

Driving Simulator Market by Application (Training and Research & Testing), Vehicle Type (Car Simulator and Truck & Bus Simulator), Simulator Type(Training Simulator and Advanced Driving Simulator), Training Simulator Type(Compact Simulator and Full-Scale Simulator), End User, Region - Forecast to 2025

https://marketpublishers.com/r/DAA4F65CF17EN.html

Date: January 2021 Pages: 221 Price: US\$ 4,950.00 (Single User License) ID: DAA4F65CF17EN

## **Abstracts**

The global driving simulator marketis projected to grow at a CAGR of 7.2% from USD 1.5 billion in 2020 to USD 2.1 billion by 2025. Increasing demand of skilled drivers due to high road accident rate, growing airtraffics, upcoming high speed train projects, and significant R&D investments in autonomous vehicles will be driving the demand for driving simulators.

The adoption of driving simulators and analysis technology has experienced an increase in the railways, aviation, marine, defense, and automotive sectors as it helps in testing and analyzing the designs of products in a virtual environment. Leading automotive companies, such as Toyota, General Motors, Ford, and Volkswagen, use different types of simulation software like FEA and CFD that help reduce the product design time, cost, and time-to-market. Airports of the European and Asian regions have incorporated airside driving simulators for handling ground operations. For example, Delhi International airport invested in Tecknotrove's TecknoSIM airport driving simulators for training and testing its operators on the airside in 2019. Moreover, increasing stringency of safety and environmental regulations has compelled manufacturers and authorities to invest in driving simulators with innovate designs for training. Additionally, electrification of automotive components, advent of semi-autonomous and autonomous vehicles, and increasing influence of technology companies in the automotive industry are growth factors for the driving simulator



#### market.

The demand for training and testing simulators depends on adoption of technologies in commercial vehicles, rails, airports; stringent safety regulations; encouragement by governments to install training simulators in driving schools; and released jobs for skilled drivers. The impact of the COVID-19 pandemic on industries like automotive, aviation, and railways is expected to affect the global driving simulators market as well. Driving simulators market for professional training are backed by players like ECA Group, Cruden B.V, Corys, Transurb, Tecknotrove, SHRail, and Cassidian. These companies have also been undergoing production halts during lockdowns. For instance, in the context of the COVID-19 crisis, the ECA Group limited its manufacturing activities within its sites to preserve the health and safety of its employees. The company has undertaken the remote work policy for multiple projects to further maintain its revenue in the coming days.

"The truck & bus Simulator segment is expected to be the fastest segment in the forecast."

Truck simulators are used in assisting drivers in enhancing driving skills and performing loading/unloading of materials accurately and within an optimum time limit. Truck simulators consist of a fully functional pneumatic driver seat with all typical controls—a seat belt, pedals, and a fully adjustable (height and tilt) steering column with integrated flashers and hand brake. Various truck models with diverse transmission configurations are provided in such simulators. In truck simulators, braking plays a significant role.

One of the most important modes of urban passenger transportation worldwide is buses. Mostly used for short and medium distances, buses are designed to have a capacity of as high as 300 passengers, making driver training essential. Bus simulators have training and testing applications. For instance, Tecknotrove's bus driving simulator, TecknoSIM, is a replication of a real bus with vehicle controls like steering wheel, gear, brake, clutch, pedals, indicators, and switches. It is an advanced tool for testing and training drives for various types of buses like minibus, passenger bus, electric bus, mini coach, and school bus. TecknoSIM provides basic and advanced driving skills in emergency scenarios.

"Adavanced driving simulatorsegment is expected to be the largest and the fastestgrowing end user segment in the forecast period."

Advanced simulators are the most immersive type of simulators. They encompass the



entire structure of a real vehicle. These are manufactured in a dome shape and provide a 360° view for driving. The dome is assembled on a motion platform with a high degree of freedom—up to 9 degrees. Many OEMs like Ford, Daimler, Toyota, Honda, and BMW have installed advanced driving simulators for R&D purposes. For instance, in 2018, BMW announced an investment of EUR 100 million in a driving simulator center in Munich, Germany. The project is estimated to be completed by 2020. Urban driving is a major hurdle in the context of autonomous vehicles that can be tested with the help of advanced driving simulators.

End users for the advanced driving simulator include vehicle manufacturing companies that conduct testing for advanced vehicle dynamics like acceleration, braking, steering, and aerodynamics. Mostly researchers and engineers analyze high-tech vehicles, safety features, and studies of driver's behavior in adverse conditions using advanced simulators.

In-depth interviews were conducted with CEOs, marketing directors, other innovation and technology directors, and executives from various key organizations operating in this market.

By Company Type: Tier I - 55%, Tier II - 13%, and OEMs - 32%

By Designation: CXOs - 23%, Director Level - 47%, and Others - 30%

By Region: North America - 31%, Europe - 33%, Asia Pacific - 28%, and RoW – 8%

The driving simulator market comprises major companies such as Cruden B.V. (Netherlands), Cassidian (Germany), ECA Group (France), Tecknotrove Simulator System Pvt. Ltd (India), and Adacel Technologies (Australia).

#### **Research Coverage:**

The study covers the driving simulator market size and future growth potential across different segments such as by application, vehicle type, simulator type, training driving simulator type, end user, and region. The study also includes an in-depth competitive analysis of the key players in the market, along with their company profiles, key observations related to product and business offerings, recent developments, and key market strategies.



#### Key Benefits of Buying the Report:

The report will help market leaders/new entrants in this market with information on the closest approximations of revenue numbers for the overall driving simulator market and its subsegments.

This report will help stakeholders understand the competitive landscape and gain more insights to better position their businesses and plan suitable go-tomarket strategies.

The report also helps stakeholders understand the pulse of the market and provides them information on key market drivers, restraints, challenges, and opportunities.





## **Contents**

#### **1 INTRODUCTION**

1.1 OBJECTIVES OF THE STUDY
1.2 MARKET DEFINITION

1.2.1 INCLUSIONS & EXCLUSIONS

TABLE 1 INCLUSIONS & EXCLUSIONS FOR DRIVING SIMULATOR MARKET
1.3 MARKET SCOPE
FIGURE 1 DRIVING SIMULATOR MARKET: MARKET SEGMENTATION

1.3.1 YEARS CONSIDERED FOR THE STUDY

1.4 PACKAGE SIZE

1.5 LIMITATIONS
1.6 STAKEHOLDERS

1.7 SUMMARY OF CHANGES

#### 2 RESEARCH METHODOLOGY

- 2.1 RESEARCH DATA
- FIGURE 2 RESEARCH DESIGN
- FIGURE 3 RESEARCH METHODOLOGY MODEL
  - 2.1.1 SECONDARY DATA
  - 2.1.1.1 List of key secondary sources
  - 2.1.1.2 Key data from secondary sources
  - 2.1.2 PRIMARY DATA

FIGURE 4 BREAKDOWN OF PRIMARY INTERVIEWS: BY COMPANY TYPE, DESIGNATION, & REGION

- 2.1.2.1 List of primary participants
- 2.2 MARKET ESTIMATION METHODOLOGY

FIGURE 5 RESEARCH METHODOLOGY: HYPOTHESIS BUILDING

- 2.2.1 TOP-DOWN APPROACH
- FIGURE 6 MARKET SIZE ESTIMATION METHODOLOGY FOR DRIVING SIMULATOR MARKET: TOP-DOWN APPROACH

FIGURE 7 MARKET SIZE ESTIMATION METHODOLOGY FOR DRIVING SIMULATOR MARKET FOR PROFESSIONAL TRAINING: TOP-DOWN APPROACH FIGURE 8 DRIVING SIMULATOR MARKET FOR PROFESSIONAL TRAINING: RESEARCH DESIGN & METHODOLOGY FIGURE 9 DRIVING SIMULATOR MARKET FOR PROFESSIONAL TRAINING:

RESEARCH METHODOLOGY ILLUSTRATION OF ADACEL REVENUE ESTIMATION



2.2.2 FACTOR ANALYSIS FOR MARKET SIZING: DEMAND AND SUPPLY SIDE 2.3 DATA TRIANGULATION

FIGURE 10 DATA TRIANGULATION METHODOLOGY

2.4 FACTOR ANALYSIS

2.5 RESEARCH ASSUMPTIONS

2.6 RESEARCH LIMITATIONS

## **3 EXECUTIVE SUMMARY**

FIGURE 11 DRIVING SIMULATOR FOR PROFESSIONAL TRAINING: MARKET OUTLOOK FIGURE 12 DRIVING SIMULATOR: MARKET OUTLOOK FIGURE 13 DRIVING SIMULATOR MARKET: MARKET DYNAMICS FIGURE 14 DRIVING SIMULATOR MARKET, BY PROFESSIONAL TRAINING APPLICATION, 2020 VS. 2025 (USD MILLION) FIGURE 15 DRIVING SIMULATOR MARKET, BY END USER, 2020 VS. 2025 (USD MILLION) 3.1 COVID-19 IMPACT ON DRIVING SIMULATOR MARKET FOR PROFESSIONAL TRAINING

3.2 COVID-19 IMPACT ON DRIVING SIMULATOR MARKET

## **4 PREMIUM INSIGHTS**

4.1 DRIVING SIMULATOR MARKET TO GROW AT A SIGNIFICANT RATE DURING THE FORECAST PERIOD (2020–2025)

FIGURE 16 INCREASING DEMAND FOR SKILLED DRIVERS AND SAFETY NORMS IN VEHICLES LIKELY TO BOOST MARKET GROWTH

4.2 DRIVING SIMULATOR MARKET FOR PROFESSIONAL TRAINING TO GROW AT A SIGNIFICANT RATE DURING THE FORECAST PERIOD (2020–2025)

FIGURE 17 INCREASING DEMAND FOR SKILLED DRIVERS AND SAFETY NORMS IN VEHICLES LIKELY TO BOOST MARKET GROWTH

4.3 EUROPE IS ESTIMATED TO LEAD THE DRIVING SIMULATOR MARKET IN 2020 FIGURE 18 DRIVING SIMULATOR MARKET SHARE, BY REGION, 2020

4.4 GLOBAL DRIVING SIMULATOR MARKET, BY VEHICLE TYPE AND SIMULATOR TYPE

FIGURE 19 CAR SIMULATOR AND ADVANCED DRIVING SIMULATOR ACCOUNT FOR LARGEST SHARES IN 2020

4.5 DRIVING SIMULATOR MARKET, BY END USER

FIGURE 20 ADVANCED DRIVING SIMULATOR ESTIMATED TO HOLD LARGEST



SHARE, 2020 VS. 2025 (USD MILLION) 4.6 DRIVING SIMULATOR MARKET, BY TRAINING DRIVING SIMULATOR FIGURE 21 COMPACT SIMULATOR EXPECTED TO HOLD LARGEST SHARE, 2020 VS. 2025 (USD MILLION) 4.7 DRIVING SIMULATOR MARKET, BY VEHICLE TYPE FIGURE 22 CAR SIMULATOR EXPECTED TO HOLD LARGEST SHARE, 2020 VS. 2025 (USD MILLION) 4.8 DRIVING SIMULATOR MARKET, BY APPLICATION TYPE FIGURE 23 RESEARCH & TESTING ESTIMATED TO HOLD LARGEST MARKET, 2020 VS. 2025 (USD MILLION) 4.9 DRIVING SIMULATOR MARKET FOR PROFESSIONAL TRAINING, BY **APPLICATION** FIGURE 24 TRUCK ESTIMATED TO HOLD LARGEST MARKET, 2020 VS. 2025 (USD MILLION) 4.10 DRIVING SIMULATOR MARKET FOR PROFESSIONAL TRAINING, BY REGION FIGURE 25 EUROPE ESTIMATED TO HOLD LARGEST MARKET, 2020 VS. 2025 (USD MILLION)

#### **5 MARKET OVERVIEW**

5.1 INTRODUCTION

**5.2 MARKET DYNAMICS** 

FIGURE 26 DRIVING SIMULATOR MARKET: MARKET DYNAMICS

5.2.1 DRIVERS

5.2.1.1 Shortage of skilled drivers

FIGURE 27 DRIVING SIMULATOR: SCENARIO BASED TRAINING (SBT) DEVELOPMENT CYCLE

5.2.1.2 Professional training requirement for new locomotive pilots TABLE 2 GLOBAL RAIL PROJECTS TO WATCH IN FUTURE

5.2.1.3 Increasing focus on R&D

TABLE 3 EUROPE: ANNUAL NUMBER OF ROAD ACCIDENT FATALITIES, BY COUNTRY (2012-2016)

FIGURE 28 EUROPE: ROAD ACCIDENT FATALITIES, BY TRANSPORT MODE (2017)

FIGURE 29 EUROPE: ROAD ACCIDENT FATALITIES PER MILLION HABITANTS, BY COUNTRY (2018)

5.2.2 RESTRAINTS

5.2.2.1 Complexities in real-time control

**5.2.3 OPPORTUNITIES** 



5.2.3.1 Growing air traffic and airport projects worldwide TABLE 4 AIRPORT CONSTRUCTION INVESTMENT SUMMARY: CURRENT AND PREDICTED GLOBAL AIRPORT INVESTMENTS (USD MILLION) TABLE 5 CURRENT AND PREDICTED GLOBAL AIRPORT IMPROVEMENT INVESTMENTS (USD MILLIONS)

5.2.3.2 Simulators for police and emergency vehicles

5.2.3.3 Increasing developments in autonomous and semi-autonomous vehicles FIGURE 30 EVOLUTION OF AUTONOMOUS VEHICLES

5.2.4 CHALLENGES

5.2.4.1 Integration complexities

5.2.4.2 Lack of benchmarks and standards

TABLE 6 IMPACT OF MARKET DYNAMICS

5.3 REVENUE SHIFT DRIVING MARKET GROWTH

5.4 REVENUE MISSED: OPPORTUNITIES FOR DRIVING SIMULATOR PROVIDERS

FOR PROFESSIONAL TRAINING

5.5 PORTER'S FIVE FORCES

FIGURE 31 PORTER'S FIVE FORCES: DRIVING SIMULATOR MARKET

5.6 TECHNOLOGY ANALYSIS

5.6.1 INTRODUCTION

5.6.2 HMI (HUMAN-MACHINE INTERFACE)

5.6.3 AI FOR DRIVING SIMULATOR

5.6.4 ADAS (ADVANCED DRIVER ASSISTANCE SYSTEM)

5.7 EMERGING TREND: VR SIMULATOR

5.7.1 VIRTUAL REALITY (VR) SIMULATOR

5.8 TRAINING SIMULATORS TECHNOLOGY FOR ECO-DRIVING

5.9 OPEN SOURCE SOFTWARE FOR AUTONOMOUS VEHICLES

5.9.1 APOLLO

5.9.2 AUTOWARE

5.9.3 EB ROBINOS & EB ROBINOS PREDICTORS - ELEKTROBIT

5.9.4 NVIDIA DRIVEWORKS

5.9.5 OPENPILOT

5.10 ECOSYSTEM ANALYSIS

FIGURE 32 DRIVING SIMULATOR MARKET: ECOSYSTEM ANALYSIS

5.11 PRICING ANALYSIS

TABLE 7 DRIVING SIMULATOR MARKET FOR PROFESSIONAL TRAINING:

AVERAGE PRICE OF DRIVING SIMULATOR

5.12 SUPPLY CHAIN ANALYSIS

FIGURE 33 DRIVING SIMULATOR MARKET: VALUE CHAIN ANALYSIS

5.13 PATENT ANALYSIS



TABLE 8 IMPORTANT PATENT REGISTRATIONS RELATED TO DRIVING SIMULATOR MARKET

5.14 CASE STUDY ANALYSIS

5.14.1 MAP GENERATION METHOD FOR AUTOMATIC DRIVING SIMULATOR FIGURE 34 GENERATION OF TRAJECTORIES USING MODEL PREDICTIVE CONTROL

5.14.2 SIEMENS AG

5.14.3 ADVANCED TRAIN LOCATION SIMULATOR (ATLAS)

5.15 DRIVING SIMULATOR MARKET, SCENARIOS (2020–2025)

FIGURE 35 DRIVING SIMULATOR MARKET– FUTURE TRENDS & SCENARIO, 2020–2025 (USD MILLION)

5.15.1 MOST LIKELY SCENARIO

TABLE 9 DRIVING SIMULATOR MARKET: MOST LIKELY SCENARIO, BY REGION, 2020–2025 (USD MILLION)

5.15.2 OPTIMISTIC SCENARIO

TABLE 10 DRIVING SIMULATOR MARKET: OPTIMISTIC SCENARIO, BY REGION, 2020–2025 (USD MILLION)

5.15.3 PESSIMISTIC SCENARIO

TABLE 11 DRIVING SIMULATOR MARKET: PESSIMISTIC SCENARIO, BY REGION, 2020–2025 (USD MILLION)

5.16 DRIVING SIMULATOR MARKET FOR PROFESSIONAL TRAINING, SCENARIOS (2020–2025)

FIGURE 36 DRIVING SIMULATOR MARKET FOR PROFESSIONAL TRAINING– FUTURE TRENDS & SCENARIO, 2020–2025 (USD MILLION)

5.16.1 MOST LIKELY SCENARIO

TABLE 12 DRIVING SIMULATOR MARKET FOR PROFESSIONAL TRAINING: MOST LIKELY SCENARIO, BY REGION, 2020–2025 (USD MILLION)

5.16.2 OPTIMISTIC SCENARIO

TABLE 13 DRIVING SIMULATOR MARKET FOR PROFESSIONAL TRAINING:

OPTIMISTIC SCENARIO, BY REGION, 2020–2025 (USD MILLION)

5.16.3 PESSIMISTIC SCENARIO

TABLE 14 DRIVING SIMULATOR MARKET FOR PROFESSIONAL TRAINING: PESSIMISTIC SCENARIO, BY REGION, 2020–2025 (USD MILLION)

#### 6 COVID – 19 IMPACT

6.1 IMPACT ON DRIVING SIMULATOR MARKET

6.2 IMPACT ON GLOBAL RAIL INDUSTRY

6.3 IMPACT ON GLOBAL DRIVING SIMULATOR MARKET FOR PROFESSIONAL



TRAINING

# 7 DRIVING SIMULATOR MARKET FOR PROFESSIONAL TRAINING, BY APPLICATION

7.1 INTRODUCTION

FIGURE 37 DRIVING SIMULATOR MARKET FOR PROFESSIONAL TRAINING, BY APPLICATION, 2020 VS. 2025 (USD THOUSAND)

TABLE 15 DRIVING SIMULATOR MARKET FOR PROFESSIONAL TRAINING, BY APPLICATION, 2019–2025 (UNITS)

TABLE 16 DRIVING SIMULATOR MARKET FOR PROFESSIONAL TRAINING, BY APPLICATION, 2019–2025 (USD THOUSAND)

7.1.1 RESEARCH METHODOLOGY

7.1.2 ASSUMPTIONS

TABLE 17 ASSUMPTIONS: BY PROFESSIONAL TRAINING APPLICATION

7.1.3 KEY PRIMARY INSIGHTS

FIGURE 38 KEY PRIMARY INSIGHTS

7.2 RAIL

7.2.1 UNDERGOING PROJECTS FOR HIGH-SPEED TRAINS WILL BOOST DEMAND

TABLE 18 TRAIN SIMULATORS DEVELOPMENTS AND CONTRACTS FOR TRAINING PURPOSES

TABLE 19 RAIL: DRIVING SIMULATOR MARKET FOR PROFESSIONAL TRAINING, BY RAIL TYPE, 2019–2025 (UNITS)

TABLE 20 RAIL: DRIVING SIMULATOR MARKET FOR PROFESSIONAL TRAINING, BY RAIL TYPE, 2019–2025 (USD THOUSAND)

7.2.2 PASSENGER TRAIN

7.2.3 FREIGHT

7.2.4 METRO

TABLE 21 LIST OF OPERATIONAL & UNDER CONSTRUCTION METRO PROJECTS IN INDIA

TABLE 22 LIST OF APPROVED METRO PROJECTS IN INDIA

7.2.5 MONORAIL & TRAM

7.3 BUS

7.3.1 INCREASING RATE OF ROAD ACCIDENTS WILL DRIVE SAFE DRIVING SIMULATION TRAINING FOR BUSES

TABLE 23 BUS: DRIVING SIMULATOR MARKET FOR PROFESSIONAL TRAINING, BY REGION, 2019–2025 (UNITS)

TABLE 24 BUS: DRIVING SIMULATOR MARKET FOR PROFESSIONAL TRAINING,



BY REGION, 2019–2025 (USD THOUSAND)

7.4 CAR

7.4.1 REALISTIC INTERPRETATION OF ACTUAL DRIVING CONDITIONS IS MAJOR ADVANTAGE OF CAR SIMULATORS

TABLE 25 CAR: DRIVING SIMULATOR MARKET FOR PROFESSIONAL TRAINING, BY REGION, 2019–2025 (UNITS)

TABLE 26 CAR: DRIVING SIMULATOR MARKET FOR PROFESSIONAL TRAINING, BY REGION, 2019–2025 (USD THOUSAND)

7.5 TRUCK

7.5.1 PORTABILITY AND EFFECTIVENESS OF TRUCK SIMULATORS WILL DRIVE THE MARKET

TABLE 27 TRUCK: DRIVING SIMULATOR MARKET FOR PROFESSIONAL TRAINING, BY REGION, 2019–2025 (UNITS)

TABLE 28 TRUCK: DRIVING SIMULATOR MARKET FOR PROFESSIONAL

TRAINING, BY REGION, 2019–2025 (USD THOUSAND)

7.6 POLICE

7.6.1 INTRODUCTION OF ADVANCED TACTICAL TRAINING SYSTEMS TO DRIVE DEMAND

TABLE 29 POLICE: DRIVING SIMULATOR MARKET FOR PROFESSIONAL TRAINING, BY REGION, 2019–2025 (UNITS)

TABLE 30 POLICE: DRIVING SIMULATOR MARKET FOR PROFESSIONAL TRAINING, BY REGION, 2019–2025 (USD THOUSAND

7.7 MOTORBIKE

7.7.1 NEED FOR SAFE RIDING & RISK PREVENTION TO DRIVE DEMAND TABLE 31 MOTORBIKE: DRIVING SIMULATOR MARKET FOR PROFESSIONAL TRAINING, BY REGION, 2019–2025 (UNITS)

TABLE 32 MOTORBIKE: DRIVING SIMULATOR MARKET FOR PROFESSIONAL TRAINING, BY REGION, 2019–2025 (USD THOUSAND)

7.8 AIRSIDE DRIVING SIMULATOR

7.8.1 NEED TP INCREASE OPERATIONAL EFFICIENCY OF AIRPORT VEHICLES TO DRIVE DEMAND

TABLE 33 AIRSIDE SIMULATORS BY DIFFERENT COMPANIES

FIGURE 39 AIRSIDE DRIVING/OPERATION SIMULATOR

TABLE 34 AIRSIDE DRIVING SIMULATOR: DRIVING SIMULATOR MARKET FOR PROFESSIONAL TRAINING, BY REGION, 2019–2025 (UNITS)

TABLE 35 AIRSIDE DRIVING SIMULATOR: DRIVING SIMULATOR MARKET FOR PROFESSIONAL TRAINING, BY REGION, 2019–2025 (USD THOUSAND)

## 8 DRIVING SIMULATOR MARKET, BY APPLICATION



8.1 INTRODUCTION

FIGURE 40 DRIVING SIMULATOR MARKET, BY APPLICATION, 2020 VS. 2025 (USD MILLION)

TABLE 36 DRIVING SIMULATOR MARKET, BY APPLICATION, 2017–2019 (USD MILLION)

TABLE 37 DRIVING SIMULATOR MARKET, BY APPLICATION, 2020–2025 (USD MILLION)

8.1.1 RESEARCH METHODOLOGY

8.1.2 ASSUMPTIONS

TABLE 38 ASSUMPTIONS: BY APPLICATION

8.1.3 KEY PRIMARY INSIGHTS

FIGURE 41 KEY PRIMARY INSIGHTS

8.2 RESEARCH & TESTING

8.2.1 EUROPE TO LEAD THE IN RESEARCH & TESTING SEGMENT TABLE 39 RESEARCH & TESTING: DRIVING SIMULATOR MARKET, BY REGION, 2017–2019 (USD MILLION)

TABLE 40 RESEARCH & TESTING: DRIVING SIMULATOR MARKET, BY REGION, 2020–2025 (USD MILLION)

8.3 TRAINING

8.3.1 GROWING CONCERNS OVER ROAD ACCIDENTS TO DRIVE THE SEGMENT TABLE 41 TRAINING: DRIVING SIMULATOR MARKET, BY REGION, 2017–2019 (USD MILLION)

TABLE 42 TRAINING: DRIVING SIMULATOR MARKET, BY REGION, 2020–2025 (USD MILLION)

#### 9 DRIVING SIMULATOR MARKET, BY END USER

9.1 INTRODUCTION

FIGURE 42 DRIVING SIMULATOR MARKET, BY END USER, 2020 VS. 2025 (USD MILLION)

TABLE 43 DRIVING SIMULATOR MARKET, BY END USER, 2017–2019 (USD MILLION)

TABLE 44 DRIVING SIMULATOR MARKET, BY END USER, 2020–2025 (USD MILLION)

9.1.1 RESEARCH METHODOLOGY

9.1.2 ASSUMPTIONS

TABLE 45 ASSUMPTIONS: BY END USER

9.1.3 KEY PRIMARY INSIGHTS



FIGURE 43 KEY PRIMARY INSIGHTS

9.2 ADVANCED DRIVING SIMULATOR

9.3 TRAINING DRIVING SIMULATOR

9.4 PROFESSIONAL TRAINING SIMULATOR

### 10 DRIVING SIMULATOR MARKET, BY SIMULATOR TYPE

10.1 INTRODUCTION

FIGURE 44 DRIVING SIMULATOR MARKET, BY SIMULATOR TYPE, 2020 VS. 2025 (USD MILLION)

TABLE 46 DRIVING SIMULATOR MARKET, BY SIMULATOR TYPE, 2017–2019 (USD MILLION)

TABLE 47 DRIVING SIMULATOR MARKET, BY SIMULATOR TYPE, 2020–2025 (USD MILLION)

10.1.1 RESEARCH METHODOLOGY

10.1.2 ASSUMPTIONS

TABLE 48 ASSUMPTIONS: BY SIMULATOR TYPE

10.1.3 KEY PRIMARY INSIGHTS

FIGURE 45 KEY PRIMARY INSIGHTS

10.2 ADVANCED DRIVING SIMULATOR

10.2.1 DIVING SIMULATORS ARE EXPECTED TO HAVE EXCEPTIONAL DEMAND FOR RESEARCH AND TESTING PURPOSES ADVANCED

TABLE 49 ADVANCED DRIVING SIMULATOR: DRIVING SIMULATOR MARKET, BY REGION, 2017–2019 (USD MILLION)

TABLE 50 ADVANCED DRIVING SIMULATOR: DRIVING SIMULATOR MARKET, BY REGION, 2020–2025 (USD MILLION)

**10.3 TRAINING DRIVING SIMULATOR** 

10.3.1 NEED TO TRAIN NEW DRIVERS FOR APPROPRIATE SKILLS EXPECTED TO DRIVE THE SEGMENT

TABLE 51 TRAINING DRIVING SIMULATOR: DRIVING SIMULATOR MARKET, BY REGION, 2017–2019 (USD MILLION)

TABLE 52 TRAINING DRIVING SIMULATOR: DRIVING SIMULATOR MARKET, BY REGION, 2020–2025 (USD MILLION)

## 11 DRIVING SIMULATOR MARKET, BY TRAINING DRIVING SIMULATOR

11.1 INTRODUCTION FIGURE 46 SIMULATION TOOLS FIGURE 47 DRIVING SIMULATOR MARKET, BY TRAINING DRIVING SIMULATOR,

Driving Simulator Market by Application (Training and Research & Testing), Vehicle Type (Car Simulator and Tru...



2020 VS. 2025 (USD MILLION)

TABLE 53 DRIVING SIMULATOR MARKET, BY TRAINING DRIVING SIMULATOR, 2017–2019 (USD MILLION)

TABLE 54 DRIVING SIMULATOR MARKET, BY TRAINING DRIVING SIMULATOR, 2020–2025 (USD MILLION)

11.1.1 RESEARCH METHODOLOGY

11.1.2 ASSUMPTIONS

TABLE 55 ASSUMPTIONS: BY TRAINING DRIVING SIMULATOR

11.1.3 KEY PRIMARY INSIGHTS

FIGURE 48 KEY PRIMARY INSIGHTS

11.2 COMPACT SIMULATOR

11.2.1 COMPACTNESS, PORTABILITY, AND LOW COAST TO DRIVE THE SEGMENT

TABLE 56 COMPACT SIMULATOR: DRIVING SIMULATOR MARKET, BY REGION, 2017–2019 (USD MILLION)

TABLE 57 COMPACT SIMULATOR: DRIVING SIMULATOR MARKET, BY REGION, 2020–2025 (USD MILLION)

11.3 FULL-SCALE SIMULATOR

11.3.1 FULLY INSTRUMENTED FIXED CABINS OF FULL-SCALE SIMULATORS ALLOW REALISTIC EXPERIENCE

TABLE 58 FULL-SCALE SIMULATOR: DRIVING SIMULATOR MARKET, BY REGION, 2017–2019 (USD MILLION)

TABLE 59 FULL-SCALE SIMULATOR: DRIVING SIMULATOR MARKET, BY REGION, 2020–2025 (USD MILLION)

## 12 DRIVING SIMULATOR MARKET, BY VEHICLE TYPE

12.1 INTRODUCTION

FIGURE 49 DRIVING SIMULATOR MARKET, BY VEHICLE TYPE, 2020 VS. 2025 (USD MILLION)

TABLE 60 DRIVING SIMULATOR MARKET, BY VEHICLE TYPE, 2017–2019 (USD MILLION)

TABLE 61 DRIVING SIMULATOR MARKET, BY VEHICLE TYPE, 2020–2025 (USD MILLION)

12.1.1 RESEARCH METHODOLOGY

12.1.2 ASSUMPTIONS

TABLE 62 ASSUMPTIONS: BY VEHICLE TYPE

12.1.3 KEY PRIMARY INSIGHTS

FIGURE 50 KEY PRIMARY INSIGHTS



12.2 CAR SIMULATOR

12.2.1 REALISTIC INTERPRETATION OF ACTUAL DRIVING CONDITIONS IS MAJOR ADVANTAGE OF CAR SIMULATORS

TABLE 63 CAR SIMULATOR: DRIVING SIMULATOR MARKET, BY REGION, 2017–2019 (USD MILLION)

TABLE 64 CAR SIMULATOR: DRIVING SIMULATOR MARKET, BY REGION, 2020–2025 (USD MILLION)

12.3 TRUCK & BUS SIMULATOR

12.3.1 DEMAND FOR DRIVING TRAINING SIMULATION SYSTEMS FOR COMMERCIAL TRUCKS & BUSES EXPECTED TO INCREASE

TABLE 65 TRUCK & BUS SIMULATOR: DRIVING SIMULATOR MARKET, BY REGION, 2017–2019 (USD MILLION)

TABLE 66 TRUCK & BUS SIMULATOR: DRIVING SIMULATOR MARKET, BY REGION, 2020–2025 (USD MILLION)

#### **13 DRIVING SIMULATOR MARKET FOR PROFESSIONAL TRAINING, BY REGION**

13.1 INTRODUCTION

FIGURE 51 DRIVING SIMULATOR MARKET FOR PROFESSIONAL TRAINING, BY REGION, 2020 VS. 2025 (USD MILLION)

TABLE 67 DRIVING SIMULATOR FOR PROFESSIONAL TRAINING MARKET, BY REGION, 2019–2025 (UNITS)

TABLE 68 DRIVING SIMULATOR FOR PROFESSIONAL TRAINING MARKET, BY REGION, 2019–2025 (USD THOUSAND)

13.2 SOUTH ASIA & OCEANIA

FIGURE 52 6-DOF MOTION BASE USED IN TRAINING SIMULATORS

FIGURE 53 DIM250 SIMULATOR BY VI-GRADE

13.3 EUROPE

FIGURE 54 ARCHITECTURE OF INTEGRATED DRIVING HARDWARE-IN-THE-

LOOP (IDHIL) SIMULATOR FOR THE TESTING AND EVALUATION OF

COOPERATIVE ECO-DRIVING SYSTEMS

13.4 LATIN AMERICA

FIGURE 55 DIM250 SIMULATOR BY VI-GRADE

13.5 MIDDLE EAST & INDIA

#### 14 DRIVING SIMULATOR MARKET, BY REGION

14.1 INTRODUCTION FIGURE 56 DRIVING SIMULATOR MARKET, BY REGION, 2020 VS. 2025

Driving Simulator Market by Application (Training and Research & Testing), Vehicle Type (Car Simulator and Tru...



TABLE 69 DRIVING SIMULATOR MARKET, BY REGION, 2017–2019 (USD MILLION) TABLE 70 DRIVING SIMULATOR MARKET, BY REGION, 2020–2025 (USD MILLION) 14.2 ASIA PACIFIC

FIGURE 57 ASIA PACIFIC: DRIVING TRAINING SIMULATOR MARKET SNAPSHOT TABLE 71 ASIA PACIFIC: DRIVING SIMULATOR MARKET, BY COUNTRY,

2017-2019 (USD MILLION)

TABLE 72 ASIA PACIFIC: DRIVING SIMULATOR MARKET, BY COUNTRY,

2020-2025 (USD MILLION)

14.2.1 CHINA

14.2.1.1 Car simulator segment to lead the market

TABLE 73 CHINA: DRIVING SIMULATOR MARKET, BY VEHICLE TYPE, 2017–2019 (USD MILLION)

TABLE 74 CHINA: DRIVING SIMULATOR MARKET, BY VEHICLE TYPE, 2020–2025 (USD MILLION)

14.2.2 JAPAN

14.2.2.1 Presence of key OEMs expected to drive the market

TABLE 75 JAPAN: DRIVING SIMULATOR MARKET, BY VEHICLE TYPE, 2017–2019 (USD MILLION)

TABLE 76 JAPAN: DRIVING SIMULATOR MARKET, BY VEHICLE TYPE, 2020–2025 (USD MILLION)

14.2.3 INDIA

14.2.3.1 Government subsidies to private training schools to drive the market TABLE 77 INDIA: DRIVING SIMULATOR MARKET, BY VEHICLE TYPE, 2017–2019 (USD MILLION)

TABLE 78 INDIA: DRIVING SIMULATOR MARKET, BY VEHICLE TYPE, 2020–2025 (USD MILLION)

14.2.4 SOUTH KOREA

14.2.4.1 Increasing adoption of high-end technology and innovations to drive the market

TABLE 79 SOUTH KOREA: DRIVING SIMULATOR MARKET, BY VEHICLE TYPE, 2017–2019 (USD MILLION)

TABLE 80 SOUTH KOREA: DRIVING SIMULATOR MARKET, BY VEHICLE TYPE, 2020–2025 (USD MILLION)

14.2.5 REST OF ASIA PACIFIC

TABLE 81 REST OF ASIA PACIFIC: DRIVING SIMULATOR MARKET, BY VEHICLE TYPE, 2017–2019 (USD MILLION)

TABLE 82 REST OF ASIA PACIFIC: DRIVING SIMULATOR MARKET, BY VEHICLE TYPE, 2020–2025 (USD MILLION)

14.3 EUROPE



TABLE 83 EUROPE: DRIVING SIMULATOR MARKET, BY COUNTRY, 2017–2019 (USD MILLION)

TABLE 84 EUROPE: DRIVING SIMULATOR MARKET, BY COUNTRY, 2020–2025 (USD MILLION)

14.3.1 FRANCE

14.3.1.1 Rise in automotive technology to drive the market

TABLE 85 FRANCE: DRIVING SIMULATOR MARKET, BY VEHICLE TYPE, 2017–2019 (USD MILLION)

TABLE 86 FRANCE: DRIVING SIMULATOR MARKET, BY VEHICLE TYPE, 2020–2025 (USD MILLION)

14.3.2 GERMANY

14.3.2.1 Presence of innovative OEMs to drive the market

TABLE 87 GERMANY: DRIVING SIMULATOR MARKET, BY VEHICLE TYPE, 2017–2019 (USD MILLION)

TABLE 88 GERMANY: DRIVING SIMULATOR MARKET, BY VEHICLE TYPE, 2020–2025 (USD MILLION)

14.3.3 SPAIN

14.3.3.1 Growing commercial vehicle production to drive the market

TABLE 89 SPAIN: DRIVING SIMULATOR MARKET, BY VEHICLE TYPE, 2017–2019 (USD MILLION)

TABLE 90 SPAIN: DRIVING SIMULATOR MARKET, BY VEHICLE TYPE, 2020–2025 (USD MILLION)

14.3.4 ITALY

14.3.4.1 Growing incorporation of ADAS features to drive the market

TABLE 91 ITALY: DRIVING SIMULATOR MARKET, BY VEHICLE TYPE, 2017–2019 (USD MILLION)

TABLE 92 ITALY: DRIVING SIMULATOR MARKET, BY VEHICLE TYPE, 2020–2025 (USD MILLION)

14.3.5 UK

14.3.5.1 Popularity of premium vehicles with high-end features to drive the market TABLE 93 UK: DRIVING SIMULATOR MARKET, BY VEHICLE TYPE, 2017–2019 (USD MILLION)

TABLE 94 UK: DRIVING SIMULATOR MARKET, BY VEHICLE TYPE, 2020–2025 (USD MILLION)

14.3.6 REST OF EUROPE

TABLE 95 REST OF EUROPE: DRIVING SIMULATOR MARKET, BY VEHICLE TYPE, 2017–2019 (USD MILLION)

TABLE 96 REST OF EUROPE: DRIVING SIMULATOR MARKET, BY VEHICLE TYPE, 2020–2025 (USD MILLION)



14.4 NORTH AMERICA

FIGURE 58 NORTH AMERICA: DRIVING TRAINING SIMULATOR MARKET SNAPSHOT

TABLE 97 NORTH AMERICA: DRIVING SIMULATOR MARKET, BY COUNTRY, 2017–2019 (USD MILLION)

TABLE 98 NORTH AMERICA: DRIVING SIMULATOR MARKET, BY COUNTRY, 2020–2025 (USD MILLION)

14.4.1 US

14.4.1.1 Stringent safety regulations to drive the market

TABLE 99 US: DRIVING SIMULATOR MARKET, BY VEHICLE TYPE, 2017–2019 (USD MILLION)

TABLE 100 US: DRIVING SIMULATOR MARKET, BY VEHICLE TYPE, 2020–2025 (USD MILLION)

14.4.2 CANADA

14.4.2.1 Growing demand for safety and convenience features to drive the market TABLE 101 CANADA: DRIVING SIMULATOR MARKET, BY VEHICLE TYPE, 2017–2019 (USD MILLION)

TABLE 102 CANADA: DRIVING SIMULATOR MARKET, BY VEHICLE TYPE, 2020–2025 (USD MILLION)

14.4.3 MEXICO

14.4.3.1 Increasing truck production would require safe driving training TABLE 103 MEXICO: DRIVING SIMULATOR MARKET, BY VEHICLE TYPE, 2017–2019 (USD MILLION)

TABLE 104 MEXICO: DRIVING SIMULATOR MARKET, BY VEHICLE TYPE, 2020–2025 (USD MILLION)

14.5 REST OF THE WORLD

TABLE 105 ROW: DRIVING SIMULATOR MARKET, BY COUNTRY, 2017–2019 (USD MILLION)

TABLE 106 ROW: DRIVING TRAINING SIMULATOR MARKET, BY COUNTRY, 2020–2025 (USD MILLION)

14.5.1 BRAZIL

14.5.1.1 Gradual technological growth to drive the market

TABLE 107 BRAZIL: DRIVING SIMULATOR MARKET, BY VEHICLE TYPE, 2017–2019 (USD MILLION)

TABLE 108 BRAZIL: DRIVING SIMULATOR MARKET, BY VEHICLE TYPE, 2020–2025 (USD MILLION)

14.5.2 IRAN

14.5.2.1 Increasing investments by leading OEMs to drive the market TABLE 109 IRAN: DRIVING SIMULATOR MARKET, BY VEHICLE TYPE, 2017–2019



(USD MILLION)

TABLE 110 IRAN: DRIVING T SIMULATOR MARKET, BY VEHICLE TYPE, 2020–2025 (USD MILLION)

14.5.3 REST OF ROW

TABLE 111 REST OF ROW: DRIVING SIMULATOR MARKET, BY VEHICLE TYPE, 2017–2019 (USD MILLION)

TABLE 112 REST OF ROW: DRIVING SIMULATOR MARKET, BY VEHICLE TYPE, 2020–2025 (USD MILLION)

### 15 RECOMMENDATIONS BY MARKETSANDMARKETS

15.1 EUROPE WILL BE A MAJOR DRIVING SIMULATOR MARKET 15.2 ADVANCED DRIVING SIMULATORS ARE KEY FOR AUTOMOTIVE MARKET IN COMING YEARS 15.3 CONCLUSION

### **16 COMPETITIVE LANDSCAPE**

**16.1 MARKET EVALUATION FRAMEWORK** FIGURE 59 MARKET EVALUATION FRAMEWORK 16.2 OVERVIEW FIGURE 60 KEY DEVELOPMENTS BY LEADING PLAYERS, 2017-2020 **16.3 MARKET SHARE ANALYSIS FOR DRIVING SIMULATOR MARKET** FIGURE 61 MARKET SHARE ANALYSIS, 2019 **16.4 RANKING ANALYSIS FOR DRIVING SIMULATOR MARKET** FIGURE 62 MARKET RANKING ANALYSIS, 2019 **16.5 COMPETITIVE SCENARIO 16.5.1 NEW PRODUCT LAUNCHES** TABLE 113 NEW PRODUCT LAUNCHES, 2018–2020 **16.5.2 MERGERS & ACQUISITIONS** TABLE 114 MERGERS & ACQUISITIONS, 2018 16.5.3 PARTNERSHIPS/SUPPLY CONTRACTS/COLLABORATIONS/AGREEMENTS TABLE 115 PARTNERSHIPS/SUPPLY CONTRACTS/COLLABORATIONS/AGREEMENTS, 2017-2020 **16.5.4 EXPANSIONS TABLE 116 EXPANSIONS, 2018–2020** 16.6 COMPETITIVE LEADERSHIP MAPPING (MAJOR ESTABLISHED PLAYERS) 16.6.1 STARS **16.6.2 EMERGING LEADERS** 



16.6.3 PERVASIVE **16.6.4 PARTICIPANTS** FIGURE 63 DRIVING SIMULATOR MARKET FOR PROFESSIONAL TRAINING: COMPETITIVE LEADERSHIP MAPPING, 2020 16.7 STRENGTH OF PRODUCT PORTFOLIO FIGURE 64 PRODUCT PORTFOLIO ANALYSIS OF TOP PLAYERS IN DRIVING SIMULATOR MARKET FOR PROFESSIONAL TRAINING **16.8 BUSINESS STRATEGY EXCELLENCE** FIGURE 65 BUSINESS STRATEGY EXCELLENCE OF TOP PLAYERS IN DRIVING SIMULATOR MARKET FOR PROFESSIONAL TRAINING **16.9 WINNERS VS. TAIL-ENDERS** TABLE 117 WINNERS VS. TAIL-ENDERS 16.10 COMPETITIVE LEADERSHIP MAPPING FOR DRIVING SIMULATOR PROVIDERS FIGURE 66 GLOBAL DRIVING SIMULATOR: COMPETITIVE LEADERSHIP MAPPING, 2019

#### **17 COMPANY PROFILES**

(Business overview, Product offerings, Developments & MnM View)\*

17.1 KEY PLAYERS

17.1.1 CRUDEN B.V

17.1.2 CASSIDIAN

17.1.3 TECKNOTROVE SIMULATOR SYSTEM PVT. LTD

17.1.4 ECA GROUP

FIGURE 67 ECA GROUP: COMPANY SNAPSHOT

17.1.5 ADACEL TECHNOLOGIES LTD.

FIGURE 68 ADACEL TECHNOLOGIES LTD.: COMPANY SNAPSHOT

17.1.6 TRANSURB

- 17.1.7 EDISER
- 17.1.8 CORYS
- 17.1.9 SHRAIL
- 17.1.10 IPG AUTOMOTIVE
- 17.1.11 OKTAL SYDAC
- 17.1.12 VI-GRADE
- 17.1.13 ENVIRONMENTAL TECTONICS CORPORATION (ETC)

FIGURE 69 ETC: COMPANY SNAPSHOT

TABLE 118 ETC: PRODUCTS OFFERED

TABLE 119 ETC: CONTRACTS



17.1.14 L3 HARRIS TECHNOLOGIES FIGURE 70 L3 HARRIS TECHNOLOGIES: COMPANY SNAPSHOT TABLE 120 L3 HARRIS TECHNOLOGIES: PRODUCTS OFFERED TABLE 121 L3 HARRIS TECHNOLOGIES: CONTRACTS/MERGERS & **ACQUISITIONS** 17.1.15 FAAC INC. (UNDER AROTECH CORPORATION) FIGURE 71 FAAC/AROTECH: COMPANY SNAPSHOT TABLE 122 FAAC/AROTECH: PRODUCTS OFFERED TABLE 123 FAAC/AROTECH: ACQUISITIONS/AGREEMENTS/INVESTMENTS 17.1.16 SIMFOR TABLE 124 SIMFOR: PRODUCTS/SERVICES OFFERED 17.1.17 SIM FACTOR TABLE 125 SIM FACTOR: PRODUCTS/SERVICES OFFERED TABLE 126 SIM FACTOR: CONTRACTS/PROJECTS \*Details on Business overview, Product offerings, Developments & MnM View might not be captured in case of unlisted companies. **17.2 OTHER KEY PLAYERS 17.2.1 NORTH AMERICA** 17.2.1.1 Ford 17.2.1.2 General Motors 17.2.1.3 Virage Simulation 17.2.1.4 WAYMO 17.2.1.5 Mechanical Simulation Corporation 17.2.2 EUROPE 17.2.2.1 Daimler 17.2.2.2 BMW 17.2.2.3 Rexroth 17.2.2.4 Volkswagen 17.2.2.5 Volvo 17.2.2.6 Almotive 17.2.2.7 CARLA 17.2.2.8 AB Dynamics 17.2.2.9 XPI Simulation 17.2.2.10 rFpro **17.2.3 ASIA PACIFIC** 17.2.3.1 Toyota 17.2.3.2 Nissan

- 17.2.3.3 CVEDIA
- 17.2.3.4 Honda



### 17.2.4 REST OF THE WORLD 17.2.4.1 Cognata

#### **18 APPENDIX**

18.1 KEY INSIGHTS OF INDUSTRY EXPERTS
18.2 DISCUSSION GUIDE
18.3 KNOWLEDGE STORE: MARKETSANDMARKETS' SUBSCRIPTION PORTAL
18.4 AVAILABLE CUSTOMIZATIONS
18.5 RELATED REPORTS
18.6 AUTHOR DETAILS



#### I would like to order

Product name: Driving Simulator Market by Application (Training and Research & Testing), Vehicle Type (Car Simulator and Truck & Bus Simulator), Simulator Type(Training Simulator and Advanced Driving Simulator), Training Simulator Type(Compact Simulator and Full-Scale Simulator), End User, Region - Forecast to 2025

Product link: https://marketpublishers.com/r/DAA4F65CF17EN.html

Price: US\$ 4,950.00 (Single User License / Electronic Delivery) If you want to order Corporate License or Hard Copy, please, contact our Customer Service: info@marketpublishers.com

#### Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <u>https://marketpublishers.com/r/DAA4F65CF17EN.html</u>

# To pay by Wire Transfer, please, fill in your contact details in the form below:

First name: Last name: Email: Company: Address: City: Zip code: Country: Tel: Fax: Your message:

\*\*All fields are required

Custumer signature \_\_\_\_

Please, note that by ordering from marketpublishers.com you are agreeing to our Terms & Conditions at <u>https://marketpublishers.com/docs/terms.html</u>

Driving Simulator Market by Application (Training and Research & Testing), Vehicle Type (Car Simulator and Tru...



To place an order via fax simply print this form, fill in the information below and fax the completed form to +44 20 7900 3970