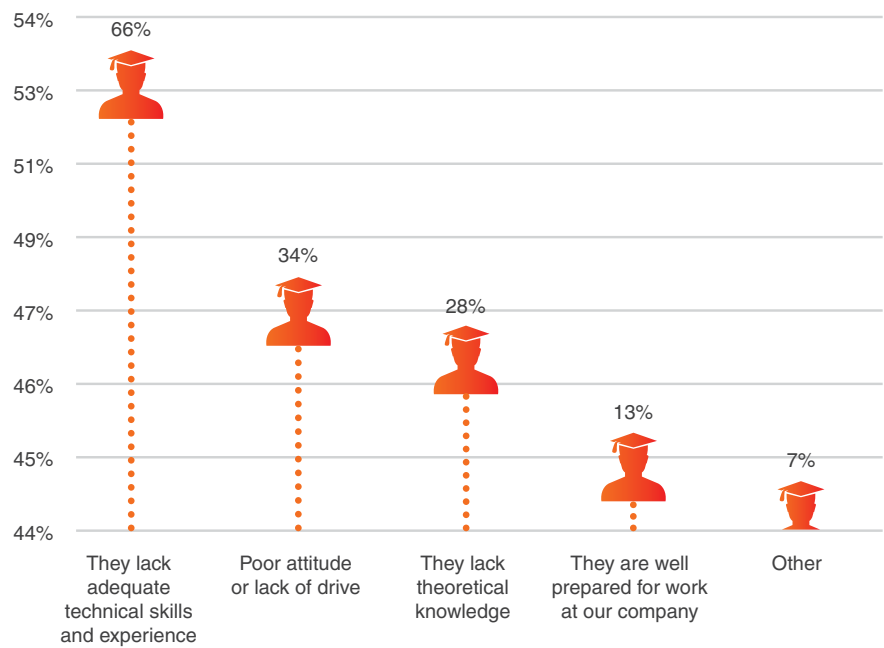


About one fifth of the companies included in the survey do not cooperate with schools. However, the majority of companies are attempting to develop or are having various forms of cooperation with schools. Almost three fifths of the companies organize student work experience and internships. Several companies have already engaged with students to work on their bachelor's and master's theses in cooperation with the companies. The work on theses can later be followed up by a direct assignment of research tasks to schools by the companies.

The automotive suppliers included in the survey evaluated the preparedness of university graduates to work at their companies. About 13% of the companies stated that they were satisfied. According to two thirds of companies, university graduates do not have adequate skills. More than one third of the companies also criticized graduates' insufficient engagement in and motivation for work. About the same number of respondents stated that students do not have the required theoretical knowledge. According to the respondents, the level of language skills is also often low among university graduates.

**Question No 24**

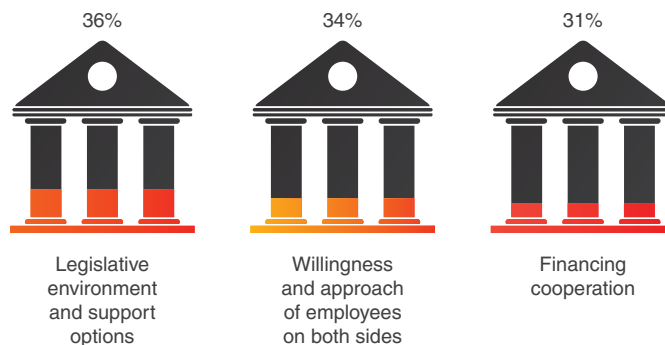
What do you think about the readiness of university graduates for work at your company? Please mark all that apply.



According to one third of the respondents, the level of the preparedness of universities staff and companies is the key problem as regards cooperation. One third of the surveyed companies stated there is a need for a legislative framework of support, and for a solution to the issue of financing.

**Question No 25**

In your opinion, what are the main problems regarding cooperation with universities?

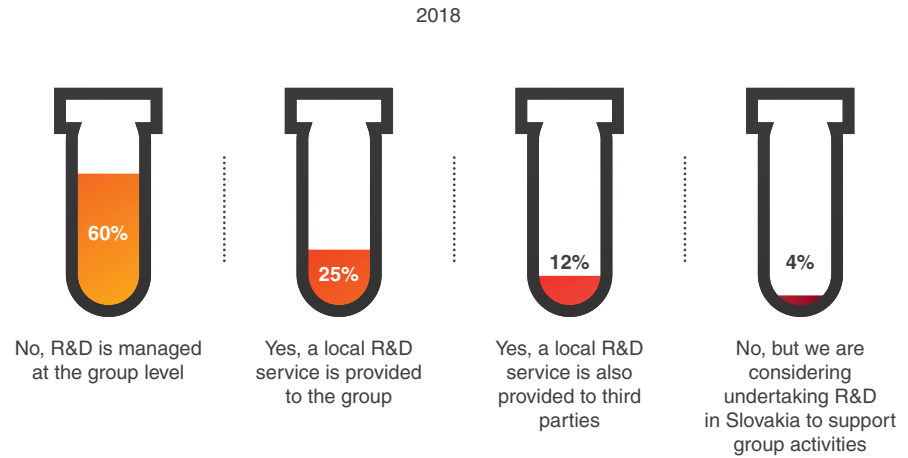


## Importance of innovations

Due to increasing competition and shortening of innovation cycles in the automobile industry, the possibilities to obtain innovation inputs from the research and innovation are becoming even more important factors for successful operation in the automotive field. According to more than 50% of the companies, research and development is managed at the group level. A small percentage of the companies are considering starting research and development activities in Slovakia, or participation in these activities of the group. One quarter of the respondents is involved in research and development activities in Slovakia, though exclusively within the parent group. Some companies' research and development departments also provide services to third parties. Regarding the participation share of R&D, Slovak suppliers are lagging behind their colleagues in Hungary or Austria, where participation in R&D is at the level of 50% to 70%. It is perceived that others countries do more to incentivise R&D activities.

### Question No 26

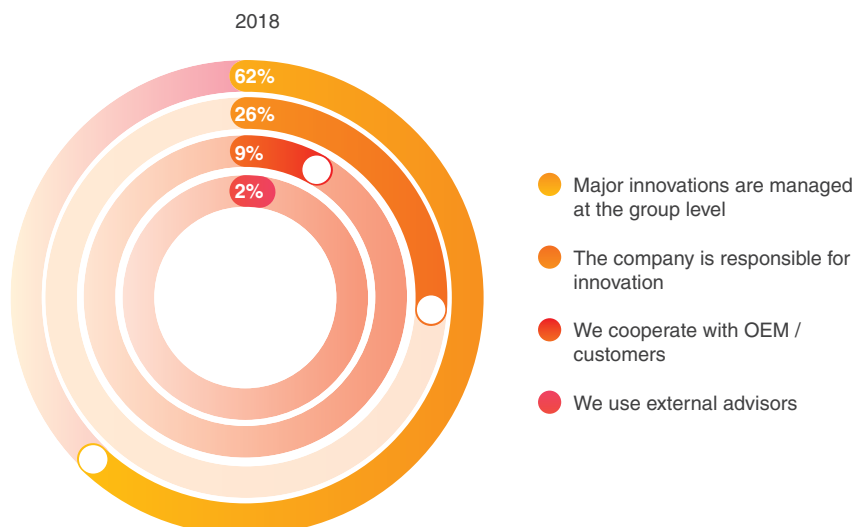
Do you undertake R&D in Slovakia?



The development of innovations in the supply structure of the Slovak automobile industry is often influenced by the structure and management of these activities within the multinational groups. More than 50% of the companies in the survey state that their key innovation activities are managed at the group level. One quarter of the companies have their own specialized team to actively manage innovations. Almost 10% of the companies cooperate with customers, particularly with automobile producers. Only a few respondents use the help of external companies. The trend of managing innovation activities by the parent company continues in Slovakia. With respect to be innovation results, organisations might consider decentralizing innovation activities at the plants, where the possibilities, potential and customer are precisely known.

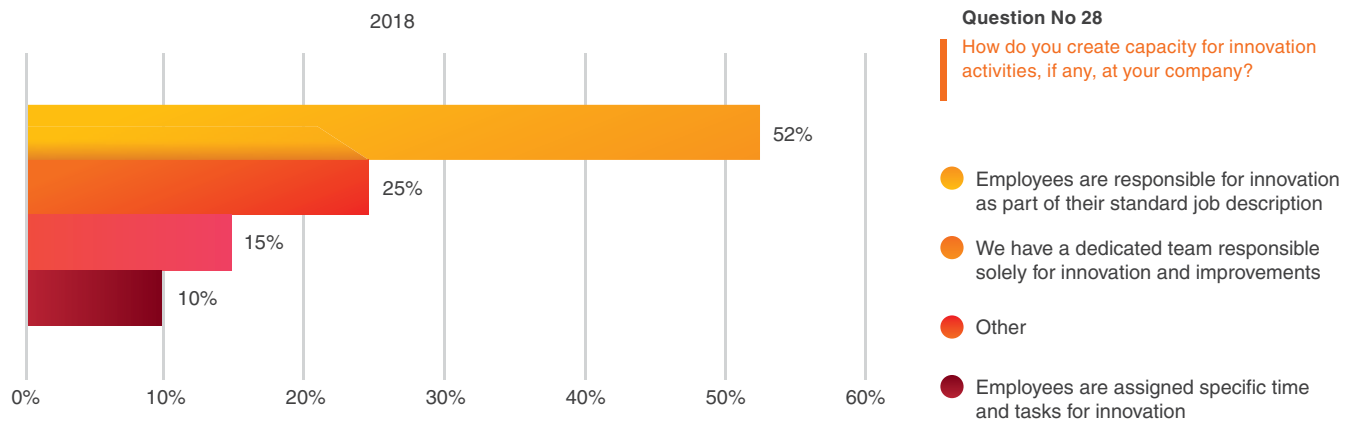
### Question No 27

Who leads innovation activities at your Company?



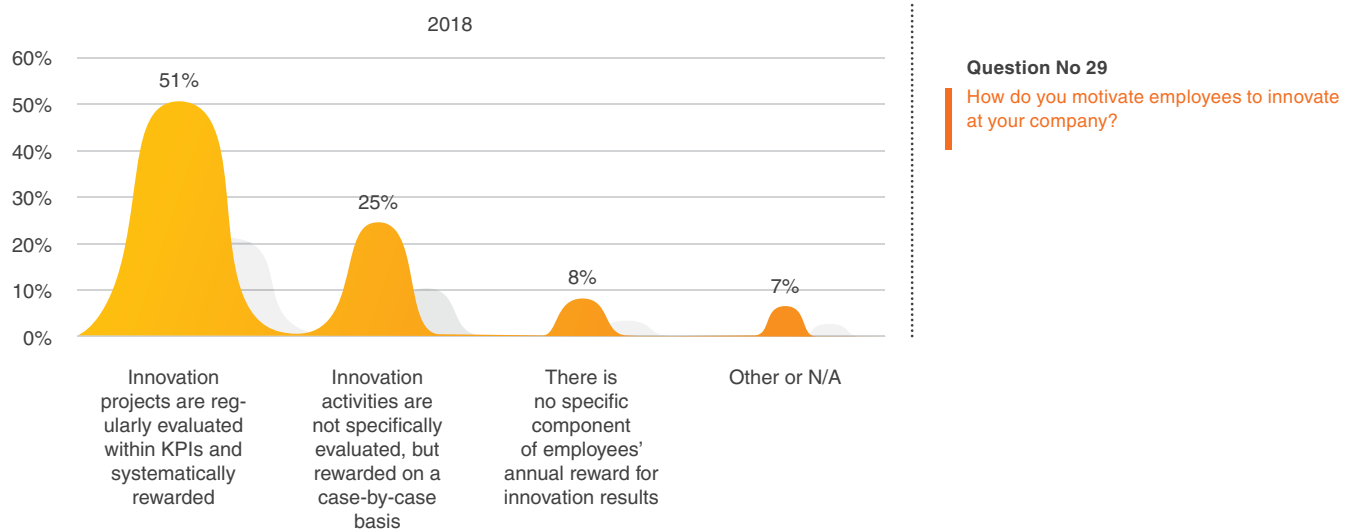
For the companies in the supply industry, innovations have become an important element of competitiveness. More than 50% of the surveyed companies state that their employees are responsible for innovations as part of their standard job descriptions, i.e. without any specific objectives. One quarter of the companies have a special team exclusively responsible for innovations and improvements. 10% of the companies set specific times when their employees work on innovation tasks in addition to their usual tasks.

Practice shows that employees should engage in changes during their regular worktime. Setting the tone that all employees are responsible for innovations is powerful as it eliminates the stereotype that changes must come from above.



The development of innovation in the companies largely depends on how the given company motivates its employees to improve operations and performance of the company and to come up with innovation ideas. More than 50% of the companies have included innovation projects in the KPIs which they regularly evaluate, and they have established a system of rewarding good results. About 25% of the companies do not have a system for regular evaluation of innovations, and prefer to individually reward particular activities. Almost 10% of the companies do not have a program to reward their employees for innovations.

A positive fact is that the reward and incentive systems of 51% of the companies include programs to motivate their employees. Experience shows that these programs should be matched with the real motivational needs of the employees. General rewards in the form of taxed gifts and money often lose their power shortly after introduction. In contrast, non-financial incentives for innovations – acknowledgement, being aware of uniqueness, impacts on the client, responsibility towards nature and communities, etc. are gaining ground.



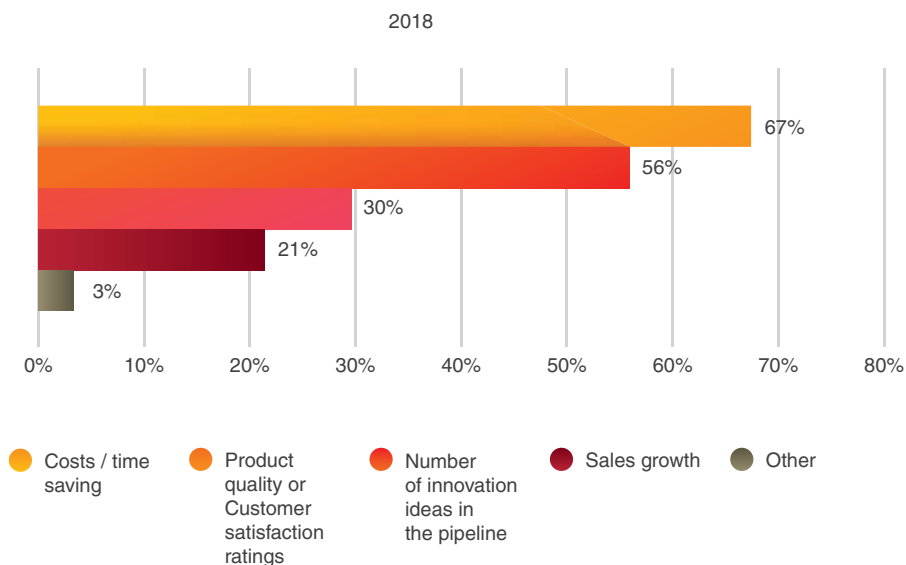


Although innovations are not easy to be evaluated, the companies have established KPIs to monitor the performance of their innovation activities. Almost two thirds of the companies measure the success of their innovations by expected and/or achieved time or costs savings brought by the innovations. More than 50% of the companies also monitor the quality of products and evaluate the satisfaction of their customers. About one third of the surveyed companies mainly measure and evaluate the number of innovation activities in the process. More than 20% of the companies measure the success of the innovations in terms of the growth of sales attributable to the innovations.

In Slovakia, innovations are dominated by effectiveness and savings and innovations are made to improve quality. Particularly in the automotive industry, this is a positive message as the pressure on productions costs is constant.

**Question No 30**

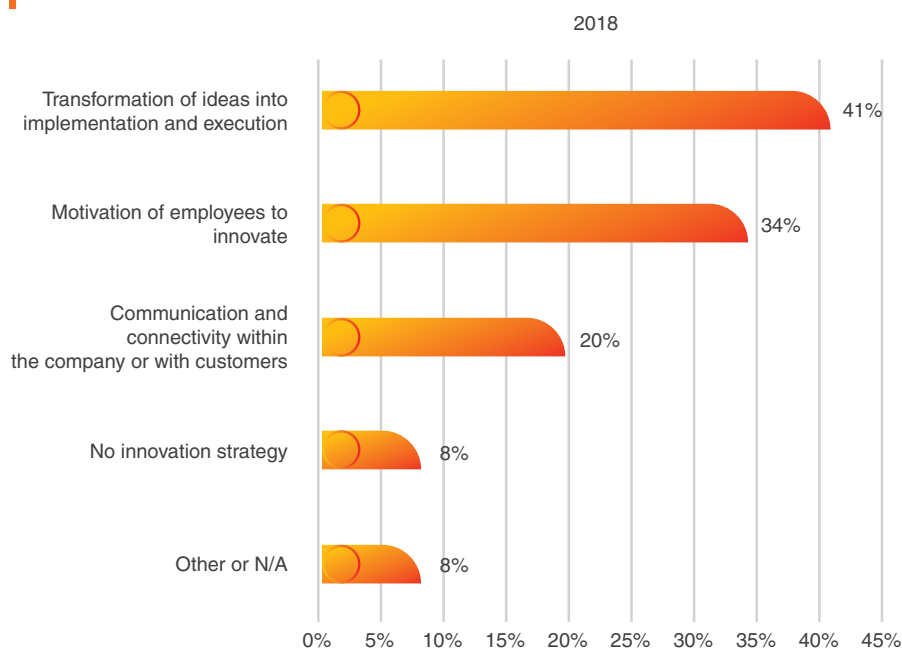
What are the most important metrics / KPIs for measuring innovation at your organization?



The introduction of innovations and the development of innovations is an important factor of company competitiveness given the speed of progress in today's automobile industry. More than 40% of the surveyed companies believe that the ability to transform ideas into specific forms and the implementation of the benefits of new ideas to company operations are a key topic and issue regarding innovation development. For one third of the surveyed companies, the main challenge is how to motivate employees to come up with new ideas. Almost 20% of the companies stated that communication with customers and the ability to connect people within the organisation is an important area which is worth addressing. Approximately 8% of the companies stated that they do not have any strategic challenges in the field of innovations.

**Question No 31**

What is your greatest strategic challenge to successful innovation?









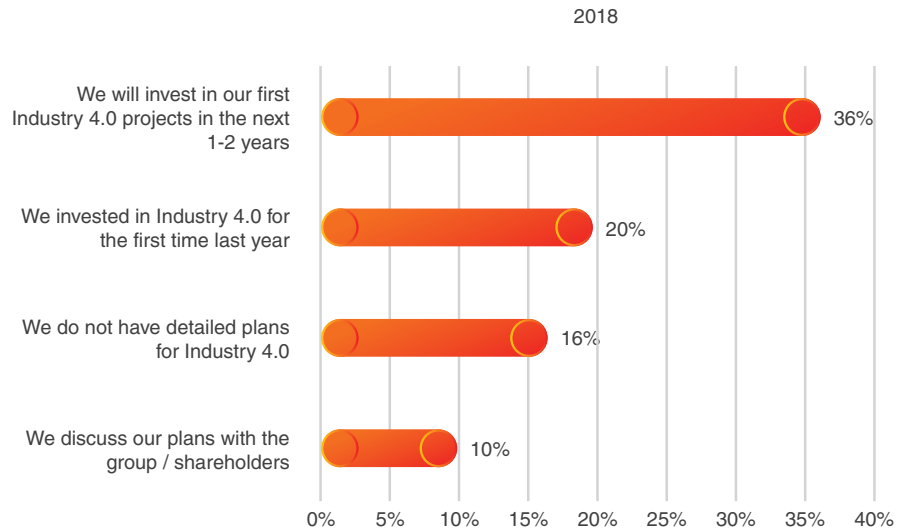


## Investments in to Industry 4.0

Application of the principles of Industry 4.0, i.e. using connected digital technologies to make companies' operations more effective is currently one of the most noticeable industrial megatrends. It is gradually being introduced, but there are fewer and fewer companies that have not at least attempted to verify what impact it has on their operation. More than one fifth of the companies have started investments to apply the principles of Industry 4.0. More than one third of the surveyed companies plan to invest in this field in the next two years. About 10% of the respondents intend to discuss plans related to Industry 4.0 with their shareholders. This is usually connected with two main topics – participation in projects planned by the parent group in connection with Industry 4.0, and the amount of costs and investments required to implement the projects.

### Question No 32

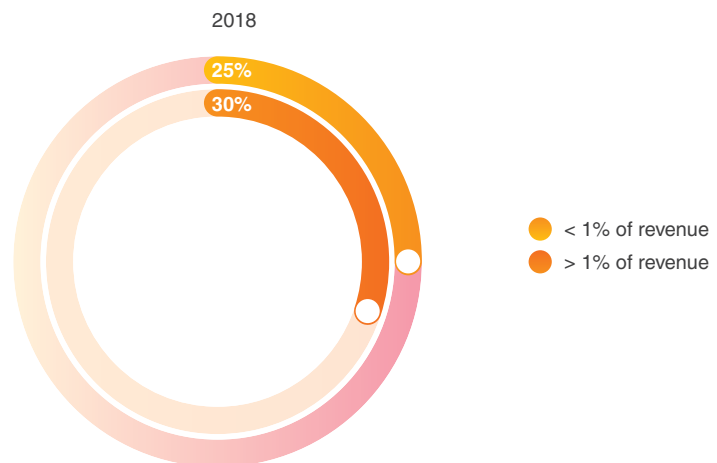
How are Industry 4.0 trends impacting your future plans?



When considering the level of application of industry 4.0 principles, price is still a factor sensitively perceived by the companies. Almost 50% of the companies still do not have a precise idea of their amount. About 25% of the surveyed companies estimate that in the next two or three years, the costs related to Industry 4.0 may be less than 1% of total company sales. The percentage of companies that estimate that the costs of projects and technologies of Industry 4.0 will exceed 1% of company's revenues is slightly higher.

### Question No 33

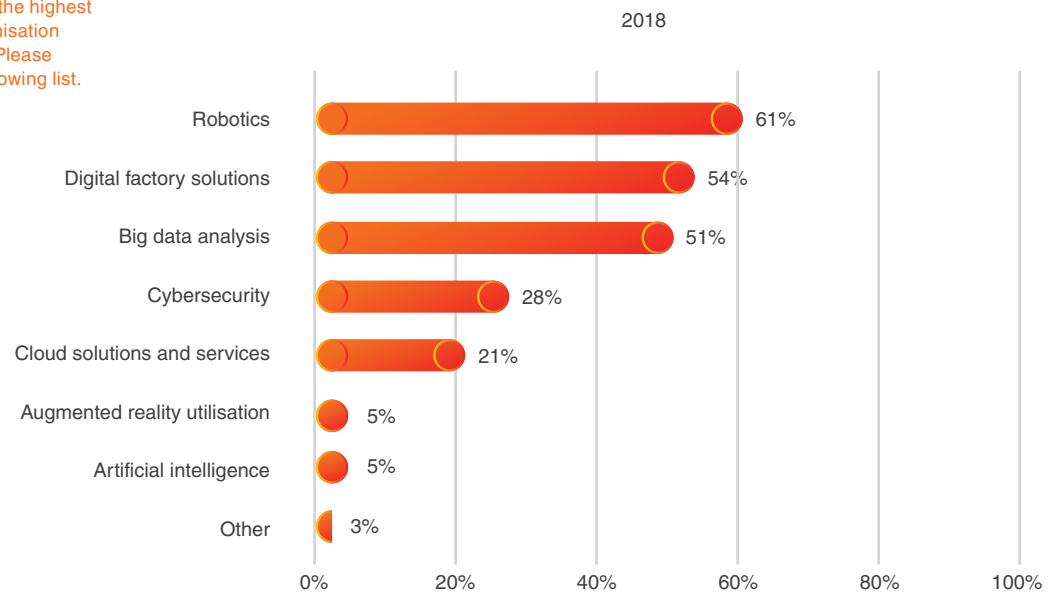
What is your total estimated spending in Industry 4.0 for the next 2-3 years?



Automobile suppliers are also assessing the strategic importance of particular technologies for future their business. Almost two thirds of the surveyed companies perceive development of robotics as an important area. This is connected with staff shortages, and with the necessity to replace physically demanding and repetitive activities with automated technologies. For more than 50% of the respondents, digitalization and the use of in-depth data analysis will also become more important. These are the areas that are probably the most related to the phenomenon of Industry 4.0. The Industry 4.0 concept envisages optimization of operations based on a continuous detailed analysis of economic and digitally recorded and processed technical and physical operational data. This is also related to the increasing importance of cybersecurity, cloud solutions and the development of technologies such as augmented reality and artificial intelligence. All this should facilitate the gradual move from the shortening of response times to changing customer requirements, production structure and other factors, to the use of advanced predictive models.

**Question No 34**

Which of these IT areas will be of the highest strategic importance to your organisation over the next three to five years? Please select 5 technologies from the following list.

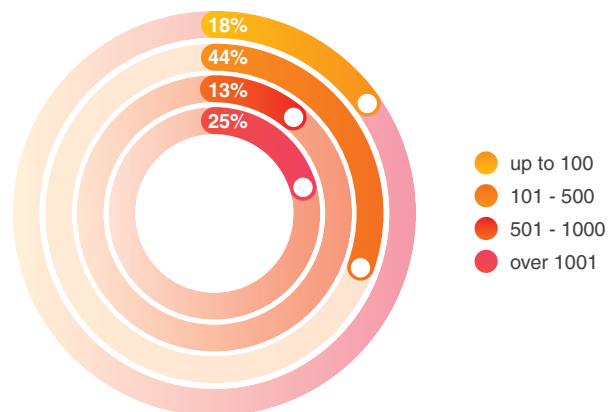


## Structure of the survey respondents

A view on economies with strong domestic industries shows that medium-sized innovative companies and small companies with innovative ideas, rather than volume big producers, are the driving force behind progress. 62% of the surveyed companies are organisations with up to 500 employees. Hence, we believe that the survey will cover the perception of progressive enterprises. The survey presents a balanced reflection of the views of large multinationals which are of equal significance for the Slovak supplier landscape.

**Question No 35**

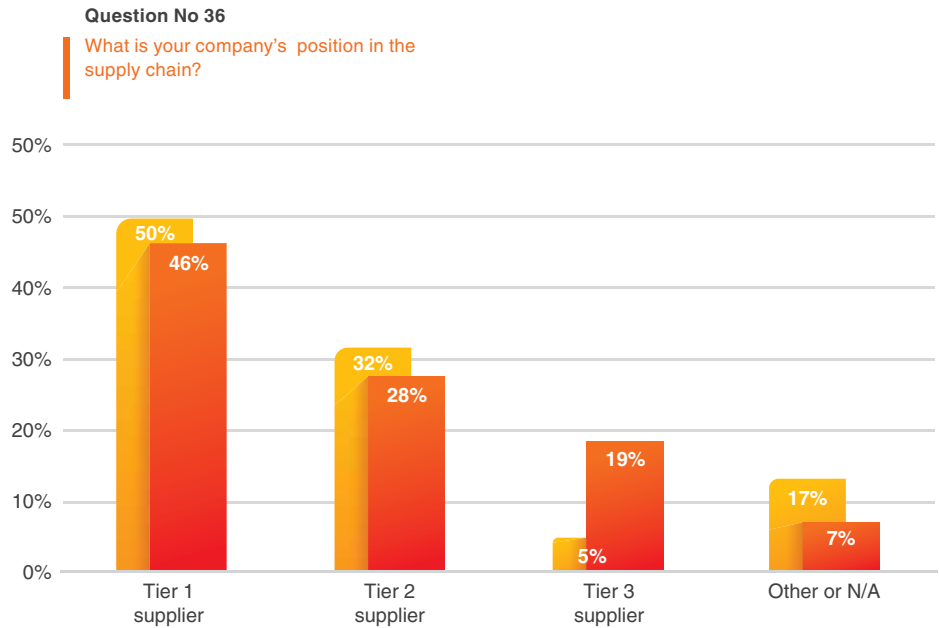
How many people (own staff and external) currently work at your plants?





50% of the surveyed companies are Tier 1 suppliers. Together with Tier 2 suppliers, the share of these two groups accounts for more than four fifths of survey respondents. Due to the differences in respondents' sizes, the survey also includes opinions from companies whose relevance is reflected as regards production as well as innovations. In addition, the survey also includes companies that provide expertise services and supply production technologies.

● 2018 ● 2017



Similar to other Central European countries, Slovakia has become a base for a number of suppliers to operate within complex supply chains of large multinational manufacturers. This is also confirmed by the fact that the respondents produce for three automobile producers on average. There is a strong group of respondents, more than two thirds, whose customers include the Slovak manufacturing site of Volkswagen. As this supply chain started to significantly develop almost twenty years ago, it has a significant impact on the supply chain. One third of the respondents also produce for the other two multinational automobile producers which have plants in Slovakia – Kia and PSA. Currently, the supply chain for the new plant of Jaguar Land

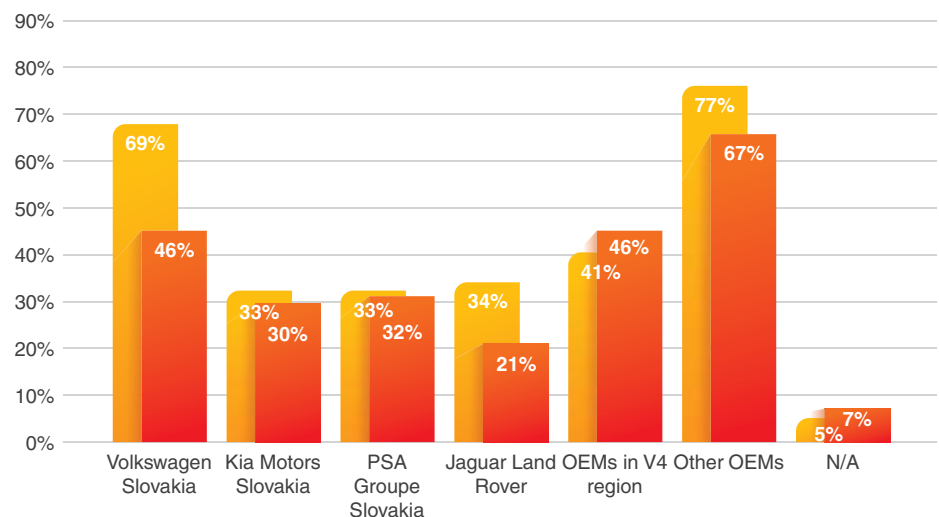
Rover is being built, and Jaguar Land Rover plans to start production in Nitra by the end of this year. One third of respondents already supply to JLR. The growth of automobile production in Central Europe is connected with the fact that within 500 km of Slovakia assembly capacity for several million cars per year has been established, which also influences the diversification of customers of Slovak suppliers. More than 40% of the companies included in the survey have customers in the V4 region. Due to diversification and increased leverage to market risks, the fact that the customers of more than three quarters of the companies from the survey also include other automobile producers is a positive sign. In Slovakia, the share of the final production of

automobiles in the industry is much higher than, for example, in Hungary or Austria, where no automobile producer produces complete automobiles (Austria is home to contract production of the Magna Group, and also a major engine plant of BMW). There is a concentration of supplier plants for automobile producers in Slovakia, and the suppliers take advantage of the central logistic position of Slovakia to deliver to a variety of brands.

**Question No 37**

What are the final OEMs supplied or sub-supplied with your products? (Please mark all that apply)

● 2018 ● 2017



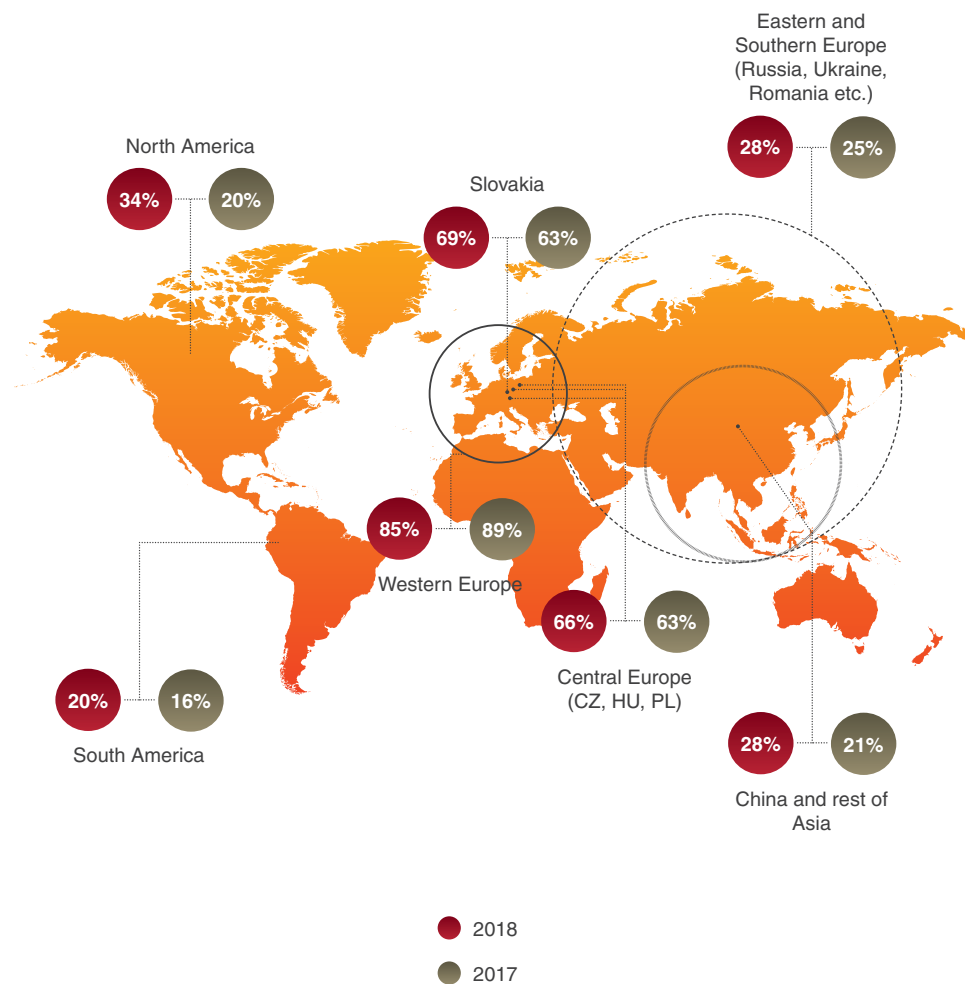


The supply chain in the Slovak automobile industry has a very strong base in the global production structures. As in other neighbouring countries, e.g. in Hungary, in the past, this was largely developed to lower the cost of supplies for automobile producers in Western Europe, who are the main customers for Slovak suppliers and Hungarian and Austrian automobile companies. In addition to supplying Slovak automobile plants and customers in Central Europe, Slovak suppliers have also managed

to establish themselves in the supply chains of automobile producers in Asia and in North and South America. Due to overseas distribution distances, it is more feasible to deliver technologically more demanding products, and this is positive news. The structure of Austrian suppliers is similar. The customer structure of the companies included in the PwC survey of the Hungarian automobile industry is significantly less global.

**Question No 38**

What are the key markets for your output?  
(Please, mark all that apply)



## About the survey

The survey was carried out by the consultancy firm PwC in cooperation with the Automotive Industry Association of the Slovak Republic and the Slovak Automotive Institute. The addressed suppliers responded via an on-line questionnaire, or printed versions of the questionnaire during the period 1 March to 10 April 2018. The survey includes 61 suppliers of the automotive industry in Slovakia. Our report includes the key findings regarding the automotive suppliers market, assessments of the results from last year and their main factors, and the future outlook.

## About PwC

At PwC, our purpose is to build trust in society and solve important problems. We are a network of firms in 158 countries with more than 236,000 people committed to delivering quality in assurance, advisory and tax services. Find out more and tell us what matters to you by visiting us at: [www.pwc.com/sk](http://www.pwc.com/sk).

## About the Automotive Industry Association of the Slovak Republic

The Automotive Industry Association of the Slovak Republic is a voluntary association of legal entities acting in and contributing to automotive and associated industries. The main mission of the Association is to support the sustainability and competitiveness of the automotive industry in Slovakia. Its strategic objectives for 2018 include improving quality and shaping the business environment, supporting and creating an R&D base for the automotive industry; improving cooperation between final producers and sub-contractors, and developing environmental legislation. For more information visit: [www.zapsr.sk](http://www.zapsr.sk).

## About the Slovak Automotive Institute

The Slovak Automotive Institute is an independent industrial think-tank providing information services and analyses in fields relating to the automotive industry and industrial and transport sectors.

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