



# Market Study Africa

Impacts of Covid-19  
Transport Sector | Education &  
Training

**DB Rail Academy**

Supported by  
 **Invest for Jobs**  
Opportunities for Growth in Africa

Implemented by

**giz** Deutsche Gesellschaft  
für Internationale  
Zusammenarbeit (GIZ) GmbH

*Dear Reader,*

Many African countries have been enjoying continuous political stabilisation and high economic growth for several years. However, the COVID-19 pandemic and its economic impacts have put the brakes on this positive trend: millions of jobs are at risk, companies face declining revenues and the threat of insolvency.

The core objective of the Special Initiative on Training and Job Creation of the German Federal Ministry for Economic Cooperation and Development (BMZ) is to create jobs and training opportunities in Africa by promoting sustainable local private investment. During the pandemic, the Special Initiative has been able to respond particularly rapidly to the new challenges and supported companies in order to help ensure business continuity and preserve jobs.

To effectively support companies active in Africa, it is crucial to systematically engage with them on the ground and analyse their wants and challenges during these difficult times. With this High-Level Market Analysis conducted by DB Engineering & Consulting (DB E&C) we gain valuable insights on the needs of the companies in Africa. As the Global Programme of the Special Initiative we are very pleased to have such an experienced partner with an extensive network to conduct this important study.

We would like to express our gratitude to DB E&C, the project leads and managers and look forward to future collaborations with them.

With kind regards,

Thomas Rolf  
Head of the GIZ Global Programme on Training and Job Creation

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# Executive Summary

“COVID-19 pandemic impacted both, positively and negatively. Positively, the development of paperless logistics process in the industry! Negatively, the slower movement of the economy.”

Anonym, Top Manager, Ethiopia

We intended to conduct a study that aimed to support companies in selected African countries<sup>1</sup> coping with the economic and health consequences of the COVID-19 pandemic.

Our strategy to identify measures that may support in maintaining and professionalizing local skills and resources for the supply industry and the transport sector can be summarized as a multi-level approach, in which critical resources and their training needs are matched with existing capacities and international standards and objectives.

This study aims at assessing the support that companies in Africa may need and potentially:

Africa is for European and especially German companies a very attractive region when it comes to manufacturing business lines.

Different countermeasures and mitigating activities will support the companies active in the sector immediately and the countries on the long-term perspective.



Securing job opportunities in the automotive and mobility industry for prospective candidates through digital training measures



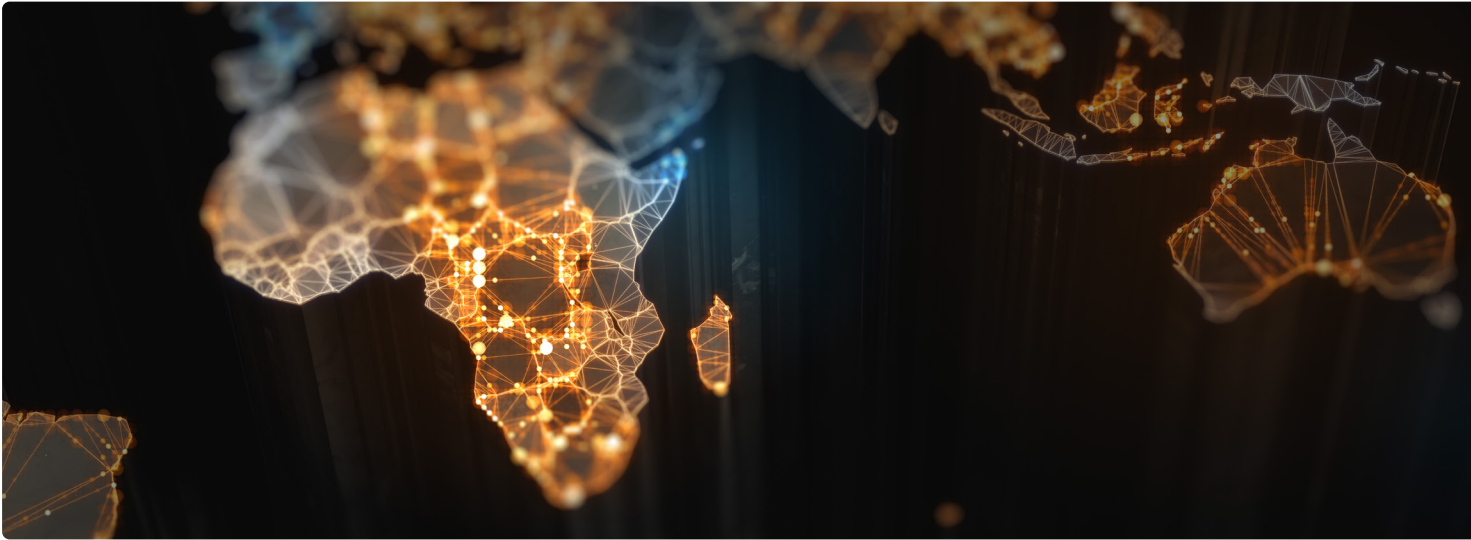
Reducing of economic and health consequences



Increasing of COVID-19 test capacities on site

<sup>1</sup> Focus countries: Côte d'Ivoire, Egypt, Ethiopia, Ghana, Kenya, Morocco, Rwanda, Senegal, South Africa, Tunisia

# Context of the Project



The creation of enough employment and income opportunities is one of the key challenges for Africa's development. Under the Invest for Jobs brand, the German Federal Ministry for Economic Cooperation and Development (BMZ) has put together a package of measures to support German, European and African companies engaging in Africa.

The Special Initiative on Training and Job Creation – the official title – offers comprehensive advice, contacts, and financial support through its implementing organizations to overcome investment barriers. The Special Initiative's development objective is to team up with companies to create up to 100,000 jobs and 30,000 training opportunities, to improve working conditions in its partner countries. Programs are currently in place in the Special Initiative's eight partner countries: Côte d'Ivoire, Egypt (in preparation), Ethiopia, Ghana, Morocco, Rwanda, Senegal, and Tunisia.

During the COVID-19 pandemic, the Special Initiative has been able to respond particularly rapidly and flexibly to the new challenges and help to preserve jobs and investment in Africa. Around 2,700 companies employing more than 119,000 people have so far been supported.

The Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH is one of the Special Initiative's implementing organizations. With the Global Program on Training and Job Creation GIZ helps to mobilize companies and investors for sustainable investments, both in Germany and in the partner countries and to initiate training and job partnerships with them.

The study will provide reliable information on training and retraining needs of companies in focus countries identified by Invest for Jobs. Based on the market analysis, digital training measures are to secure jobs in the automotive and mobility industry and at the same time reduce economic and health impacts. After the identification of basic and acute training topics, online learning formats will be offered and made available to the companies concerned and their employees. In the medium term, the overall level of qualification is to be raised to support the economy after the crisis through productivity gains.

# Scope of the Project



## Objective

The study has two specific objectives: One is to create a foundation with intent to secure job opportunities in the automotive and mobility industry for all those involved through digital training measures and, at the same time, to reduce the economic and health consequences.

The other is to determine the requirements for test capacities to maintain the employees' ability to work. In doing so, the demand coverage rate for test capacities on site will be identified, which will provide information on possibilities for increasing capacities.

## Scope

### Country Frame

The scope of the study is aligned with the interest of Invest for Jobs. The scope of countries was finally defined and agreed upon the first results of the Data Analysis Phase. The selection was strongly depending on the list of

identified companies and organizations located in Africa with focus on the potential number of interviews to be considered as sufficient. Hence, the final frame of countries was defined as follows.

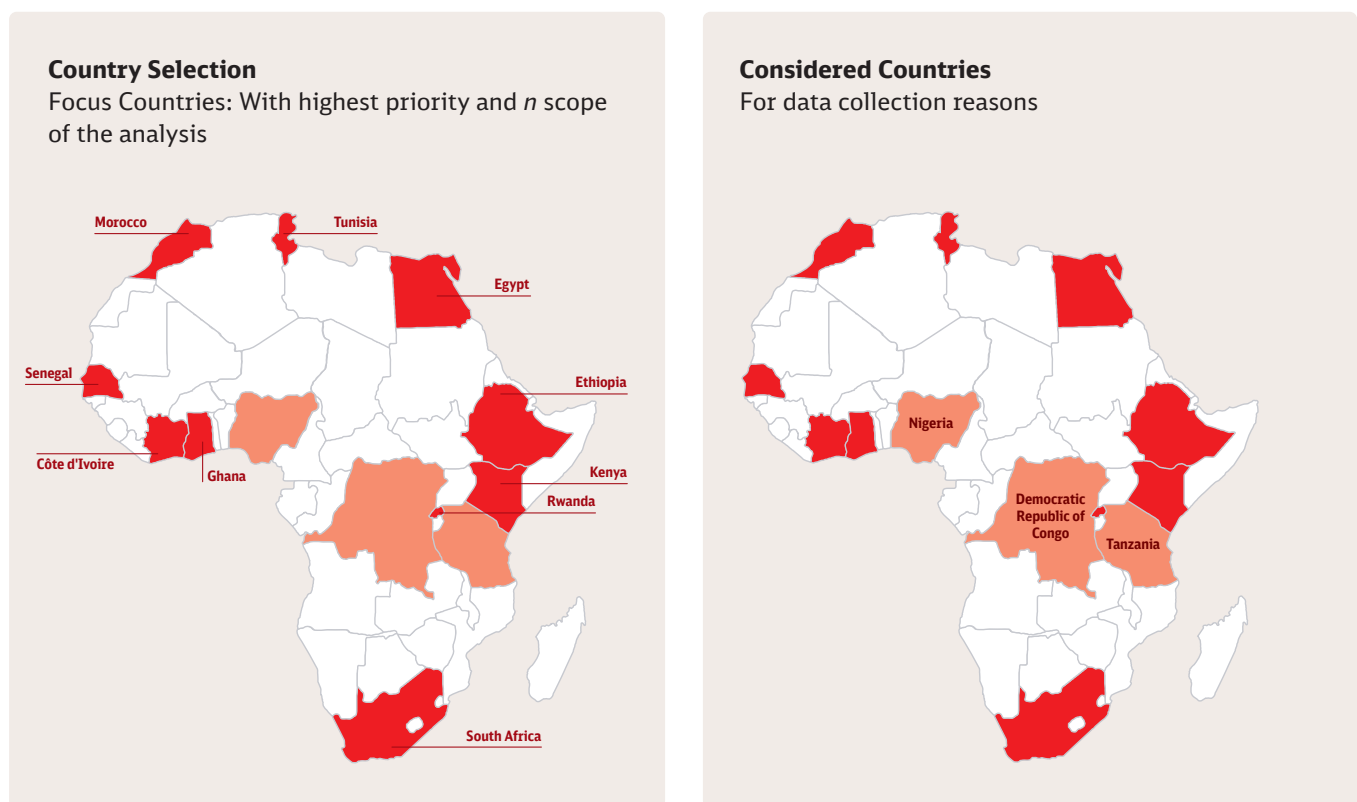


Figure 1: Selection of Countries

### Sector Frame

The scope in terms of business activities of companies located in Africa was already outset in the beginning of the study. The industrial and partially the service sector therefore were in focus: the mobility and transport, automotive and supplier industry as well as affiliated companies such as public organization in relation to transport and mobility as well as governmental institutions.

### Outframe

At the beginning of the study some countries were included as additional interesting markets (see table 1: Scope of Study – Country Selection). During the study, it became clear that the existing project resources had to concentrate more on the core markets to create the highest possible data basis. For this reason, these countries are not considered further in the study<sup>2</sup>.

<sup>2</sup> Democratic Republic of Congo, Nigeria, South Africa, Tanzania



# Scope of the Project

## Timeframe

The study started in October 2020 and was completed by February 2021 (4 months).

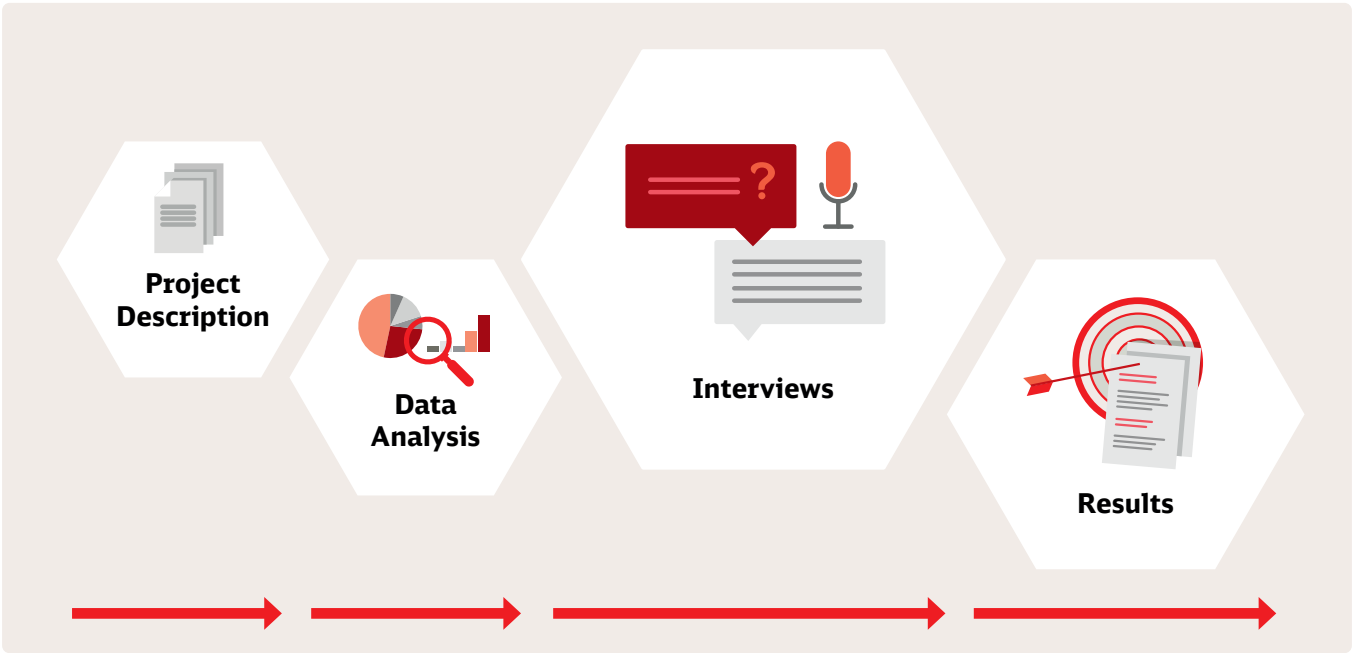


Figure 2: Overview of Project Phases



# Methodology



The systemic analysis is carried out in the three central sequential steps. The basic objective is to obtain a clear and comprehensive picture of the extent of the COVID-19 crisis in Africa's economy, with a focus on the automotive

and mobility sector. To identify the needs and their requirements, the project is divided into three successive phases:

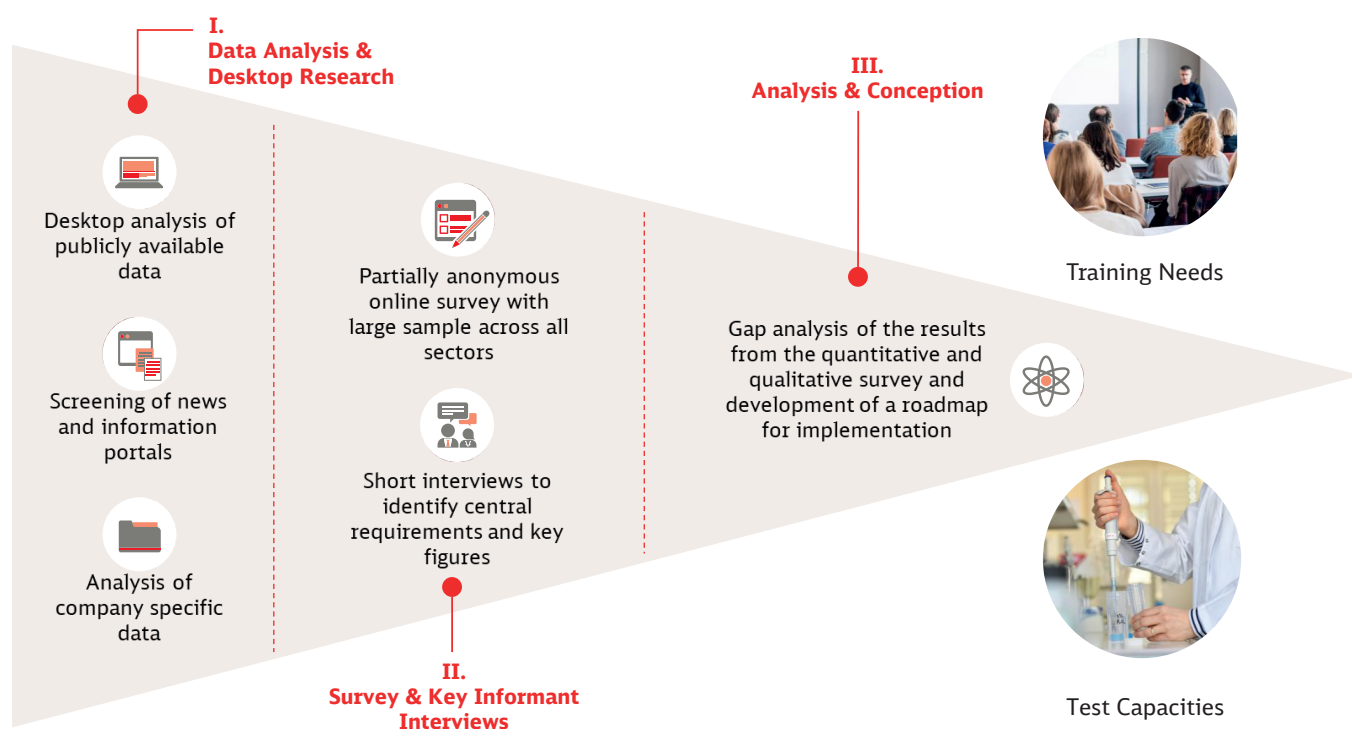


Figure 3: Overview of Project Phases 2

Data Analysis

The first phase is the conduction of a high-level market analysis. The aim of the data analysis is to identify the current state, the status quo, including the existing potentials and challenges in the selected countries. For the analysis, mainly local and publicly accessible information portals were used to create a comprehensive basis about the status

quo. During the data analysis, the objective was to identify potential affected companies, general training needs and challenges in the sector and the status quo of COVID-19 test capacities. The result of this phase is a comprehensive compilation of companies that will be considered for the second phase.

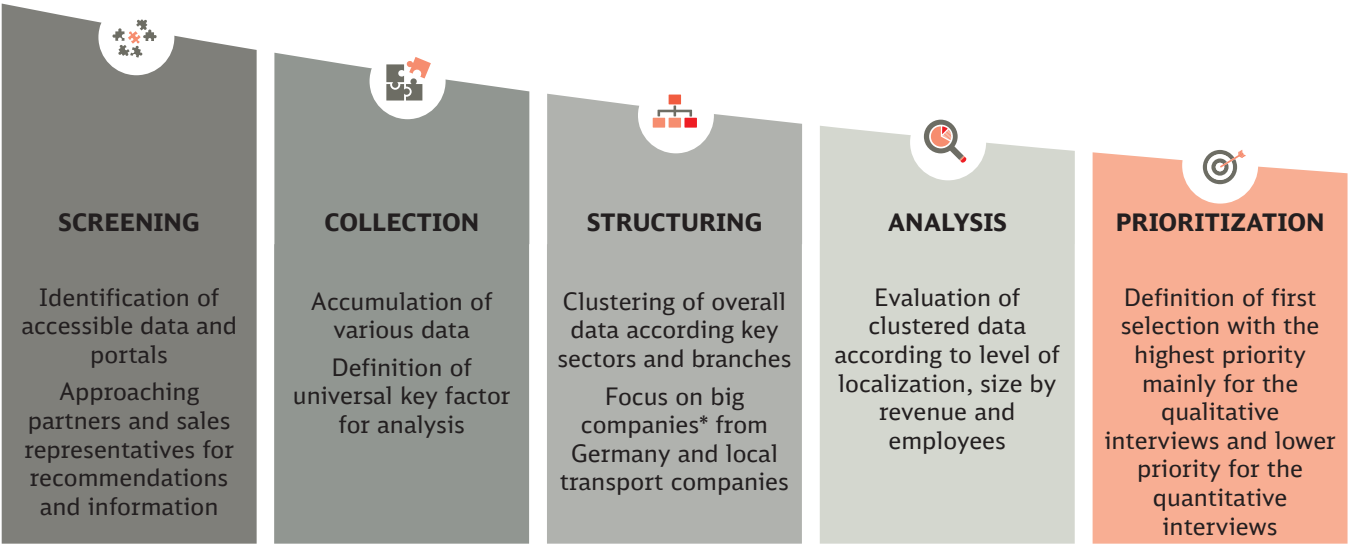


Figure 4: Process of Data Analysis

\* According Eurostat's definition of company size

The data pool is structured by various elements such as Company Structure, Economic Sector and Business Lines as well as ranked by the level of priority (size of employees/ revenue and/or affiliation to German parent com-

pany and/or strategic importance and/or congruence of business). Nevertheless, the data results identified in this stage can be seen as raw data and is not describing the sample frame yet.

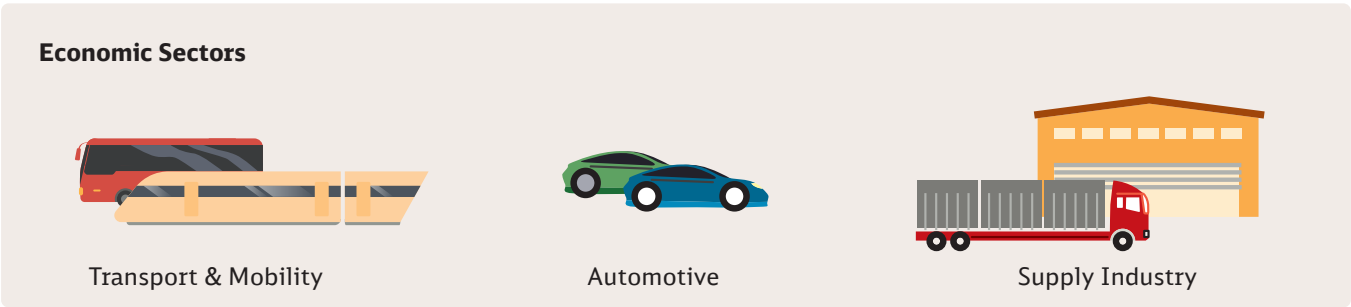


Figure 5: Focus Sectors

## Company List & Sample Size

As basis for defining the sample size for the analysis, a country-specific screening has been conducted with a clear objective of identifying companies active in the automotive, transport and mobility as well as in the supplier industry. It has been done mainly in form of a desk research by screening different publicly accessible data and platforms provided online. A fast way of receiving an overview of companies that have in any kind a specific business relation with an African country, several member lists of German and African non-profit associations have been compiled and reviewed. Additionally, business, and local enterprise platform have been screened. Also, the results of an open search engine investigation have been integrated too.

The output was a raw data consisted of an unfiltered data set of 1,384 companies throughout all sectors and countries in Africa. To understand which companies are fitting into the set requirements (s. table 2 “Structural Elements”), a cleansing of data was conducted through intensive examination of the companies in different waves. In concrete terms, South Africa and Egypt and Kenya enriched the country selection size.

The distribution of companies in the priority countries shows that in Ethiopia and South Africa in particular a strong concentration of interesting companies is to be found while the other countries are far behind these figures.

### Key Facts:

- **55 countries** have been assessed through several source of information (member list of Afrika Verein, German Chambers of Commerce Abroad, Local Industry Associations and other associations, internal data platform, online research, recommendation from business partners)
- **508 companies** active in the focus sector (automotive, supply industry and transport & mobility) are identified in Africa
- Only **455 companies** are considered for the analysis whilst **325 companies** will be approached for the surveys and interviews

### By Sector and Country

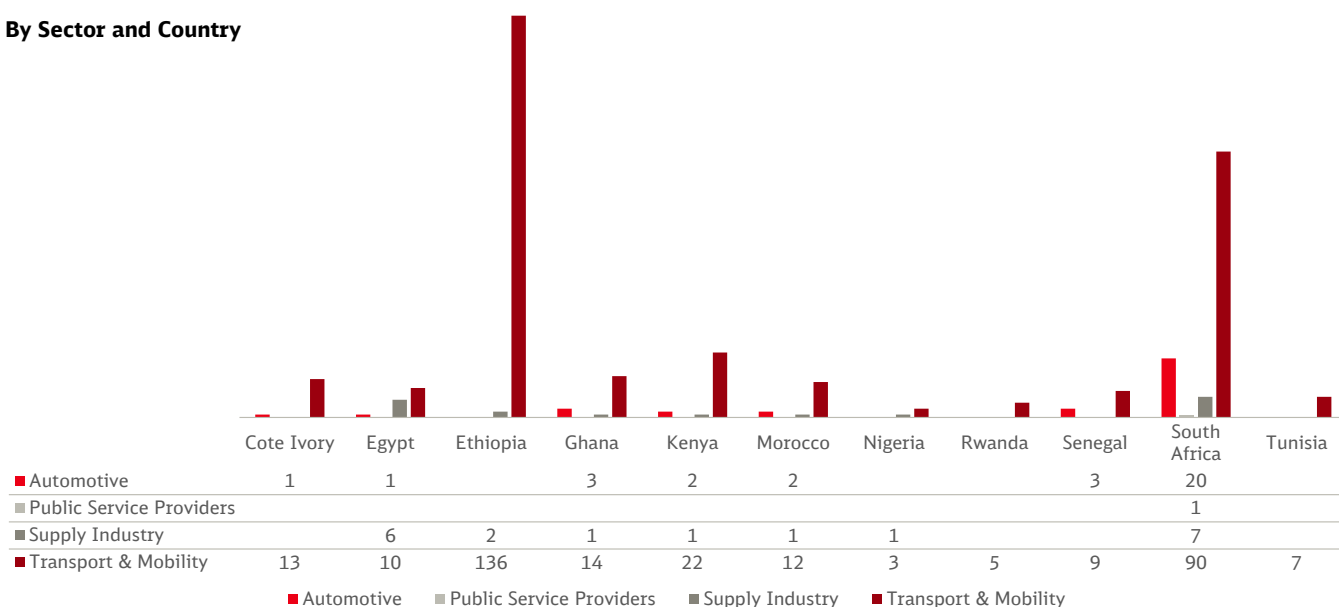


Figure 6: Number of Companies by Sector and Country

By Business Structure

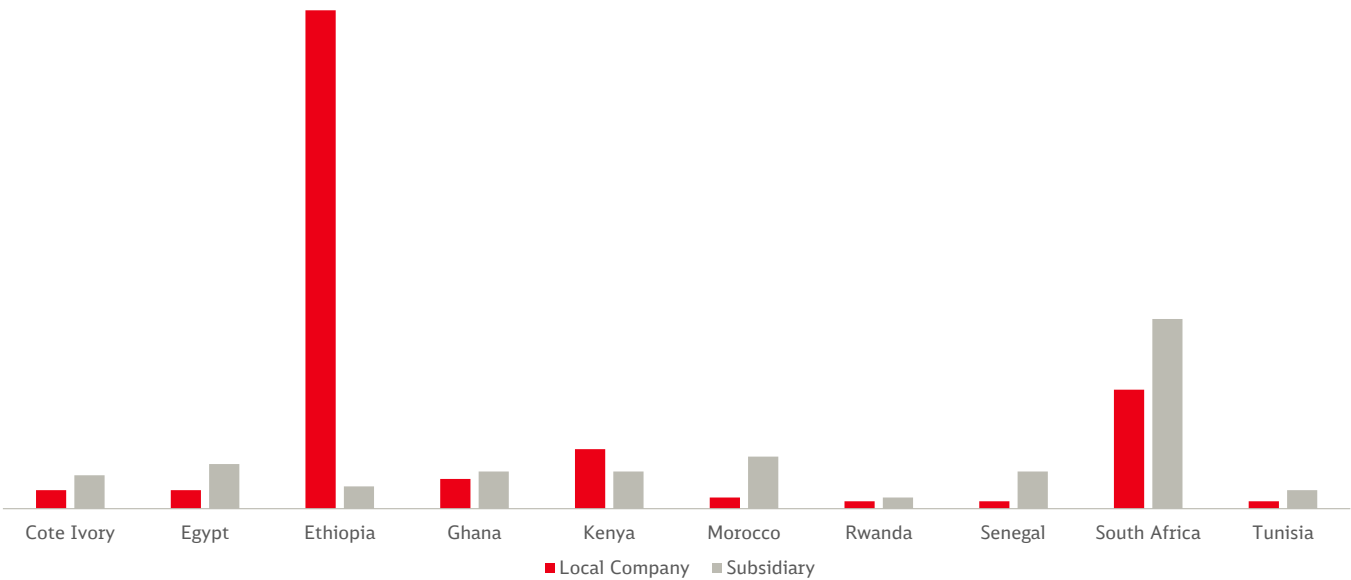


Figure 7: Number of Companies by Level of Localization and Country

The reasons for the high condensation could be that especially in South Africa many automotive manufacturers are located which causes the necessity of transport service providers and component manufacturers. South Africa has a strategically important location in the assembly of vehicles and can be understood as logistic hub for international supply and production chain. Large vehicle brands such as Daimler, BMW and Volkswagen and their affiliated companies having production sites in South Africa. Ethiopia for instance acts as hub for the East African Region with its direct connection to Djibouti as the most important port in

this region. The economy has so far been dominated by agriculture, and its most important export is currently coffee. Especially in the southern part of Ethiopia, the production and extraction of raw materials is located. The transportation of the goods is mainly done by road and trucking companies due to the underdeveloped railway network that is currently not serving the full demands of transport volumes existing in the country. Therefore, a high number of logistic service providers with transport routes to Djibouti can be found in Ethiopia. A detailed overview of companies distributed per sector are to be found in the Appendix.

## Quantitative Online Survey

The questionnaire was created within a privacy-compliant, DB-internal survey tool, Lime Survey, and distributed widely to the identified companies. It is structured dynamically by using a skip logic that redirects respondents to another question based on the answers. It allows to show or hide questions that are not applicable for the respondent. The type of questions were mainly predefined answer options by using dropdown lists and Multiple-Choice Answers to ensure the comparability of answers and to avoid a cancellation of participation. The duration for filling out the survey was planned with an average duration of 15 minutes. Before the official publication and distribution, an internal pilot test of two weeks has been taking place which included the feedback from directors and line managers, HR managers and admins, recruitment and training experts, business development managers within DB Engineering & Consulting (DB E&C). The pilot aimed to identify potential areas of adjustments that included the detailed individual feedback per question cluster on:

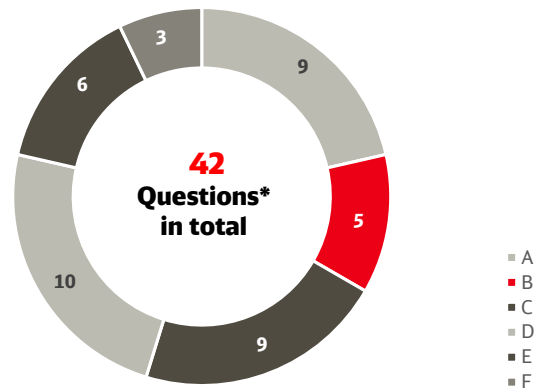


Figure 8: Interview Structure - Quantitative

- Comprehensiveness of the questions
- Clarity of questions
- Simplicity of answering
- Length and duration of answering
- Individual comments and recommendations

## Key Informant Interviews

In addition to the online survey, key expert interviews with an average duration of 45 minutes have been conducted with the aim of specifying the respective needs, but also to understand the extent of the COVID-19 crisis within the individual company. Based on a qualitatively oriented guideline-supported telephone interview, decision-makers and experts from the human resources, production and technical departments of companies and organizations identified in the data analysis phase were specifically interviewed. The questionnaire is based on the Online Survey and utilizes many questions and answer options, so that a comparability and congruency of data is ensured. The type of questions though are mainly open questions to receive a more detailed input and to make the participant reveal more information, directly, indirectly and latently.

The questionnaire is a guideline – the interviewer shall create an atmosphere for an open conversation and dialogue, taking notes. The interviews have been conducted by two persons from the study team: one is leading the interview

and the other taking notes. For the data collection, the same survey tool that has been used for the quantitative one, applied here in order to generate a comprehensive overview of all results. For this, the questionnaire was implemented in Lime Survey as well and was filled in by the second interviewer during the interview.

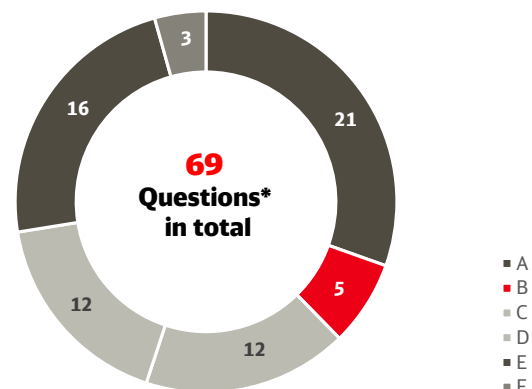


Figure 9: Interview Structure - Qualitative

Analysis & Concept

The true value of any survey data is not realized until the data are analyzed. This phase mainly involved the data analyses and the results compilation. The data are analyzed in a manner of encompassing a very simple summary statistics to more complex multivariate analyses. Virtually every survey, no matter how carefully planned and executed, will have some outlier observations. In this research, there were only a small number of such cases which were excluded. Certain variables covered in the survey are calculated based on the values of a large number of variables. To facilitate the conduct of followon surveys, the study team documented the entire process by which the raw data are transformed into tables and graphs. In this stage, tables and graphs have been prepared that provide basic information about variables of interest using simple descriptive statistics.

The study team conducted multivariate methods that go beyond simple summaries. The purpose of such methods is to deal with the simultaneous treatment of several variables concerning the collective study of a group of outcome variables. These analyses included crosstabulations. In many cases, the answers varied among the various countries and sectors. Therefore, testing for significant differences for the various variables between countries and sectors was applied. This was mainly achieved through double-difference or difference-in-differences methods.

Resulting from this, the different types of needs specific measures have been derived, further structured, and detailed by ranking them according to urgency, production model and service provision timeframe as well as the complexity of the measure’s implementation. With this result, an architecture of measures has been developed that will serve as basis for creating a roadmap on how these needs can be met sustainably and in different time horizons.

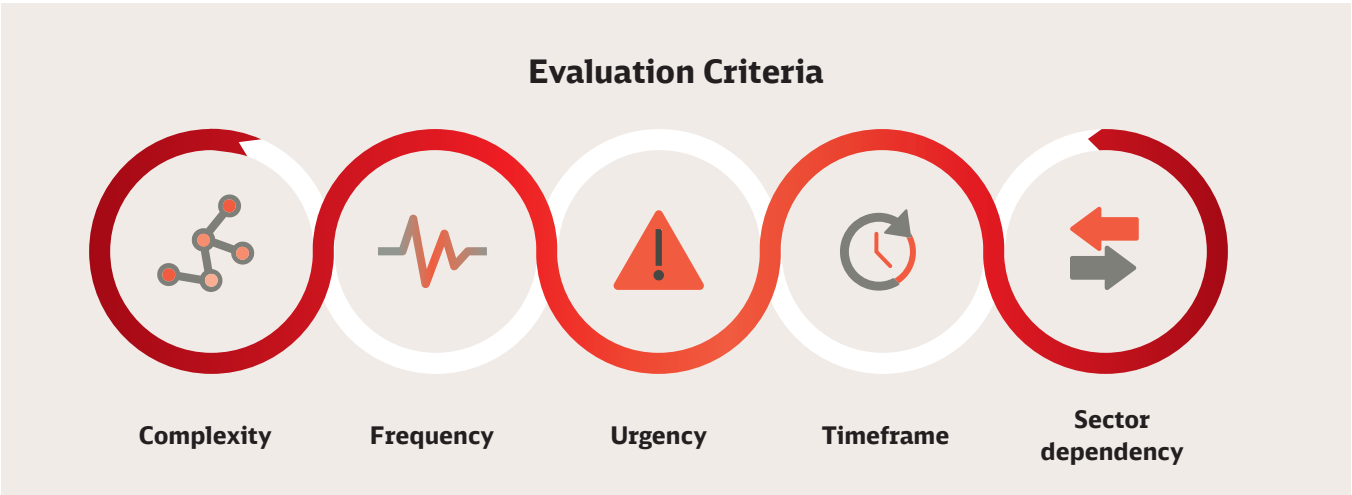


Figure 10: Evaluation Criteria



# Current Studies and background



Since the beginning of the pandemic a number of studies have been done with the intention to develop a better understanding of the impact of this new virus on the economies worldwide.

One of the first relevant studies that has been published was initiated by the German Chambers of Commerce Abroad in Ghana and published in May 2020, when it was still the common understanding that the middle of the pandemic was reached. The study sheds a light on the situation of German and French Companies in Ghana specifically and found that while investments were halted in most companies, there was no immediate reduction in the workforce. In June 2020 Deloitte published its Global Human Capital Trends Report with a specific contextualization of the results regarding COVID-19. While this report is more focusing on the industrialized countries and looking at high tech solutions, it understands the crisis as an accelerator of the already ongoing changes, which also bears true to the areas the study team has been looking at.

The most recent reports have been done by the International Labor Organization (ILO), which have been published by the end of 2020 to early 2021. Two of those studies, “COVID-19, jobs and the future of work in the LDCs” (12/2020) and “Policy Brief - COVID-19 - Tackling the jobs crisis in the Least Developed Countries” (01/2021), are looking at the situation in the least developed countries (LDCs) specifically. They are confirming the intuition that due to the non-existent financial basis especially in informal job sectors, the economic impact on the LDCs is specifically hard and not recoverable without outside support.



## Current Studies and background

Two others are examining the skills development sector, “Skills development in the time of COVID-19” (01/2021), and the passenger transport sector, “Sectoral Brief - COVID-19 and Urban Passenger Transport Services” (09/2020), respectively. The first report finds the main challenge to the skills development being the difficulty of safely conducting in person trainings while at the same time the digital alternatives are not sufficiently available.

The second report sees the significant drop in passengers as a major problem not only for the sector itself, but also to the economy in general, as workers are not able to get to their workplaces. As both studies are rather looking at industrialized countries, the results are not directly applicable to all African markets.

## Roadmap Mitigation & Countermeasures



Figure 11: Roadmap Mitigation & Countermeasures

The results of the surveys clearly show that there is an apparent negative effect on the business activities of transport, mobility and supplier companies in the selected African countries caused by the COVID-19 pandemic and its accompanying health restrictions. The main drivers for the negative impact are travel bans internationally and regionally, the decrease of purchasing power worldwide and transport volumes that increased the service fees and the competition within the sector as well as production stops. As a result, almost all companies surveyed experienced a decline in sales and revenues that again leads to substantial cost savings and headcount reductions. Nevertheless, some companies that experienced a positive impact on their business managed to identify new business opportunities and expanded the transportation of new product lines to overcome the negative effects on the existing business activities.

When it comes to workforce related impacts, almost all companies stopped recruitment activities related to workforce expansion and hired new employees mainly for the operation and sales department and only in case of replacements or performance issues. However, given the fact that the retention rate for some companies was higher before the outbreak, the rate dropped during the pandemic that can be linked to termination of labor contracts. Though the number of layoffs did not exceed 10% of the total headcount, the most affected departments were in sales, human resources and finance which is directly linked to the overall decrease of business activities. The decision of what job titles and profiles are to be reduced were taken by the level of experiences and age mainly. Especially junior and senior leveled personnel were mostly considered of contract cancellations while managerial staff kept remaining their positions. It can be positively mentioned that the majority

of the companies that faced headcount reductions due to business needs, consider retaining of these employees, particularly in light of the fact that adequate and skilled labor resources are generally lacking in the countries. The shortage of potential staff is not due to the lack of available manpower, but to the unavailability of qualification offers so that the companies have own customized solutions according to their business needs. Coming to the required skills, the pandemic did not significantly change the skillset needed and the before the outbreak existing training needs are the same whereby capacity building of current employees would support fulfilling the new requirements resulting from the pandemic such as new virtual working environment.

Competences identified as currently required are to be assigned to the area of operation and processes, management, leadership and intrapersonal skills, quality, and safety as well as innovation and digitalization as well as technical and IT-system trainings. Not important overall for the sector are competencies in the area of maintenance which can be explained that the rolling stock needed for especially road transportation are maintained externally and not through internal employees. The importance of the competences and training deployment is that there must be a clear link to the working environment and the actual tasks, and that added value is created to increase the overall turnover rate. Therefore, practical trainings where the utilization of knowledge can be applied are of highest priority. By consideration of hygienic regulations, lockdowns and poor equipment of operational working staff that are mainly blue-collar workers, on-the-job training the most probable way of teaching method. Thus, online learning solutions that requires equipment and a stable internet connectivity are the less preferred learning methods while classroom and theoretical learning methods are to be considered further.

Skillsets arising through the pandemic are abilities to cope with changes in working styles such as digital work environment, abilities in using IT software and tools, strengthening individual's resilience by focusing emotional and physical wellbeing, marketing, and management related skills. Though the employees possess mainly these competences already, the available budget for structured and comprehensive capacity building is not reliably planned annually that strongly depends on the revenues and economic situation of the company.

In terms of PCR-Tests, the majority of the companies have the opportunity to administer the tests but due to country specific regulations stated by the ministries of health, an autonomous takeover the tests itself is restricted. By meaning of administration is the creating a framework and process that ensures the adequate reaction and decision based on risk groups (such as drivers) and test results. The testing itself are governed by the ministry of health or by recognized private laboratories. The costs for the tests are mainly burden by the individual itself and in some cases, the company takes over but naturally the tests are not funded and provided free of charge. It can be concluded that the numbers of infections are therefore not reliable due to unaffordability of testing as well the disbelief in the existence of the virus itself.

Following the summary of the key findings, the following measures and activities are recommended in order to mitigate the impacts of COVID-19 but also tackle challenges in the sector that has been relevant even before the pandemic.

The implementation of the different measures is structured and prioritized based on the urgency and necessity of the respective measure (see chapter 4.3) and can be detailed seen on the following page. Based on the different ratings, the final score gives a recommendation of which measures, and activities should be implemented urgently.

It is important to mention, that the focus in the first place is to provide specific trainings and to organize a cross-sectoral event (score <1,7). Both measures can be deployed either online and for the trainings through pre-recorded sessions with the aim of upskill and exchange on knowledge and experience. Additionally, the costs can be expected as low due to the low complexity of implementation. On the mid-term perspective (score 1,8 – 2,2), the general professionalization of the companies itself should be target that will go in line with a country wide implementation of sufficient qualification structures to both, educate the strong workforce in the market and to improve the companies' activities economy with qualified workers that will end in an increase of the overall country economy's turnover. On the long run (score >2,3) strategic alliances and hub creations shall be focused that as well will connect countries into regions and will support especially those countries, who are lagging behind in general.

# Conclusion and Challenges



This high-level market study has been conducted in the middle of the pandemic where countries and companies have already suffered under the several restrictions implemented. It shows that the pandemic had and still has a noticeable negative impact on the economy. Multinational and large enterprises can overcome the challenges easier than smaller companies. The global drop in demand is influencing the economies in African countries: closing of production led to a decrease of transport volumes which caused extreme variations in prices and small margins. Nevertheless, the majority of the interviewed companies did not terminate employments, but a further lockdown of global business may change this situation. The biggest impact of COVID-19 is not only in transportation and production, it is also found in the working environment and the wellbeing of the workforce. New and comprehensive hygienic rules and processes, remote work required an adjustment of the workforce of the companies as well as from the management itself. Almost all countries are affected heavily such as South

Africa or at least affected significantly while other countries and their economy are still in a stable operation such as in Ethiopia. We can assume that if the pandemic continues and restrictions are imposed, the situation in Africa as a whole will deteriorate drastically. Companies that have so far been able to avoid massive staff reductions will gradually lay off personnel. The already few job opportunities in the African countries will be further worsened by the self-preservation measures of beleaguered companies. Short-term qualification measures can contribute to the fact that the local enterprises are rather willing to keep the personnel longer and to emerge from the crisis strengthened. However, a major challenge is the disbelief among the population that the virus exists. Accompanying awareness campaigns need to penetrate especially vulnerable areas and societies to prevent further deterioration of the overall economic and social situation. Easy and free access to test kits can help create a valid database to quantify the true extent.

## Acknowledgments

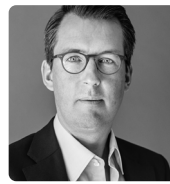
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## About DB Rail Academy

DB Rail Academy is the international training provider of DB E.C.O. Group that serves the global rail and transport sector with high quality, holistic training solutions based on over 185 years of successful transport and mobility business with Deutsche Bahn. DB Rail Academy offers a wide range of trainings and consulting services from idea to operation.

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