

Automotive Innovation Slovakia Survey 2014

Survey focused on research, development and innovation in the Slovak automotive industry



Automotive Industry Association of the SR Survey partner

0

Speech

Jaroslav Holeček, President of the Automotive Industry Association of the Slovak Republic (AIA)



Vladimír Švač, Head of Innovation Advisory Services, KPMG in Slovakia

In the last two years, we have been using the words "science" and "research" very frequently as basic conditions for innovation in industry in general, but mainly in relation to the automotive industry, which drives the Slovak economy. We are convinced that without further R&D development, mainly in its applied form, it is not possible to increase the competitiveness of the automotive industry in Slovakia. **Currently it is not sufficient to only produce products; sub-suppliers in the automotive industry have to develop and improve them, as well as ensure their constant evolution.**

As far as the automotive industry is concerned, Slovakia has surely achieved a high level of innovation mainly in relation to improving processes and technologies. However, what we lack is a basis for development of the products themselves in the sub-supplier industry.

We in AIA say that if we do not turn R&D into a proper business area – that means unless we find an organisation which will professionally deal with an order for R&D, from its acceptance through to its implementation - it is not possible for R&D to advance. For AIA it is important to establish a centre of strategic research, development and innovation in the industry as a basic organisational unit which will perform such business; it might even be a virtual centre or a part of an existing R&D institution. I must say that in the last few years many sub-suppliers in the automotive industry have understood that they cannot be competitive without innovating in products and technologies. And so we have seen the first pioneers in Slovakia, international sub-suppliers who have brought germs of scientific and research centres. We are very glad about that, but it is necessary to also motivate our Slovak local sub-suppliers. Good examples are Matador Holding or Služba Nitra who have long benefited from the fact that they realised they could not be competitive without applied R&D, technical development and innovation. In cooperation with the Automotive Industry Association of the Slovak Republic (AIA), KPMG in Slovakia has prepared the first unique survey in the automotive industry focused on research, development and innovation and further development of this area in Slovakia. It is precisely the automotive industry with its supplier sector which plays the main role in the Slovak economy. The automotive industry is characterized as one of the most innovative industries in the world and this is the reason why this area is also important for the future development of Slovakia.

Several interesting findings have resulted from this unique survey. They may represent a certain start line and a good indicator of where help must be provided and what should be the main focus of attention in corporate innovation. The outcomes of the survey indicate that the automotive industry is developing in a positive direction and the interest of Slovak engineers and managers in innovation is growing constantly. **A positive example is that as many as 26 supplier companies stated that they already had their own R&D centre in Slovakia and another 16 supplier companies are planning to establish such centres within 3 years.** The ability to innovate and increase one's innovation potential is a crucial task for the current management of Slovak companies. Another global trend which is becoming common in Slovakia is the establishment of R&D centres,



and we can see that Slovakia might potentially also see the linking of well-established companies with the start-up community.

In the last few years, KPMG in Slovakia has been addressing innovation mainly in two directions: development of innovation management services for well established companies in Slovakia and development of services and consultancy for Slovak start-ups. In addition to these activities, KPMG has started to also pay attention to children in elementary schools in the form of a creative business project called iKid, which has already been running successfully for two years.

I do believe that the innovation-related initiatives of KPMG will be beneficial not only for the business sector but also for building an innovation ecosystem in Slovakia.

Contents

Speech
Introduction
Main findings
Structure of respondents in the survey
Factors of corporate innovation development
Barriers to innovation efforts
Motivation factors
Plans for the next year
Capacities for R&D
Profit growth
Start-ups and the automotive industry
Areas of development and support

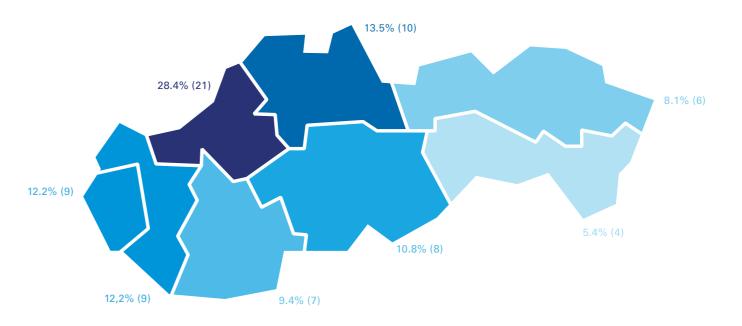
26

Introduction

Survey objectives and methodology

In cooperation with the Automotive Industry Association in the Slovak Republic (AIA), KPMG has prepared the *first survey related to research, development and innovation in the automotive industry in Slovakia.* The aim of the survey was to acquire knowledge about the current conditions and future development of the automotive industry in Slovakia

Structure of respondents by region in Slovakia



from the point of view of evolution of research, development and innovation. Based on the outcomes, we will be able to propose tools to support the above-mentioned areas in companies acting in the automotive industry in Slovakia. 74 respondents joined the survey in August – September 2014.

Main findings

300

The supplier companies in Slovakia are planning to hire over **300** R&D staff in the next 12 months

70%

respondents identified **"return on investment"** as the main measurable indicator of the value of innovation

26

supplier companies stated that they possessed their own R&D centres and another **16** are planning to establish such centres within 3 years

700

R&D centres of suppliers for car plants currently employ over 700 R&D staff

Major

The major responsibility for the development of research, development and innovation in companies in Slovakia is borne by **directors of companies and heads of R&D centres**

3

According to respondents, the three greatest obstacles to innovation in supplier companies include: **lack of engineering talent, rocketing costs of innovation and lack of time for innovation**

One

of the top 3 motivation factors is to "let the staff work as they find appropriate"

3

key factors which may convince a parent company to invest in R&D in Slovakia include: guarantee of long-term duration of the R&D project and use of investments, state support and **enthusiasm for R&D among the company's management in Slovakia**

23%

of the **supplier companies** demonstrated their interest in cooperation with Slovak start-ups

62%

As many as 62% respondents said that they considered **"continuous process improvement"** as the main factor for innovation development



As many as **77.8%** supplier companies in Slovakia are planning to invest a certain percentage of their turnover in R&D in the next 1-2 years

65%

respondents said they needed help in searching for engineering talent





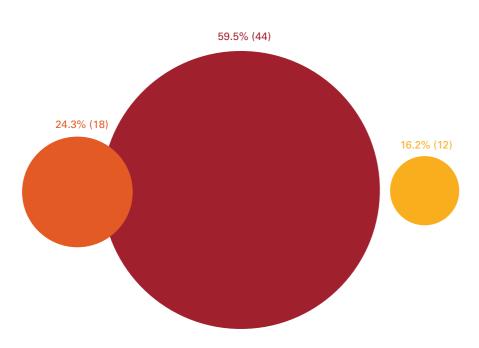
Kenneth Ryan Managing Partner KPMG in Slovakia

Survey focused on research, development and innovation in the Slovak automotive industry

Survey prepared and processed by: Vladimír Švač Editor: Ľubomíra Mardiaková

"At KPMG we are delighted to support innovation in the Slovak automotive industry"

What is the number of employees in your company?

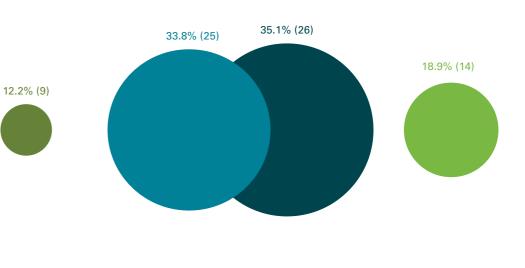


Large enterprise (250+ employees)

- Medium enterprise (50-249 employees)
- Small enterprise (1-49 employees)

Please classify your company according to the type of supplier.

One of the prevailing trends in the supplier sector of the automotive industry is the growing need of producers to have an R&D area available directly at the suppliers' location. Suppliers have responded by establishing R&D departments and centres.





Type 1-Tier suppliers are also called system suppliers and their typical characteristic is ownership of their own R&D facility. 35% of respondents represented this group in our survey.

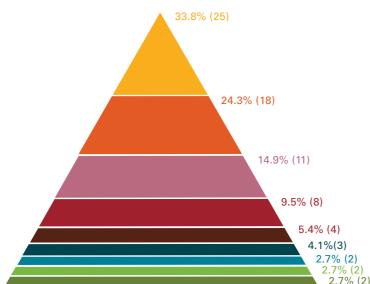
Who is the main person responsible in your company for research, development and innovations?

It is very important to know who bears the main responsibility for innovation and its development in companies. To create a corporate environment genuinely full of incentives and innovation-friendly, we need strong leaders and managers who can excite and motivate employees. The survey results show that this role is performed mainly by senior company representatives,

i.e. CEOs/DGs (33.8%). Almost one guarter (24.3%) of respondents identified *leaders of R&D centres* as the vectors for innovation. The answer "other", marked by 14.9% of the respondents, also represented a significant share. This primarily meant that the companies' foreign headquarters bore the main responsibility for R&D.

How important are the following factors for development of innovation in your company? (Please select top 3 factors)

It is not easy to develop innovation in companies; it requires diligent and systematic work from the persons involved. A continuous improvement of processes mainly contributes to the development of innovation, which was confirmed by over 62% of respondents. This was followed by two equally

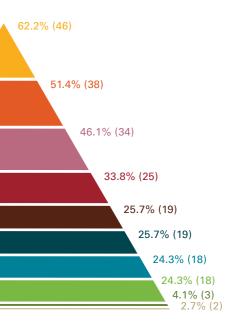


- CEO/Managing Director
- R&D Center Manager
- Other
- All employees take part in innovation process
- Other top management member

- Head of Department
- Company Development Manager
- External company
- Special innovative group consisting of managers of various departments
- Innovation Manager

•	Continuous process improvement
	Engineering talent availability
	Availability of funding
	Increase of turnover by using innovations
	Availability of the most advanced technologies

important factors: availability of engineering talent (51.4%) and availability of financial resources (46%). According to the overall outcomes of this survey, the "engineering talent" factor is one of the most important ones in relation to innovation of the Slovak automotive industry.



- Development of disruptive innovation with global scope
- Having own R&D Centre
- Development of innovation networks and partnerships
- Innovation training
- Other

What are the main innovation indicators used in your company to measure the value of innovations? (Please select top 3 indicators)

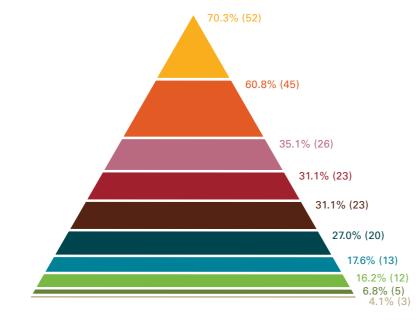
Measurement of innovation is frequently discussed in different forums, since the innovation process is often a certain form of experimentation. Sometimes it is hard to measure an outcome at the beginning which we only expect; nonetheless, several combinations are created in companies of how to measure innovation in the most

efficient manner possible. Automotive supplier companies in Slovakia consider the following as the three main indicators for measuring the value of innovation: *return on investment* – 70.3%; *revenue growth* – 60.8% and *number of new customers* – 35.1%.

Barriers to innovation efforts

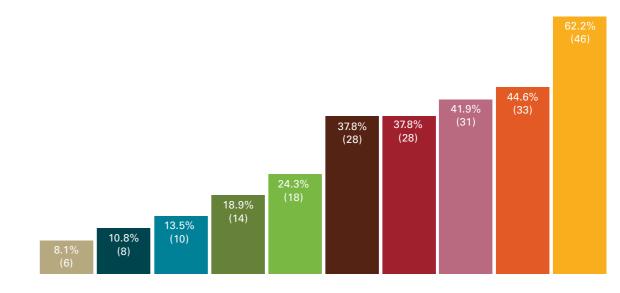
What are the barriers to innovation in your company? (Please select top 3 obstacles)

Innovation is a long-term process. It requires a brave and dedicated team who are able to face great challenges, a motivating and innovative environment, and especially time. Supplier companies have identified the following as the three main obstacles to innovation in Slovakia: *lack of engineering*



- Return on Investment
- Increase of turnover
- Number of new customers
- Market share of the company
- Amount of investment into innovation

- Number of new launches
- Number of improvement proposals
- Increase of brand visibility
- Number of employees retrained in innovation
- Other



Shortage of engineering talent
Expenses required for innovations too high
Shortage of time
Shortage of financial resources
Shortage of government support

talent (62.2%), *rocketing costs of innovation* (45%) and *lack of time for innovation* (41.9%). Respondents also mentioned a lack of finances, insufficient state support and a lack of their own R&D centre in Slovakia.

Lack of own R&D Centre in Slovakia
 Low employee motivation
 Missing innovation strategy

Shortage of or no innovation training
 Other

Motivation factors

What are the key motivation factors for innovation in your company? (Please select top 3 criteria)

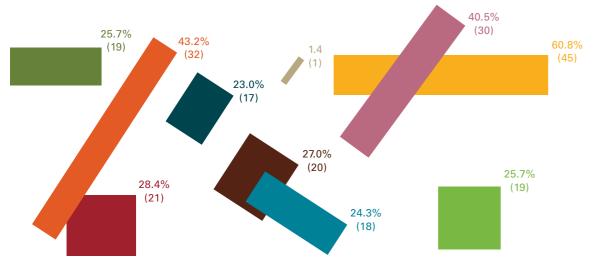
The most significant motivation factor for innovation in companies is financial remuneration for the innovative ideas which are implemented - this was stated by almost two thirds (60.8%) of respondents in our survey. The second major motivation factor for Slovak employees is "internal or external appreciation" for the work done. Thanking and highlighting the innovative work of employees becomes a significant factor which contributes to further innovation.

A third, no less important, motivation factor is to "let the staff work as they find appropriate". A space or a centre which has been created for the generation of ideas, and their implementation in practice seems to be especially important for Slovak employees. Two fifths (40.5%) of respondents would appreciate if they were given a chance to express themselves and show their abilities.

Plans for the next year

How many employees are you planning to employ for research, development and innovation activities in your company in the next 12 months?

As for research, development and innovation in the automotive industry in Slovakia, it is positive that supplier companies are planning to hire new staff.





- Money remuneration for implemented innovations
- Internal/external appreciation of employees` efforts
- Giving employees the opportunity to implement their ideas
- Employee's career advancement
- Allocation of time for innovation activities within standard working hours
- Exceptional innovation project
- Dedicated space for innovation activities (R&D Centre)
- Personal approach and encouragement even in the case of failures
- Good work relationships
- Other



Respondents said that they would hire over 300 R&D staff in the next 12 months.

Is your company planning to invest financial resources and time in innovation training for your employees in the next 12 months?

Another positive signal of development of R&D in the automotive industry is the fact that as many as 63.5%

of respondents said they were planning to invest time and money in innovation training for staff in the next 12 months.

How much is your company planning to invest in research, development and innovation in Slovakia in the next 1-2 years? (Please indicate as a percentage of the company's turnover in Slovakia)

As many as 77.8% of supplier companies in Slovakia are planning to invest several per cent of their company turnover in R&D in the next 1-2 years. Almost 30% of respondents



said that their investments would amount to over 4% of the company turnover in Slovakia. Note: 63 respondents answered this question

More than 4%
 2 - 3%
 0 - 1%
 I do not know
 No plan for investment

Does your company have its own R&D Centre (innovation or technology centre) in Slovakia?

The automotive industry in Slovakia and the related area of research, development and innovation has taken a positive direction. The survey found that 26 of the companies have their own R&D centres in Slovakia, which is a positive signal for the future changeable structure of the automotive industry. More than 700 R&D staff work in these centres.

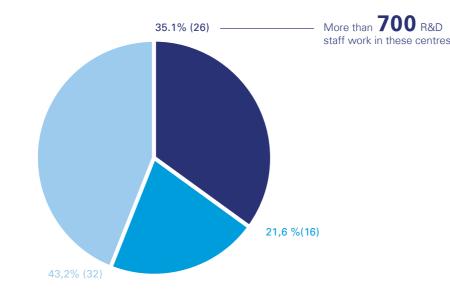
These examples may inspire other companies but more importantly, they may inspire development of engineering talent at universities. Another 16 companies are planning to establish their R&D centres in Slovakia within the next 3 years.

What do you think would persuade your parent company to invest in research, development and innovation in your company in Slovakia? (Please select top 3 criteria)

The development of R&D and establishment of R&D centres depends on a number of factors. We therefore asked the respondents what could convince their parent companies to invest in R&D in a branch in Slovakia. The main 3 criteria

Government support

company

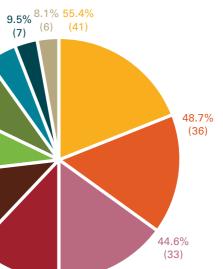


(7) 12.2% 24.3% (18)28.4% (21)32.4% (24)36.5% (27) Guarantee of long-term project and use of investment Enthusiasm of company's management for R&D • Availability of highly qualified workforce • Good references of well-established company for the parent

No, but we are planning to establish an R&D Centre within the next 3 years

No, and we have no intention of establishing an R&D Centre

included a guarantee of the long-term duration of the project and use of investments (55.4%), state support (48.7%) and enthusiasm of the management of the Slovak branch for R&D (44.6%).

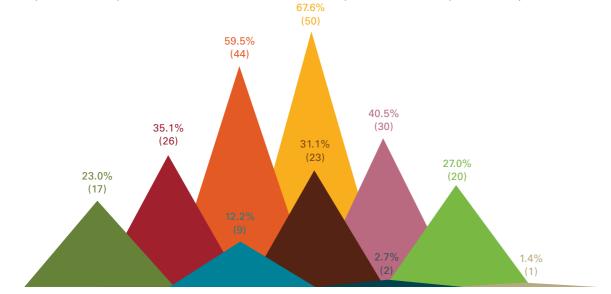


- Expense of competition for R&D in Slovakia • Formation of partnerships with universities Other
- Presence of other foreign R&D Centres in Slovakia Assistance from external company in persuading the parent company to invest in R&D

Profit growth

Which of the following elements would significantly contribute to your company's overall growth of profit in Slovakia for the next 12 months? (Please select top 3 elements)

The following three elements have a major benefit for companies in the automotive industry from the point of view of profit growth: new customers (67.6%), the company's manufacturing sphere (59.5%) and research and development of new products and services (40.5%). These outcomes demonstrate that innovation is an important factor of companies' profit growth. Acquiring new customers and R&D of new products and services are very closely connected. The need to innovate is increasingly important also for companies already established in Slovakia.

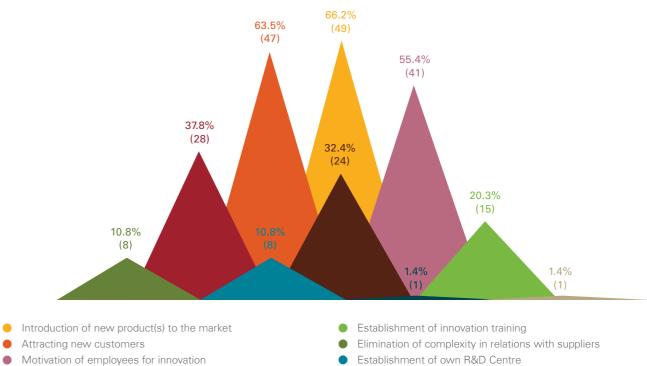


- New customers
- Company's manufacturing sphere
- Research and development of new products and services
- Product portfolio diversification
- Better strategy of supplier management

- More expressive marketing and brand development
- Increasing efficiency of logistics and distribution
- Development of new business models in your company in Slovakia
- Modular and platform strategies
- Other

What are the top three innovation challenges for your company in Slovakia within the next 12 months?

Respondents identified the introduction of new products in the market and acquisition of new customers as the greatest innovation challenges for the period of the next 12 months. The third largest innovation challenge for the companies is interesting - it is motivation of staff for innovation, which



- Establishment of the company's innovation strategy
- Development of collaboration with universities and SAV

is increasingly attracting more attention. Currently we may observe an increasing need to identify the right combination of motivation factors which will foster more intensive innovation activity in companies in Slovakia.

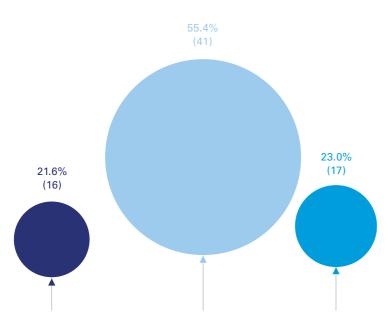
• Development of collaboration with start-ups Other

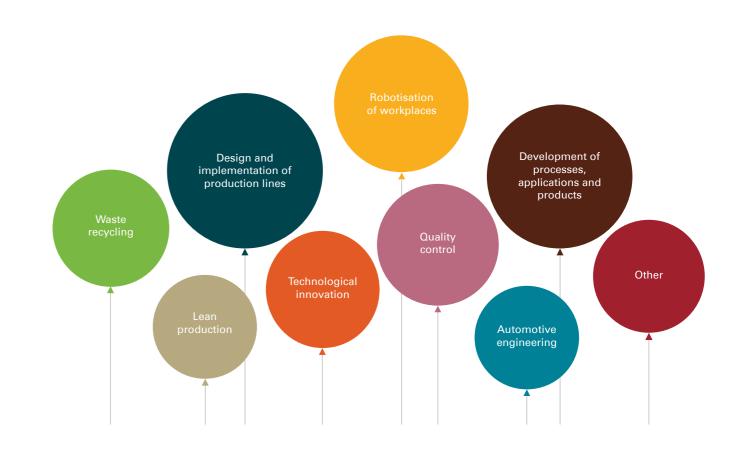
Is there an interest in your company in collaboration with Slovak start-ups?

Start-ups are currently one of the biggest global phenomena. This trend of forming new innovative and technologicallyfocused companies is also evident in Slovakia. Almost a quarter (23%) of respondents said that *they wished to cooperate with Slovak start-ups*, while conversely, more than a fifth (21.6%) were not interested in this type of partnership. The remaining number, representing more than half (55.4%) of supplier companies said they did not know. We believe that the reason for this is the fact that a lot of supplier companies are not aware of Slovak start-ups, the areas they are active in and the innovation which they bring. It will be a great challenge to identify ways to connect these two worlds – newly launched start-ups and established suppliers.

In what area would you like to cooperate?

The companies which said that they wished to cooperate with start-ups suggested several areas of potential cooperation:





- I do not know
- Yes
- No

If you were interested in establishment of R&D Centre in your company or further development in this area, what kind of help would you be looking for? (Please select top 3 areas)

The supplier companies in Slovakia are interested in R&D activities; however, a number of them need help in their efforts and in the implementation of innovative initiatives. Areas in which the companies need help most are *searching for engineering talent* (64.9% respondents), *acquiring external finances for R&D* (56.8%) and convincing the parent company to invest in R&D in a company in Slovakia (40.5%).

One of the biggest problems is high-quality human resources or the lack thereof, since R&D capacities require talented engineers and developers. This finding should be a challenge mainly for universities where the educational process needs to be improved and linkages between course content and industrial practice need to be strengthened.



- Finding engineering talent
- Obtaining external financial resources
- Persuading the parent company to invest in R&D in our company in Slovakia
- Searching for an external R&D partner

- Motivation of employees for innovation
- Execution of innovation training
- Processing of innovation strategy
- Finding Slovak start-ups
- Designing R&D Centre
- Other



Contact



Kenneth Ryan Managing Partner T: +421 2 59984 111 E: kennethryan@kpmg.sk



Vladimír Švač Head of Innovation Advisory Services T: +421 2 59984 492 E: vsvac@kpmg.sk

Automotive Innovation Slovakia Survey 2014 is the first survey of its kind in Slovakia

Survey prepared and processed by: Vladimír Švač Editor: Ľubomíra Mardiaková

KPMG in Slovakia Dvořákovo nábrežie 10 811 02 Bratislava

Žriedlová 12 - 14 040 01 Košice

T: +421 2 5998 4111 **E:** skmarketing@kpmg.sk

kpmg.sk

© 2014 KPMG Slovensko spol. s r. o., a Slovak limited liability company and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity. All rights reserved. Printed in Slovakia.