High Gear

The South African automotive component sector: **Opportunities to** drive transformation objectives through learning and skills development initiatives

Funding Partners





Implementing Partner







National Partners



Skills for prosperity

Michael & Susan Dell FOUNDATION







Contents

About High Gear

Opportunities to driv objectives through le development initiation

Occupational profile of the South African component supply b

Gender dynamics in South African autom component supply b

Racial diversity in th automotive compone

The participation of disabilities in the So automotive component

The participation of youth in the South motive component s

Recommendations

	04
ve transformation learning and skills ives	06
e 1 base	08
the notive base	10
ne South African nent supply base	12
people with buth African nent supply base	14
h African auto- supply base	16
	18

About High Gear

NAACAM and the Department of Higher Education and Training (DHET) are the lead national partners of High Gear, an exciting initiative managed by IYF that is advancing South Africa's public TVET college system.

High Gear draws on industry knowledge and skills imperatives —along with IYF curricula enhancementtools—to strengthen the market relevance of select public TVET college courses. Ultimately, High Gear aims to demonstrate a model for greater industry involvement in TVET course design and delivery that generates enthusiasm from TVET educators and industry, while also generating positive returns for young people and employers. The UK Government's Skills for Prosperity Programme is funding High Gear implementation in KwaZulu-Natal Province, and the United States Agency for International Development (USAID) and the Michael & Susan Dell Foundation are funding project implementation in Eastern Cape Province. All three funding partners are supporting High Gear's national stakeholder engagement and learning efforts.

To learn more, visit the High Gear website



Opportunities to drive transformation objectives through learning and skills development initiatives

The South African Automotive Masterplan 2035 (SAAM 2035) outlines a strategic vision for the sector

"A globally competitive and transformed industry that actively contributes to the sustainable development of South Africa's productive economy, creating prosperity for industry stakeholders and broader society."

This vision places an explicit focus on ensuring that the supply base is globally competitive, but also 'transformed'. This transformation aspect encompasses many elements including the increased employment of previously disadvantaged (PDI) South Africans; the targeted development and upskilling of PDI employees; the empowerment of dealership and repair facilities; and the increased participation and inclusion of Black-owned business (as defined in national empowerment legislation) in the value chain, as well as improved employment equity outcomes which reflect the national population demographic.

The recent COVID-19 pandemic has placed additional pressure on component suppliers' planning and organisational structures – as many suppliers have had to de-prioritise investments in their priority transformation interventions to moderate supply chain disruptions. A poll of CEOs of the National Association of Automotive Component and Allied Manufacturers (NAACAM) member companies indicates that nearly 10% of their workforce has been shed as a direct result of the pandemic. It is anticipated that this outlook will persist for some time, whilst the sector grapples with a reduced volume outlook; a global shortage of semiconductors¹ and strained logistics services plus related infrastructure.

However, as transformation and its related B-BBBE scorecard implications have a direct bearing on the ability to access industry-specific government incentives, South African automotive component manufacturers and Original Equipment Manufacturers (OEMs) are continuing to seek innovative ways to support the active transformation of their workforces and supply chains.

To understand the status of transformation in the industry and what needs to be done to further support diversity and inclusion, NAACAM and the IYF, through the High Gear project, conducted two focus groups with NAACAM member companies. The first focus group was comprised of automotive component company Managing Directors, and the second group was comprised of automotive component company Human Resource managers. The focus groups were engaged on their employee profile and to discuss and validate trends in transformation that were identified in the 2021/2022 MERSETA Sector Skills Plan (SSP).



Semiconductors are a critical component required in the manufacture of most passenger and light commercial vehicles. During the COVID-19 pandemic, a surge in demand for semiconductors by other industrial sectors (such as white goods and consumer electronics) resulted in a global shortage of semiconductors for the automotive industry. As a result, automotive assemblers reduced their active production and temporarily shutdown production operations. As a result, component suppliers were also required to temporarily halt production.

1. Occupational profile of the South African component supply base

Focus group participants were questioned on their views pertaining to the occupational profile of the sector. NAACAM members confirmed that at a strategic level, it is unlikely that there will be significant changes to the current occupational profile. One component supplier offered the explanation that the current occupational profile is a heavily institutionalised structure, and it is likely that it will persist over the SAAM 2035 period.

A component company Managing Director raised the fact that South Africa is categorised by 'mixed remuneration' groupings, i.e. Senior management in South African component supply companies are often remunerated at rates comparative to that of employees in leading automotive destinations (such as Germany), whilst shopfloor employees are often remunerated in-line with employees in lower-cost manufacturing destinations (such as Thailand). The challenge encountered by NAACAM member companies is that the average level of productivity per shopfloor worker is low, relative to global automotive manufacturing destinations – and it is this which often restricts companies from investing further in the skills development of their employees, as it will likely inflate the remuneration costs above globally competitive levels and jeopardise their ability to maintain their price competitiveness to global and domestic OEMs, plus the independent aftermarket.²

NAACAM member companies are convinced that the on-set of increased adoption of advanced manufacturing and production methodologies are likely going to have a disproportionate impact on the shopfloor, where workers would now be expected to undertake more technically complex activities, with a marginal improvement in remuneration. NAACAM member Managing Directors however cautioned against alarmist discussions about broad-based retrenchments related to the adoption of Industry 4.0 production methodologies, but instead highlighted that it is critical that skilled individuals on the shopfloor drive the adoption of these new production methodologies to promote a more robust human-machine interface, to ensure the improved quality, reliability, and flexibility to OEM customers.

One focus group participant noted that in future, it is likely that shopfloor staff will be expected to be proficient in a 'basket of skills' and no longer specialise in discreet manufacturing skills. They highlighted the importance of developing inter-disciplinary skills.

² South African component suppliers often do not participate in research and development (R&D) activities as these activities are driven by OEM and Tier 1 global head offices, and as a result South African suppliers do not have the associated R&D 'bargaining power' which would allow for increased remuneration.



8

2. Gender dynamics in the South African automotive component supply base

Across both the focus groups, NAACAM members reported slow progress in incorporating a greater number of women into the sector. They noted that whilst the B-BBEE legislation promotes the participation of Black women in the areas of management control and ownership, there are only a handful of women-owned and managed component suppliers, and these usually occur at the lower Tier level and are characterised by less technically sophisticated components.

NAACAM undertook a survey of its members in Q2 2021 to understand the current participation of women in the component supply base. The survey indicated that in 2016, women accounted for 29,8% of the component sector's workforce, whilst by 2021, this increased to only 33,4%. Many of the Managing Directors presented the observation that women have greater representation at higher-skilled levels, due to a greater perceived 'employee value proposition'. They noted that the pandemic presented a case of this, where women in higher-skilled, office-based jobs were afforded the opportunity to work from home and perform childcare activities for their families.

One participant noted that the nature of the product manufactured by the component supplier often has a direct bearing on the participation of women in that company. NAACAM research undertaken in Q2 2021 indicated that companies in the harnessing and electronics sub-sector were more likely to have many women on the shopfloor, owing to the significant requirement of being proficient in fine motor skills. A NAACAM member and wiring harness supplier to many OEMs, reported an 85% participation rate for women in their company. On the other hand, sub-sectors which require significant muscle strength and the ability to move heavy equipment and products, often do not employ women significantly on the shop floor. A foundry supplier and NAACAM member reported only a 13,3% participation rate for women in their company.

One NAACAM member noted that that they recall tertiary institutions reporting record numbers of participation of women in their courses, however, the implication is that many of these women will likely go on to undertake 'professional (white-collar)' roles in component supplier companies instead of technical roles. Many of the participants also noted a difficulty in attracting new female talent into technical roles, and reported limited movement in resignations within skilled, professional and management roles, and as a result there was limited opportunity to incorporate women in technical roles other than when an existing employee retires.

An HR Manager noted that young women tend to enter the automotive sector and exit relatively soon thereafter, and this presented a challenge to develop and mentor young women in technical roles so that they may progress within an organisation. This HR Manager noted that increased career guidance and peer learning could extensively support the retention of women in the component sector. Both the focus groups also noted that a lack of a 'public profile' of the component sector makes it difficult for young women to view component manufacturing as a 'sector of choice'



3. Racial diversity in the South African automotive component supply base



Focus group participants noted three emerging trends relating to racial diversity. Firstly, several NAACAM members noted challenges pertaining to the creation of new employment opportunities in the component supply base. NAACAM members made mention of the fact that the automotive components sector is categorised by an embedded, aging workforce, where employees are most likely to leave an organisation only upon their retirement (and not to move on to their next employment opportunity) – participants felt that this constrained their ability to hire people of colour to populate these roles.

Additionally, it is important to note that the automotive component sector operates in a cyclical nature, as OEM purchasing cycles span seven to eight years, and recruitment follows this cycle, thus there are large portions of time where component suppliers are unable to advertise and fill new positions.

One Managing Director noted that the component suppliers are under constant pressure from their OEM customers to control costs across their business operations³, and often resort to production and logistics performance improvement interventions; localisation of components to contain exchange rate exposure and minimise global logistics costs; and generally, reduce overall operating costs. He noted that remuneration is often the largest portion of overall operating costs, and as a mitigation strategy, component suppliers in a post-COVID environment are beginning to merge or consolidate job functions with existing employees, and the implication is that fewer entry-level positions exist to be filled by people of colour. Participants also noted that highly skilled people of colour often do not select the automotive sector as their first choice of employment. HR Managers posited that this may be attributed to the lack of knowledge on the available opportunities in the sector as well as a clear indication of career path mapping for new entrants. They also noted that 'high potential' people of colour were often headhunted during their tertiary education studies and often choose to join management consulting teams which offer more 'attractive' perks and benefits.

The focus groups also noted that the Apartheid-era education systems still have a lasting impact in the current environment. A participant noted that historically, people of colour did not have access to a 'level playing field' in the acquisition of their basic education, as they were forced to attend schools which were under-resourced, and which did not deliver robust teaching and learning outcomes in science, engineering and mathematics subjects. The participant suggested that when these candidates apply for positions such as apprenticeships, they often do not meet the minimum functionality requirements and will often require additional support and resources to upgrade their numeracy and problem-solving skills.

³ Automotive component suppliers are often expected to deliver an annual price decrease on the component which the supply to an OEM customer. The rationale is that the supplier should be participating in 'kaizen' or continuous improvement activities, and thereby reducing the cost of production over the life span of a vehicle model.

4. The participation of people with disabilities in the South African automotive component supply base

The physical layout of automotive component manufacturing plants presents an array of occupational health and safety risks for shopfloor staff, and these risks are amplified for people with disabilities. It is for this reason that most participants reported the greatest concentration of people with disabilities to be working in clerical and other 'deskbound' jobs.

The participants did acknowledge that employers should not address the requirements of people with disabilities in the same way – it is important that employers understand the nature of a person's disability and develop an individualised professional development plan to incorporate the person into a typical production environment. One participant commented that they have had success in utilising people with disabilities in a production environment. The example provided was that of a person that is hard of hearing, or deaf – whilst they may not be able to work on a production line, or in logistics, they are in fact well-placed to work on end-stage quality control and

inspection.

Suppliers also commented that increased digitalisation on the shopfloor presents an opportunity to include more people with disabilities into manufacturing operations, however, they acknowledged that significant investment will be required to support the individual's technical skills upgrading.



5. The participation of youth in the South African automotive component supply base

In South Africa, "youth" is defined a person between 18 and 35 years old. NAACAM's Q2 2021 survey of its members found that the current participation rate of youth in the automotive component sector is 33.8%.

There was consensus across the focus groups that an embedded 'aging' workforce in the sector creates a significant barrier to the entry of young people, however one Managing Director noted that in his organisation, young people often bring an injection of mental agility and new approaches to problem solving, which can actually result in young people 'overshooting' the knowledge and value addition provided by older workers.

The focus groups did find agreement that whilst older workers need to 'create spaces' for new entrants, it was critical that employers provide an appropriate platform or intervention for older employees to share their guidance and knowledge with new entrants. Participants noted that this approach can yield good outcomes for succession planning and promote the overall sustainability of the company. Many participants also commented that whilst they are keen to increase the participation of youth in their organisations, they acknowledged that this would require long-term, active planning and significant investment robust talent management interventions. Several participants were firmly of the view that the acceleration of youth participation does not happen 'organically', but instead requires mindful planning, which sometimes required the acquisition of external resources to ensure success and impact.



6. Recommendations

NAACAM member com-6.1. panies appear aligned in their view that new entrants to the automotive component sector require a proficiency in technical skills to compete with employees in lowcost manufacturing destinations. Whilst individual component suppliers may 'top up' new employees on knowledge areas relevant to the specific production requirements of the supplier, it is imperative that TVET colleges are supporting the developing of robust inter-disciplinary technical skills which have relevance across several automotive component sub-sectors.

At present, High Gear is developing industry led TVET curriculum content and capacitating lecturers to deliver the content in a more compelling manner, so that learners are best-placed to acquire a number of related automotive component manufacturing skills, which will dramatically increase their ability to access high quality career opportunities. 6.2. For the automotive component manufacturing sector to successfully attract and retain women in the sector, it is imperative that relevant and engaging career guidance content is broadly available to females wanting to enter the sector.

Through High Gear's digital career experience platform, Yakh'iFUTURE, curated content from NAACAM members will be housed on a zero-rated digital platform to profile young women in the sector and share their journeys and professional development. Ultimately the platform seeks to position the automotive component sector as a 'first choice' sector for female job seekers.

6.3. Whilst several recruitment websites and databases exist, the challenge is that many of them do not present a sectoral focus – this presents two specific challenges. Firstly, young people of colour that have already decided to pursue a career in the automotive sector are unlikely to seamlessly identify vacancies in the sector. But secondly, and of greater concern, is that young people of colour who have never considered a career in the automotive sector would not be able to decipher the exact requirements for the job and are unlikely to apply.

Yakh'iFUTURE seeks to moderate these outcomes on a variety of dimensions. Firstly, the platform will explicitly profile people of colour that have accelerated their career in the sector and clearly articulate how they were able to successfully acquire the requisite skills to progress their development in the sector. Secondly, the platform will also clearly map-out career development paths or trajectories for a variety of disciplines in the automotive component sub-sector.



The hope is that by showcasing success stories of previously disadvantaged individuals, other young people of colour could be motivated to seek our similar outcomes for themselves.

Lastly, the platform will also include 'mini' games which seek to support the user to develop their skills 'gaps'- by doing so, users may become more proficient in critical skills which they previously were unable to develop.

6.4. It is important that the skills development ecosystem in South Africa reviews the current modalities of training delivery and ensure that the appropriate amendments are included to ensure learning tools and platforms are more inclusive of people with disabilities.

A key deliverable of High Gear is to build and distribute lecturer toolkits and lesson plans, which are to be deployed across TVET colleges in the country. These toolkits include new tools and technologies which are currently being utilised in the components sector. These toolkits, however, still pose a challenge for people with disabilities. It is important that this learning content is digitalised to ensure greater ease of access for all young people.

High Gear report



About NAACAM - NAACAM is recognised as the voice of the South African automotive component industry both domestically and internationally. As a member-driven organisation, NAACAM is at the forefront of industry leadership, representation and stakeholder engagement for automotive component manufacturers. NAACAM devotes many resources towards positively impacting the localisation, transformation and supplier development environment in South Africa.

To find out more, visit the NAACAM website

Funding Partners

Implementing Partner

National Partners



Michael & Susan Dell









