The events of the past two years have had a tremendous impact on global supply networks and the automotive industry. This report showcases results from a PwC survey of automotive suppliers on the current market realities, key drivers, and future expectations for growth and development in the industry.
PwC, in partnership with the Indonesian Automotive Parts and Components Industries Association (GIAMM), undertook this survey to offer our wide audience insight into not only the way in which the COVID-19 pandemic has affected the automotive supplier industry in Indonesia, but also to shed light on where the industry is moving toward in future. The data revealed in this survey is telling of an industry that is not only highly resilient in the face of global shocks, but also one that has the ability to respond to shifting market demands.

While PwC’s recent global CEO survey found that executives are optimistic about the outlook for their economies in 2022, 46% of CEOs within the automotive industries highlighted that they are grappling with component shortages, particularly for semiconductors. As the Electric Vehicle (EV) market continues to grow in coming years, we will see an expansion of demand for components fit for purpose. This shift to electrified mobility will require parts suppliers to supply products that meet demand. In the Indonesian context, however, adoption of EVs has been slower than in other markets, but industry players are gearing up for a future where these vehicles play a more prominent role.

The adoption of advanced technologies, including automation, robots, big data and related smart factory solutions, will help automotive players unlock competitive advantages. The shifting role of the worker will be something to consider, and will require an evolution in skillsets. With technologies offering more efficient solutions to many tasks, workers may find themselves deployed to other areas. Competition for technical experts in the automotive supply sector will continue and even increase, with many players seeing the need to adapt the skillsets of workers to emerging technologies. The focus products and services of each company will determine how extensively operations need to be adapted to new technologies and what type of competitive advantage - if any - it may provide. The effects of the Omnibus Law, which sought extensive change to the regulatory environment of business in Indonesia, can also be seen in the responses. Surveyants see its effects in labour management, business dealings, tax, and trade decisions.

As Original Equipment Manufacturers (OEMs) continue to live up to the external threats and changes in consumer demand, suppliers need to ensure portfolio optimisation for best possible outcomes. Adapting operations in a way which boosts value proposition while strategically managing investments and expenses, will add to competitive advantages. Having a product portfolio which is market ready, innovative and flexible enough to respond to customer needs, will be increasingly important. The golden thread in the survey is, indeed, that respondents see their performances heavily influenced by their ability to adapt to customer demands and deploying innovative solutions, all the while keeping in mind the realities of the dynamic market they operate in. Few, if any, respondents state that they do not see the promise and opportunity in the Indonesian market and many, in fact, aim to expand their operations in the country. As the economy rebounds and grows in coming years, the increased spending power of the consumer classes is something that the automotive industry can look forward to.
The resilience and determination shown by Indonesia's automotive industry, considering the economic turbulence of the COVID-19 pandemic, is something that all industry stakeholders have been working hard on. As an association, Gabungan Industri Alat-alat Mobil dan Motor (GIAMM) has served the industry for almost 50 years, and in this time, we have been part of the journey of our many stakeholders. We have seen how the automotive component industry has developed and stood up to challenges, transforming itself into the globally competitive sector it is today.

GIAMM and PwC saw how important it was to take a pulse of the industry during these times. With the purpose of understanding how our members are handling these challenges, we were happy to support PwC in pursuing this report. The findings of this report show that suppliers share the belief of car manufacturers that Indonesia is a market worth investing in and one which has strong growth prospects.

The manner in which industry players are willing to adapt to evolving market demands and welcome new technologies magnifies the competitive nature of this industry for our country. Global supply chain disruptions and ongoing external economic threats are on the minds of many industry players, and we see them responding hereto by seeking localised alternatives. The strong core of suppliers in Indonesia and the ASEAN region has enabled car manufacturers to continuously deliver units, but many hurdles have had to be overcome in the process. The forecast is that supply chain disruptions will come years will see this trend continue, with consumer sentiment calling on car manufacturers to supply them with vehicles that are aligned to their modern, digital tastes, and progressively, the need for EVs. While we are at the very beginning of the digitised and EV era, Indonesia's middle-class should continue to expand, and consumer spending power will recover and accelerate. This will drive suppliers to be ready to respond to the need for components that are adequate for these emerging market demands.

A key element to this drastic shift in the automotive component industry is to have a workforce that is equipped with the skills necessary to execute tasks effectively. The pandemic has forced many players to incorporate work-from-home models into their operations and, as restrictions ease, we are seeing the emergence of a new hybrid-work model. Finding the right balance between operational flexibility and efficiencies will be key for businesses to attract and retain top workers. Workers with technical skill sets, especially on the information technology and engineering front, should be looked after by employers while empowering low-skilled workers with more such skills to execute tasks. To this end, this survey reveals how industry players see their competitiveness affected by investing in their people and the creation of attractive work environments. It also shows how global investor sentiment concerning sustainability issues is also seeping into the automotive supplier mindset, with most acknowledging the necessity for products and solutions that take our natural environment into consideration.

We appreciate the participation and support of the GIAMM members to acquire the results for this report and for their honest feedback to create a realistic portrait of the industry. Likewise, we appreciate PwC’s ongoing initiative and results-driven approach to assist industry players, and we look forward to ongoing collaboration. We hope that this report can act as a valuable resource for anyone hoping to better understand the market dynamics of the automotive supply industry in Indonesia. So too, we see it as a valuable tool to make informed decisions, and better navigate the market. Finally, it tells the story of an industry that will continue to grow and adapt to the next era of development in the automotive industry.
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Structure of survey respondents
The incorporation of modern technologies into business streams are having a direct impact on how automotive industry suppliers view productivity and human capital deployment. Competition within the industry is driven largely by the pace of productive technology adoption in the workplace and on the assembly floor. The deployment of these technologies are having a positive effect on the output of mid-sized businesses, with 38% of all survey participants employing between 101 and 500 employees. The second largest statistical cohort sits with those businesses who employ 501 to 1,000 employees. These two segments, collectively, represent over two-thirds of the respondents. In the Indonesian landscape, this concentration not only points to the prevalence of mid-sized businesses as key voices in the industry, but also to these players as having a strong foothold in the marketplace. With Indonesian consumers still weathering the storm of the economic fallout of the COVID-19 pandemic, but counting among the most optimistic of consumers globally, according to PwC surveys, this strong cohort of suppliers will maintain its position as the bulwark of the industry. Meanwhile, almost one-fifth of the respondents employ over 1,001 persons in-house or through contract. This is indicative of the maturing nature of the industry in Indonesia which has a strong mix of both mid-sized and emerging businesses and long established local and multinational ones built on decades of market participation.

Question No 1
How many people (in-house and contract workers) currently work at your plant(s)?

- Up to 100: 13%
- 101 - 500: 38%
- 501 - 1,000: 30%
- Over 1,001: 19%
The automotive industry has, globally, experienced a progress shift over the last few decades to the incorporation of different suppliers in the vehicle manufacturing chain. With this demand for supply of production activities and individual component assemblages increasing, at least 87% of all respondents are Tier 1 suppliers. For these suppliers, being contractually coupled to car manufacturers with set design specifications, allows for specialisation and expertise without the need for further outsourcing. Developmental competencies are often taken over by Tier 2 suppliers in other markets, but in Indonesia these Tier 1 suppliers are keeping much of this work in-house. It is often found that lower tier suppliers offering specific technical services are able to specialise in niche elements of production, creating higher added value. Pressed piece or casing producers would be such an example, with their simple - but essential - products allowing car manufacturers and Tier 1 suppliers to offset concerns over such products. As car manufacturers demand quality and greater efficiency, special service suppliers will see their role in the value chain strengthen.

**Question No 2**
What is your company’s position in the supply chain?

<table>
<thead>
<tr>
<th>Tier 1 supplier</th>
<th>Tier 2 supplier</th>
<th>Tier 3 supplier</th>
<th>Others</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>87%</td>
<td>11%</td>
<td>0%</td>
<td>2%</td>
<td>0%</td>
</tr>
</tbody>
</table>

The ownership structure of Indonesia’s automotive suppliers reflects wider Indonesian market realities and the economic evolution of the country. The automotive industry is, in the global sense, dominated by various powerful entities with a strong foothold in multiple markets. These steer best practices and drive competition in the markets they operate in. In the Indonesian context, we see that at least 77% of all respondents are majority-owned by foreign corporations. The overall health of the industry is improved thanks to this internationalised, integrated market reality, with benefits including better competition, diversity of supply, and proliferation of quality products. So too, a diversity of market players allows for safeguards against market monopolisation and cartels. Only 13% of respondents indicate that their firms are owned, in the majority, by local entrepreneurs, while 9% of respondents form part of joint-ventures between local and foreign enterprises. The linkage between global business and local enterprise can be a beneficial one, which creates more room for development, the availability of capital sourcing, and the deployment of innovative business strategies. Altogether, as COVID-19 continues its disruption of global supply chains, car manufacturers will welcome the diversity of supply and ownership structures in the Indonesian market.

**Question No 3**
Please specify your company’s ownership structure

- Majority-owned by local entrepreneurs: 9%
- Majority-owned by foreign corporations: 77%
- Joint Ventures: 13%
- 9%
Without much divergence of data regarding leading automotive manufacturers and top car brands in Indonesia, the survey sees suppliers supply most products to market leaders Toyota, Mitsubishi, and Daihatsu. The survey finds that Daihatsu, in fact, is the chief original equipment manufacturer (OEM) to whom the set of suppliers supply their products. These OEMs, alongside fellow-Japanese companies Suzuki and Honda, are viewed favourably by Indonesian suppliers and, with large assembly plants in the country, demand for production part supply is large. As Indonesia’s middle-class grows and consumer spending power increases, we’ve seen both the four-wheel vehicle and two-wheel vehicle segments demand growth in recent years. As an example of the production strength of OEMs, Toyota Astra Motor not only dominates domestic car sales with the locally assembled Avanza, but its production plants are also exporting these to other markets. Similarly, PT Astra Daihatsu Motor, with its production plants in Karawang and Sunter, sees delivery for their assembled Terios, Granmax, Rocky and Xenia brands, met with the support of suppliers.
Respondents are involved in a diverse range of product and service supply in both the four- and two wheel segments in Indonesia’s automotive industry. With respondents predominantly falling into the mid-sized to large business segments and production facilities needed to meet the demand of the expansive capacity of the OEMs and overall market, suppliers are found to supply a diverse range of products across the value spectrum. With the largest concentration of suppliers delivering chassis and engine components within the four-wheel segment, there is less competition among other production parts such as with brake systems, steering systems, speedometers and temperature gauges. The dynamic two-wheel market in Indonesia, where parts and repairs are the lifeblood of many retail outlets, is driven by demand for products such as chains, batteries, valves, oil pumps, headlights and horns.

**Question No 5**
What types of products or services do you manufacture and/or supply to the automotive industry?

### Four-wheel products
- Chassis (chassis frame, fuel tank, etc.) - 16%
- Engine (bearing, carburetor, radiator, etc.) - 10%
- Wheel Axle, Propeller Shaft (front/rear axle, wheel assembly, tire, etc.) - 7%
- Transmission (pedal, drive chain, gears, etc.) - 5%
- Interior (instrument panel, pedal, seat & seat belt, etc.) - 5%
- Electrical (ignition coil, electric starter, air condition, etc.) - 5%
- Exterior (external/internal construction, automotive glass) - 5%
- Suspensions (absorber, suspension strut, coil spring, etc.) - 5%
- Brake System (brake disc assembly, pad assembly, brake shoe, etc.) - 4%
- Clutch Assy (clutch system, clutch disc assembly, clutch housing) - 4%
- Steering System (steering gear assembly, dumper, pitman arm, etc.) - 3%
- Instrument (temperature gauge, speedometer, hour meter, etc.) - 2%

### Two-wheel products
- Engine (valve, oil pump, etc.) - 8%
- Chassis fuel tank, seat, front wheel, etc. - 6%
- Electrical (starting motor, headlight, horn, etc.) - 5%
- Frame (head pipe, seat rail, down tube, etc.) - 2%
- Steering System (steering column, steering gear, power steering pump, etc.) - 2%
- Others - 5%
As with most other countries, Indonesian roads are populated predominantly with vehicles bearing Internal Combustion Engines (ICE). These drive systems form the overwhelming majority of output from OEMs and, to that end, drive supply demands among suppliers. The global automotive industry is, however, experiencing a continued uptick in available hybrid and EV models, and Indonesia is no different. Suppliers note that, jointly, up to 18% of their supplies are for hybrid vehicles, while a further 2% are for battery electric ones. The current growth in the hybrid and electric segments are incentivised by the government’s official EV roadmap, published in 2020. By 2030 the country aims to have an annual local production capacity of more than 600,000 units of four-wheeled EVs and 2.45 million units of two-wheeled EVs. However, cheap petrol prices and the steady demand will ensure the dominance of the ICE driving system in the market.

Some of the suppliers surveyed not only supply to the local market but also have export-oriented operations. While Indonesia is the main market, capturing 42% of supply, other South-East Asian markets are attractive export options for the suppliers. While Indonesia is responsible for up to one-third of the overall South-East Asian car market, at 24%, other countries such as Thailand, Malaysia and Singapore draw products too from surveyed providers. Respondents meanwhile indicate that the large East Asian markets, such as China, Japan, and South Korea, are also recipients of exports. The potential of exports to Europe and North America is worth considering, given the size of these markets. Automotive sales in the USA alone stood at 15 million units in 2021, while the EU saw sales of 9.7 vehicles in 2021. The US market saw compound annual growth of 3.7%, while the EU market shrank by 2.4%. These large markets may be attractive options for automotive parts suppliers, but they should keep in mind strict quality standards, regulatory and tax requirements, and evolving considerations for emissions targets. So too, geographical distance exacerbated by global shipping issues, as well as the presence of well-established players within these markets, should also be considerations.
Impact of COVID-19 on the industry
The Indonesian economy showed its resilience in 2021, expanding by at least 3.7%, with growth expectations for 2022 predicted at 5.2%, according to the World Bank. Indonesia’s accommodative monetary and fiscal policies, alongside rebounding private consumption patterns and investor confidence, are some of the indicators which may inspire the optimism shown by respondents. With 85% of all respondents either optimistic or very optimistic about the future despite COVID-19, stability in demand and likelihood of growth may drive the automotive industry forward. This optimism could dwindle, however, if the current global inflation boom and raised interest rates in other countries have a knock-on effect on the Indonesian economy. To that end, industry players look to fiscal and monetary authorities to ensure stability and support growth.

Question No 8
Considering your country’s current COVID-19 situation, how optimistic are you about the future?

11% Very optimistic
74% Optimistic
13% Neither optimistic nor pessimistic
2% Not very optimistic
0% Not optimistic at all

With maritime transport severely disrupted by the pandemic, and container prices tipping to record highs, the integrated nature of the global automotive supply chain meant Indonesian suppliers were heavily affected. Many key automotive part businesses across Asia saw the partial closure of their factories or a slow-down in production output. The pandemic has also exacerbated the semiconductor shortage, a critical component of many cars and machinery. Toyota, for its part, saw a global downturn of 40% in production capacity in 2021 due to a shortage of available necessary parts. These global dynamics had a consequential impact on the Indonesian market too. A glaring 50% of respondents indicate that the finance and liquidity of their firms were significantly impacted by the COVID-19 economic downturn. As such shortfalls may pose a critical threat to the organisation, the suppliers may look forward to a year which could see a return to more regular consumer behaviour. Alongside financial contractions, the automotive industry has lived through two years of severe disruptions to supply chains. At least 47% of respondents note that operational and supply chain threats posed a critical threat to their organisations, while respondents acknowledge that the pandemic had an impact on their strategies and brands. The pandemic has widely been viewed as a time to reflect on medium- and long-term strategies and optimise outputs. The pandemic, alongside growing concern over sustainability issues, accelerated market shifts toward a low emission future and companies are adapting their strategies thereto. Similarly, brands are changing their narrative priorities to align to these realities and, as suppliers, to a new set of greener standards that may be set by customers. OEMs, for their part, are having a closer look at suppliers and demanding that suppliers take sufficient steps to lower their pollutive activities. On the regulatory and tax front, respondents saw the prominent Omnibus Law and some tax changes having an impact on their businesses.

Question No 9
To date, what has been the impact of COVID-19 on the following aspects of your organisation?

<table>
<thead>
<tr>
<th>Aspect</th>
<th>No impact (COVID-19 does not pose a threat to the organisation)</th>
<th>Limited impact (minimal threat to the organisation)</th>
<th>Significant impact (critical threat to the organisation)</th>
<th>Don’t know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategy and brand</td>
<td>13%</td>
<td>64%</td>
<td>17%</td>
<td>6%</td>
</tr>
<tr>
<td>Tax, trade and regulatory</td>
<td>9%</td>
<td>60%</td>
<td>25%</td>
<td>6%</td>
</tr>
<tr>
<td>Workforce</td>
<td>8%</td>
<td>43%</td>
<td>47%</td>
<td>2%</td>
</tr>
<tr>
<td>Finance and liquidity</td>
<td>6%</td>
<td>42%</td>
<td>50%</td>
<td>2%</td>
</tr>
<tr>
<td>Operations and supply chain</td>
<td>5%</td>
<td>49%</td>
<td>47%</td>
<td>2%</td>
</tr>
</tbody>
</table>
Government enforced measures as responses to the health threats posed by COVID-19 led to the adoption of a new reality for many companies, namely that many employees work from home. Like other industries, respondents indicate that the ability of employers to work from home is a major shift in the operational realities of their companies. Research by PwC in the USA has shown that up to 83% of employers (across industries) view remote work as successful, while the necessity to keep a strong workplace culture may require two to three days of office work per week. The reality in the automotive industry demands a presence on production floors and oversight in office work, which clarifies why respondents see capacity adjustment of the workforce as a major impact. Ancillary to changing workplace capacities, the availability of automation solutions and accelerated adoption of technologies to perform tasks are another major impact respondents highlight. Planning and testing to stay aligned with the latest technologies and customer demands is marked as important. This is supported by the need for digitisation to support growth and the quality of IT infrastructure. So too, supply chain disruptions and fears over its resilience are of concern in 21% of responses.

**Question No 10**
Which of the following impacts of COVID-19 do you think are most likely to be felt in the automotive supply industry?

- **Capacity adjustment of workforces to have more employees working from home offices due to the government’s restrictions and health protocols** - 24%
- **Accelerated automation for cost-cutting; Continuously updated resilience planning and testing** - 24%
- **Supply chain resilience** - 21%
- **Accelerated digitisation for growth** - 19%
- **Greater weight placed on the quality of IT and telecommunications infrastructure in business location decisions** - 11%
- **Others** - 1%
Analysis of previous year performance
2020 saw Indonesia's automotive industry experiencing a total industry volume decline of 48.4%. The COVID-19 economic slowdown negatively impacted demand for vehicles and saw a slowdown of output from the assembly floors of OEMs. 2021, in turn, saw a strong rebound for the industry with data showing a 36.3% rebound. Market data shows that at least 58% of respondents report that, in comparison to revenues for the previous year, they saw revenues rebound by more than 30%. Overall, only 10% of respondents indicated that their revenues decreased from the previous year.

**Question No 11**
What was your revenue change in 2021 compared to the previous year (2020)?

![Revenue Change Chart]

In line with the overall better performance of the market in 2021 as compared to 2020, respondents indicate that a strong increase in the number of production units and services sold was primarily responsible for better revenue returns. Data from Fitch Ratings sees an estimated 850,000 vehicle units sold in 2021. An easing of governmental health restrictions saw OEMs return to greater capacity output, which spurred demand. While the market will dictate product and service necessities, suppliers saw the pandemic-related challenges as an opportunity to introduce new products and services, as well as scale-down on some deliverables for which market demand has diminished.

**Question No 12**
What were the main factors behind the change in your revenue in 2021?

![Factors Behind Revenue Change]

Volume of production units/services sold
- 56%

Launch of new products/services or termination of existing products/services
- 21%

Changes to sales prices to customers
- 17%

Others
- 5%

No major changes in revenue
- 1%
Resource utilisation is optimized in most instances according to respondents of the survey. The optimism of industry players is justified when held up against the productivity of operations. While some instances indicate an overuse of machinery and resources - possibly overheating human resources in the process - streamlined operations should see optimal product and service outputs aligned to capacity. Data shows Indonesia's overall industrial capacity utilisation stood at 72% according to Bank Indonesia in January 2022. At least 67% of suppliers in the automotive survey, in turn, report that they're current production capacity utilisation exceeds 80%.

Governmental healthcare restrictions saw the pandemic negatively affect companies in different ways. Bank Indonesia reports that, after the initial shock of hard lockdowns in the first three quarters of 2020, industrial production output recovered to 56% by year-end 2020. Respondents surveyed exhibit the strong rebound seen in 2021 across the industry, with a majority of these indicating that their production capacity expanded by more than 10% compared to 2020.

**Question No 13**
What is your current production capacity utilisation?

- Above 100%: 8%
- 90 - 100%: 33%
- 80 - 90%: 26%
- 60 - 80%: 25%
- Below 60%: 8%

**Question No 14**
How did your production capacity change in 2021 compared to the previous year (2020)?

- Increase of more than 10%: 57%
- Increase of more than 5%: 9%
- No change (+/- 5%): 28%
- Decrease of more than 5%: 0%
- Decrease of more than 10%: 6%
Aligned to the better production capacity in 2021 as compared to 2020, suppliers in the automotive industry also saw comparably better operating profit margins. The better performance is indicative of the recovery of the overall market and an increase in demand. There were some exceptions to this. A sizable amount of respondents saw insignificant changes to the year before, while many others in fact experienced a decrease in their operating profit margin.

**Question No 15**
How did your operating profit margin change in 2021 compared to the previous year (2020)?

- **Decrease of more than 10%**: 9%
- **No change (+/− 5%)**: 15%
- **Increase of more than 10%**: 49%
- **Decrease of more than 5%**: 4%
- **Increase of more than 5%**: 23%

The unemployment rate in Indonesia dropped year by year from 2020 to 2021, with quarter 3 figures reported at 6.49%, from 7.07% for the same period in 2020. Within the wider automotive industry, speculation regarding layoffs due to the rise of automation and smart factory development has long led to discussions regarding the future of the worker. The automotive industry, indeed, pioneered the deployment of collaborative robots, alongside human workers, and the International Labour Organisation reports that upward of 30% of all robots installed across the global manufacturing industry are in automotive factories. In Indonesia, amidst COVID-19 and this global rise in automation, we have seen, however, that over a third of automotive suppliers have increased their workforce numbers. Many respondents indicate little to no change, while under 20% had seen a decrease in their workforce in this period.

**Question No 16**
How did total staff numbers (own and external) change in 2021 compared to the previous year (2020)?

- **Decrease of more than 10%**: 9%
- **No change (+/− 5%)**: 46%
- **Increase of more than 10%**: 21%
- **Decrease of more than 5%**: 9%
- **Increase of more than 5%**: 15%

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Outlook for the future
COVID-19 has had a detrimental effect on the medium and long-term strategic planning objectives of most enterprises. While the monetary and fiscal measures deployed by Indonesian authorities aim to stabilize the economy and create a more predictable business environment, ongoing global factors such as supply chain disruptions are casting a shadow over certain planning objectives for many. The dynamics within the automotive industry and the shifting demands of OEMs create an environment where suppliers need to readily adapt to customer realities. Against this backdrop, it is clear from respondents that many see their budget and production plans governed by short and mid-term strategy over a two-quarter period. Aside from the 43% who plan on the 3-6 month basis, a further 34%, however, see that they can plan budgets and production plans at least a year in advance.

**Question No 17**
When preparing budgets or production plans, what time frame are you able to reliably estimate?

- Next 3 - 6 months: 43%
- Up to 1 year: 34%
- Up to 3 years: 21%
- Up to 5 years: 2%

The optimism displayed by the respondents coincides with the projected positive attitude of Indonesian consumers for the year ahead. While Indonesia continues to address the economic and health challenges from the COVID-19 pandemic, the year ahead may bring a further increase in consumer spending, which will have a positive impact on both OEMs and automotive suppliers. Respondents indicate that they, overwhelmingly, expect revenues to grow in the year ahead.

**Question No 18**
What revenue change do you expect in 2022?

- Increase of more than 10%: 62%
- Increase of more than 5%: 32%
- No change (+/- 5%): 6%
- Decrease of more than 5%: 0%
- Decrease of more than 10%: 0%

While respondents are optimistic that their revenues will increase in this year, they are less likely to indicate that they will increase their staff members. The implications of hiring amidst external market pressures as well as the ongoing emphasis in the industry on making production more efficient, will be key factors. At least a third of respondents, however, note that they expect to see their staff figures grow in the year ahead on the back of a reignited demand for production in car plants.

**Question No 19**
What headcount changes do you expect in 2022?

- Increase of more than 10%: 11%
- Increase of more than 5%: 25%
- No change (+/- 5%): 47%
- Decrease of more than 5%: 15%
- Decrease of more than 10%: 2%
Indicative of respondents’ low enthusiasm for expanding their workforce numbers, automotive suppliers see increased labour costs as the largest risk factor affecting their future growth prospects. Bank Indonesia is targeting inflation to be within the 2-4% cohort for 2022, and, while this figure is hoped to remain steady, it will have an overall impact on expenses if it were to increase. Alongside labour costs, respondents see supply chain disruptions as a primary risk factor to contend with. This works in concert with the pressure felt from OEMs, who are pushing for price decreases amidst lower demand, which is a response to the impact of COVID-19 on their own budgets and spending power. Respondents acknowledge the externalities at play on both their and OEMs realities, with over 10% of respondents noting the short-term impacts of the pandemic as an ongoing risk factor. A growing concern in years to come will be the push for electrification and EV components.

**Question No 20**
Which of the following risk factors could affect your future growth prospects?

- Increased labour costs: 16%
- Supply-chain disruptions (increasing material price and logistics cost, trade restrictions, access to raw materials, etc.): 15%
- Continuous pressure for price decreases from OEMs: 14%
- Decrease in demand from OEMs: 12%
- Short-term impact of the pandemic on consumer demand and buying power: 11%
- Electrification of product portfolio (EV): 8%
- Local regulatory requirements: 7%
- Lack of qualified staff: 5%
- Digitalisation and automation of production: 4%
- Existence of production capacities outside Indonesia: 3%
- Reducing the organisation’s carbon footprint: 3%
- Limited possibilities further to increase productivity: 1%
- Reducing dependencies throughout the value chain: 1%
- Others: 0%

Indonesia’s Omnibus Law of 2020 set new standards for employment terms and conditions by introducing new concepts and rules to industry. The Omnibus Law revoked some labour provisions while introducing some new concepts, such as changes concerning termination entitlements, termination procedures, and compensation for fixed-term employees. Costs concerning compliance with labour laws were indicated as the main challenge for respondents within the Indonesian context and navigating these legislative demands are a major concern. Added hereto, certain tax requirements and transfer pricing measures are an issue highlighted by respondents.

**Question No 21**
What other challenges are you experiencing in Indonesia?

- Costs of compliance with labour law: 42%
- Transfer pricing and other corporate tax requirements: 31%
- Trade barriers: 15%
- Tighter requirements for financial reporting: 11%
- Others: 1%
As the economy has developed and consumer spending power has increased, Indonesia has seen the rapid development of its automotive industry in recent years. The government has earmarked digitalisation and advanced manufacturing capabilities as strategic development areas for the economy to maintain its growth pattern and steer clear of the middle-income trap. Digitalisation requires a great deal of focus on product innovation and development and here, competitive advantages may be created. Evolving product portfolios to have strong digital features is seen as a growth driver. So too, the automotive industry has led, in many ways, the push of industry for more digital and technology advanced factory floors on the process level. Many respondents see the demand for new materials, particularly materials to reduce vehicle weight (itself an area of development in the industry), as a chief trend as well. The push forward for alternative driving systems such as hybrids and EVs is also a growing factor.

**Question No 22**

What global automotive trends is your company responding to via product innovation?

- **Digitalisation**: 26%
- **New and lightweight materials**: 23%
- **Alternative drive systems (Hybrid/HEV, Plug-in Hybrid/PHEV, Battery Electric/BEV)**: 21%
- **Alternative fuel (Battery, LPG, CNG, ethanol, biodiesel, P-Series Fuels, and others)**: 12%
- **Safety; drive assistance**: 4%
- **Autonomous driving**: 4%
- **Connected cars (infotainment)**: 2%
- **None (please specify)**: 8%
While many other markets have seen a steady shift to serving the electric automotive market, most Indonesian suppliers are not serving this segment yet. However, the market has seen a push from OEMs to introduce such models into the minds of consumers and onto the streets of the country. Respondents note, however, that they are likely to see a shift in demand for such supplies in the near future. In Indonesia, the top selling EVs in 2021 were Hyundai’s Kona EV (360 units sold) and Ioniq EV (228 units sold), alongside the new Nissan Leaf (42 units). In the hybrid segment, Toyota's Corolla Cross (1,304 units) and Nissan Kicks (592 units) were top sellers. These figures are still very small in comparison to the wider market. However, strategies for fleet changes from ride-hailing services such as those of Bluebird and Gojek are pulling the market in the EV direction, with these big players drawing attention to their intentions to involve more EVs in their services.

Supply chain disruptions and customer specifications from OEMs would guide respondents’ strong sentiment toward further increasing the overall percentage of utilising local supplies. As container prices and shipping trade disruptions negatively impact the ability to source from abroad, suppliers see themselves looking to their own market for materials and services.

**Question No 23**
What percentage of your portfolio is made up of electromobility?

- More than 10%: 8%
- Between 5 - 10%: 11%
- Less than 5%: 11%
- We don’t have a presence in this segment yet, but we expect to in the near future: 62%
- We don’t plan to include this segment in our portfolio: 8%

**Question No 24**
What is the trend regarding the localisation of your purchases of materials and services in Indonesia?

- Increasing % of local supplies: 19%
- Increasing % of purchases from abroad: 8%
- No changes to the ratio of local vs. foreign purchases: 73%
Over 90% of respondents indicated that having the correct skill sets available to effectively conduct tasks within the organisation is an ongoing struggle. Technical capacity building of under-skilled workers and upskilling the skillsets of established workers to work with the latest technologies are an industry-wide reality. Respondents indicate that not only workers involved in production lines but also those in other departments need task solving skill expansions and labour quality improvements.

**Question No 25**
Do you consider the availability and quality of labour to be an issue for your company?

- Yes, it is a major issue for our company - both in production and other divisions (45%)
- Yes, it is an issue for our company - in production only (26%)
- Yes, it is an issue for our company - in other divisions only (6%)
- No (23%)

The Omnibus Law requires industry players to revise the way they interact and communicate with their workforce. Amidst the uncertainties brought about by COVID-19 and the switch for many to home-working scenarios, clear communication channels with workers became increasingly important. Workers value clarity and efficiency of communications regarding their outputs - something that respondents see as the main action to take to boost their overall attractiveness as a workplace. Alongside, respondents indicate that better working conditions, with a focus on health and safety, are steps they are taking to ensure workers feel more loyal to them as an employer. Similarly, with upskilling requirements driven by technological changes necessary, respondents are investing in educational benefits for employees. An interesting shift in the recruitment industry in recent years has seen workers view monetary related benefits as less important than other considerations. This research confirms this trend, pointing to only 23% of respondents who think monetary related benefits alone are key to attracting talented employees.

**Question No 26**
What actions have you taken to increase your attractiveness as an employer?

- Improved communication with employees (29%)
- Better health, safety and other working conditions (24%)
- Continuing educational benefits to employees (18%)
- Increased incentives, e.g. loyalty or performance-based (14%)
- Revision of base salary levels (9%)
- Contribution for transport to work, accommodation, other services (5%)
- No major changes were necessary (1%)
- Others (0%)
Innovation, development, and technologies
Most respondents note that Research & Development (R&D) activities are not necessary for their operations within Indonesia, with much R&D, instead, taking place at a more global level. As this is common practice within the automotive industry, with R&D technologies developed in central locations and then deployed to outlets, few see the need for an R&D arm in-country. Almost a third of respondents note, however, that they do have R&D services available to them if needed. This option empowers players to adapt products and services and respond to identified demands in the Indonesian context.

**Question No 27**
Do you have Research & Development (R&D) activities in Indonesia?

- 57% No, R&D is managed at the group level
- 9% No, but we are considering undertaking R&D in Indonesia to support group activities
- 28% Yes, local R&D services are provided to the group
- 2% Yes, local R&D services are also provided to third parties
- 4% Others

Almost half of the respondents indicate that they are responsible for innovations, while a further third acknowledge that these decisions are taken at the group level. With many respondents having a strong local ownership structure, through empowered entrepreneurship, management and innovation teams are involved in defining and pursuing unique competitive advantages. Noting the strong element of collaboration within the innovation context - as a response to the needs of the market - almost a fifth of the respondents indicate that they listen to the requests put by OEMs and, in turn, innovate thereon. This approach allows for readiness for market needs and flexibility to adapt to market shifts.

**Question No 28**
Who leads innovation activities at your company?

- 47% The company is responsible for innovation
- 19% We cooperate with OEMs/customers
- 34% Major innovations are managed at the group level
- 0% We use external advisors
Increased efficiencies, valuable time saved, and costs reduced are the key metrics considered by most organisations when measuring whether an innovation has been successfully deployed. With expenses from innovation requiring satisfactory results to confirm how worthwhile the endeavour was, respondents add that customers’ satisfaction with the innovation are also important. However, it is within the frame of optimisation that respondents see the most benefit to innovations.

**Question No 29**
What are the most important metrics/KPIs for measuring innovation at your organisation?

<table>
<thead>
<tr>
<th>Metric</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Costs, time savings, and efficiency gains</td>
<td>64%</td>
</tr>
<tr>
<td>Product quality or customer satisfaction ratings</td>
<td>17%</td>
</tr>
<tr>
<td>Sales growth</td>
<td>15%</td>
</tr>
<tr>
<td>Number of innovations in the pipeline</td>
<td>2%</td>
</tr>
<tr>
<td>Others</td>
<td>2%</td>
</tr>
</tbody>
</table>

Advanced and interactive networks of machines and processes, built on frameworks of effective data use and machine learning, are set to significantly impact the operations of automotive industry players in future. Seen as a competitive advantage, utilising these emerging technologies may help manufacturers reduce costs while boosting output capacity. The International Labour Organisation sees the deployment of Industry 4.0 technologies as disrupting the entire automotive industry value chain, shaping demand for new skill sets in the industry in future. In Indonesia, we see that 23% of respondents have already implemented such technologies into their production process, while a further 19% will invest in such technologies within the next two years. Confirming statements regarding R&D and innovation, 34% of respondents note that their approach to Industry 4.0 will be handled at a group level.

**Question No 30**
How are Industry 4.0 trends impacting your future plans?

<table>
<thead>
<tr>
<th>Option</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>We do not have detailed plans for Industry 4.0</td>
<td>13%</td>
</tr>
<tr>
<td>We discuss our plans with the group/shareholders</td>
<td>34%</td>
</tr>
<tr>
<td>We will invest in our first Industry 4.0 projects in the next 1-2 years</td>
<td>19%</td>
</tr>
<tr>
<td>We invested in Industry 4.0 for the first time last year</td>
<td>9%</td>
</tr>
<tr>
<td>We have implemented Industry 4.0 into the production process</td>
<td>23%</td>
</tr>
<tr>
<td>Others</td>
<td>2%</td>
</tr>
</tbody>
</table>
While respondents acknowledge that the necessity for these technologies are there, and may yet increase in the near future, it is clear that most respondents do not see major overhauls of operations and investments into such technologies as a current necessity. Almost half of all replies state that, amidst the current market realities and external risks, it is not within budget to spend over 1% of revenue on investing in these technologies.

**Question No 31**
What is your estimated total spend on Industry 4.0 trends for the next 2-3 years?

The use of advanced manufacturing solutions, including the deployment of robotics, has, in recent years, been a core consideration for many players in the automotive industry. Collaborative research led by ASEAN in 2016 found that over 60% of Indonesian automotive workers will see their jobs disrupted by the deployment of robots in coming years. Respondents realise the importance of digitising factories too, as these cloud-based solutions can centralise data, ensure it is easier to work with and allow for operations to run more efficiently. In like standing, digitisation creates an operational environment where big data analysis can be utilised to boost productivity, as well as predict threats and identify opportunities.

**Question No 32**
In which area are you investing the most?

An ongoing topic of conversation for both governments and automotive industry players is the concern over cybersecurity. As digital integration becomes more hardwired into the production process and the final products (particularly in EVs), respondents note that technology solutions also pose a threat to their companies. Cyberthreats are ongoing and evolving, and companies are employing various strategies to be more cyber-resilient. The disruptions caused by cyber-attacks could be detrimental to operations, and so, it is clear why almost two-thirds of replies view cybersecurity as a key concern.

**Question No 33**
Do you consider cybersecurity to be an important topic for your company?
Sustainability
This survey was taken in the shadow of COP26, and the global commitments made by governments and big corporations to address ongoing climate change. Central to tackling climate change is the need to change polluting production methods or offset Greenhouse Gas (GHG) emissions in a way that decreases the pollutants’ carbon footprint and is carbon neutral. So too, many companies are committing themselves to reduce GHG emissions to near zero and remove remaining unavoidable emissions. Indonesia has pledged itself to be a net-zero country by 2060. In line with this commitment, over 70% of all respondents indicated that they are either working towards or have already made commitments to be carbon-neutral or net-zero.

**Question No 34**
Has your company made the following commitments?

| Carbon-neutral commitment | Yes, my company has made this commitment | 42% |
| | No, but my company is working toward making this commitment | 34% |
| | No, my company has not made this commitment | 15% |
| | Don’t know | 9% |

| Net-zero commitment | Yes, my company has made this commitment | 44% |
| | No, but my company is working toward making this commitment | 32% |
| | No, my company has not made this commitment | 15% |
| | Don’t know | 9% |

Adapting to market demands and OEM needs, a core group of respondents specify that introducing new products and services, as well as expanding to new customer segments and new markets, are their top priorities for the next two years. To capture these segments, respondents are viewing the adoption of digital capabilities and new technologies to boost their competitiveness. While the EV market is still in its infancy in Indonesia, respondents are optimistic about the prospects that it holds and at least 10% see it as a growth area worth targeting.

**Question No 35**
Which, if any, of the following are the company’s top five priorities for the next two years?

**Top 5 priorities**

1. Expanding into new markets/customer segments: 15%
2. Introducing new products/services: 13%
3. Improving digital capabilities: 13%
4. Increasing the use of new technologies: 11%
5. EV: 10%

Rethinking/changing/adapting the business model: 9%
Increasing investment in innovation and R&D: 7%
Increasing collaboration with other companies: 7%
Autonomous and self-driving vehicles: 5%
Downsizing of Internal Combustion Engines (ICE): 5%
Increasing the organisation’s social responsibility: 5%
Telling of the changing shift in the global economy, almost all respondents indicate that sustainability is a major consideration for the automotive industry. Manufacturers, like other polluting industries, are under increased pressure from governments, investors, customers, and the public to adopt operational methods more aligned with Environmental, Social and Governance (ESG) metrics. As the importance of ESG increases, so too will the pressure on suppliers to align with these principles. While Indonesia’s economy and industrial power can develop at a rapid pace in the next decades, respondents note that sustainable utilisation of natural resources is an important concern.

**Question No 36**
How do you think sustainability will affect the automotive industry in the future?

- **56%** Sustainability will have a significant impact on creating new variants of products (e.g. environmentally friendly products).
- **42%** Sustainability will have a significant impact on the way manufacturing is carried out, and on the reputations of manufacturers.
- **2%** Sustainability will have no or minor impact to the automotive industry.
Taxes and regulations
Over half of respondents indicated that they have seen a significant positive impact from this change, while a further quarter note a limited positive impact.

**Question No 37**

The Minister of Finance has issued Regulation No. PMK-120 which updates the Luxury-goods Sales Tax (LST) incentive on cars, which was previously introduced under PMK-31. What has been the impact of this regulation on your organisation?

The Omnibus Law has been a policy vehicle aimed at addressing existing labour and bureaucratic realities for Indonesian companies. Since its enactment, many companies have seen their businesses affected by its provisions. It is noteworthy that respondents have seen that this legislation has, in over 70% of cases, had a significant or limited impact on how they regulate manpower and business permits in their organisations. Very few organisations saw no impact from the legislation on these two aspects. Meanwhile, over 50% of respondents indicate that the law also positively impacted their ability to be involved in investment and national strategic projects. Respondents found that economic zones had a 39% limited positive impact, while at least 36% believed it had no impact on their operations. In like standing, at least 54% of respondents state that land procurement developments had no impact on their operations.

**Question No 38**

Regarding the recently enacted Omnibus Law, what has been the impact of this regulation on your organisation?
Indonesian markets sentiment
The majority of respondents indicate that production within Indonesia should remain steady over the next year with no major intentions to downsize or extradite production to another country. While there was initial polemic concerning the effects of the Omnibus Law, this stability and consistency show that the market is an attractive option for the automotive industry and that players are optimistic about its future growth prospects. Confirming this optimism over market conditions, up to 21% of respondents point to the likelihood that additional production facilities will be moved to Indonesia.

**Question No 39**
Is the shareholder and/or group planning to transfer production in the next 12 months, and if so, why?

<table>
<thead>
<tr>
<th>Option</th>
<th>Percentage</th>
</tr>
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<tbody>
<tr>
<td>Yes, additional production will be moved to Indonesia</td>
<td>21%</td>
</tr>
<tr>
<td>Yes, some existing production will be moved out of Indonesia</td>
<td>3%</td>
</tr>
<tr>
<td>Shifting of production programmes both to and from Indonesia is possible</td>
<td>11%</td>
</tr>
<tr>
<td>No changes are expected</td>
<td>65%</td>
</tr>
</tbody>
</table>

*Note: Chart excludes respondents stating ‘Not applicable (not a multinational company)’*
As Indonesia's government continues to push its industrialisation and economic development efforts, the responses from automotive suppliers illustrate the effectiveness of some of these policies, with few indicating a willingness to relocate production out of the country. Business environment, labour cost and investment incentives could be a driving force for some companies to wish to relocate out of Indonesia.

**Question No 40**
Please state possible reasons for transfers of production out of Indonesia:

<table>
<thead>
<tr>
<th>Reason</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business environment</td>
<td>26%</td>
</tr>
<tr>
<td>Shift to lower labour cost countries</td>
<td>24%</td>
</tr>
<tr>
<td>Investment incentives offered by other country</td>
<td>19%</td>
</tr>
<tr>
<td>Legislation and bureaucracy</td>
<td>16%</td>
</tr>
<tr>
<td>Loss of major customers</td>
<td>11%</td>
</tr>
<tr>
<td>Workforce shortages</td>
<td>2%</td>
</tr>
<tr>
<td>Others</td>
<td>2%</td>
</tr>
</tbody>
</table>

*Note: Chart excludes respondents stating ‘Not applicable (not a multinational company)’*
In the medium and longer-term, respondents note the importance of adequate cost controls and productivity improvements aligned to technological inputs as central to their priorities. Similarly, businesses aim to continue the trend of investing in new technologies and digitalisation to strengthen their competitiveness. As the automotive industry evolves and OEMs shift priorities to a more digitised, electrified future, suppliers see themselves aligned to these demands. The necessity to innovate and employ new products and services as a part of their competitive arsenal are also among the strategic priorities for respondents, although to a lesser extent.

**Question No 41**
If you intend to continue operating in Indonesia, how would you describe your major focus for the next 3-5 years?

- Cost controls and productivity improvements with current technology: 52%
- Significant investments in new technology/digitalisation to decrease costs or improve productivity: 31%
- Changes to the product portfolio or changes in volume: 13%
- Others: 4%

*Note: Chart excludes respondents stating ‘Not applicable (not a multinational company)’.*
About the survey

The survey was carried out by the consultancy firm PwC in cooperation with the Indonesian Automotive Parts and Components Industries Association (GIAMM). The suppliers, which includes 53 prominent suppliers of the automotive industry in Indonesia, responded via an online questionnaire or printed versions of the questionnaire during the period 21 December 2021 to 21 January 2022. Our report includes the key findings regarding the automotive suppliers market, assessments of the results and the main factors driving these results, and perspectives on the future outlook.
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