



OUR STORY



MESSAGE FROM THE FOUNDER

45 years ago, I watched Speed Racer for the first time. It was then, at seven years old, that the idea for VRX was born.

With a strong ambition for racing, engineering, development, and forming partnerships with the biggest players in the technology and gaming industries, VRX has strived to become the most advanced interactive simulation company in the world.

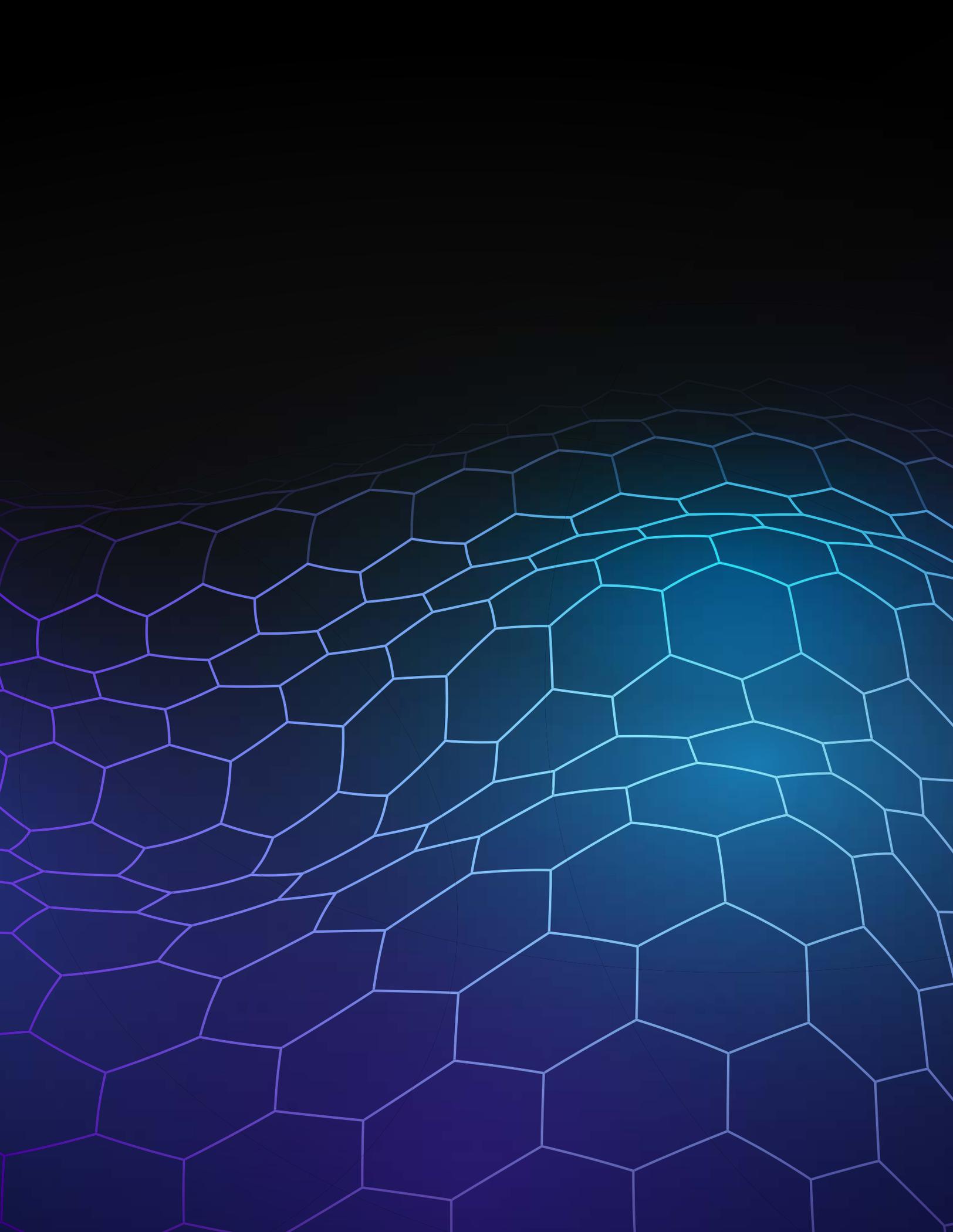
This book gives the world a timeline to help it understand where VRX came from and where it's going.

We are about to do things that could change the experiences people have with technology and with 20 years of history behind us, the best is still to come.



A white, handwritten signature of Robert Stanners, written in a cursive style.

ROBERT STANNERS
CEO/FOUNDER





THE EARLY YEARS

"Technology, like art, is a soaring exercise of the human imagination."

Daniel Bell

HOW VRX STARTED

45 years ago, CEO and visionary, Robert Stanners, watched Speed Racer for the first time. It was then, at seven years old, that the idea for VRX was born.



As Robert grew up, he developed a passion for understanding how things worked, how they were put together, and how they could be better. With a particular interest in cars and racing, Robert started building hot rods and working in metal fabrication. Through his experience in metalworks, he developed a strong skill set for building things.



Before 1999, Robert had always felt something was missing when it came to how people interacted with video games, particularly in the racing genre. The wheel and pedal sets that were out at the time didn't provide the immersive and realistic experience that Robert had always envisioned as a kid growing up. The experience needed to be more life-like. It needed to put people in the driver's seat, or at least as close as they could get.

The catalyst for Robert's vision came in 1995 when Sega released the first racing wheel built for the Sega Saturn console.

1999



Leading up to the birth of VRX in 1999, Robert experimented with building what would become the first version of the VRX racing simulator. Using coroplast and other materials, Robert would cut and attach pieces together to give him an understanding of how the chassis was going to be built; how the controllers were going to mount; how the driver was going to sit - every detail that needed to be agonized over to create what Robert envisioned.

Computer-aided design (CAD) modeling was far different, and less accessible, at that time. Therefore, Robert used to build and create lifestyle prototypes and drawings in order to convey what he wanted to be fabricated. Robert Sr., Robert's dad, would use these to-scale models to create the fabrication drawings in AutoCAD.



His brother, John Stanners, is the owner of Titan Boats and had a full-service sheet metal shop where Robert fashioned the very first parts for the VRX simulators.

In 1999, Robert made his first production run of 10 simulators chassis. They were made out of steel tubing and featured a racing wheel, pedals, and seat. They were connected to a Sega console to run some of the very first racing titles available for console games.



2000-2001

FIRST OFFICIAL SALE

*Originally Virtual RacerX,
VRX Simulators pioneered
the first turnkey racing
simulator solution for the
consumer market.*



In 2001, VRX made its first official sale of a racing simulator to a customer in Boston, MA. The retail price of the unit at that time was \$975 and was in development for almost five years.

The racing simulator was the first turnkey racing simulator to be connected to a gaming console. It ran 4x4 EVO on the Sega Dreamcast.



FACT:

Racecar drivers would come over to Robert's house to play the first editions of NASCAR.

The simulator even had fans that were connected to the gas pedal using an on/off switch to simulate wind.

2003



In 2003, IGN - America's #1 video game and entertainment media website - got their hands on a VRX simulator. As part of a giveaway, the writers compiled a thorough review of the simulator and praised it as an immersive personal environment for racing.



It was the first official review of a racing simulation product from an established news media source. The article led to additional sales and a considerable amount of exposure which fuelled some of the bigger things to come.



LINK:

Scan this QR code to take you to the original IGN review published in 2003



"Think of it as an immersive personal environment for racing" - IGN



2004-2005

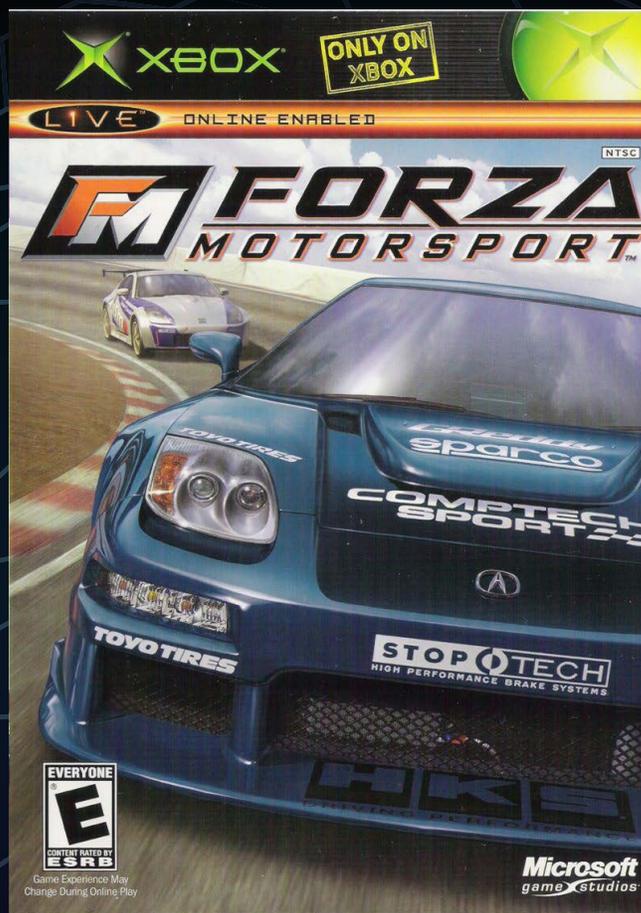
VIRTUAL VS. REALITY

Once 2004 hit, the VRX simulator as a product was beginning to gain momentum. With several years under the company's belt and a multitude of improvements over the original version, the company was poised to become the number one solution for sim racing enthusiasts.

A big milestone for VRX was in March 2005, following the initial release of Forza Motorsport - now the world's most popular virtual racing franchise. As part of a promotional piece comparing the realism of the game versus real life, two simulators were placed at Road Atlanta to do a side by side comparison of real racing versus sim racing.



Professional racing drivers Gunnar Jeanette and RJ DeVera did hot laps on the simulators as well as in a real car on the real track. The lap times between the two drivers were within half a second of what they achieved in-game. The simulators were considered "as a comparison, very very close to real-life".



With the momentum behind the company and the improvements in technology in the decade to come, the next 15 years for VRX became some of the most important years in the company's development. VRX would position itself as the pioneer of racing simulation and pave the way for an entire industry to form in its wake.





2006-2011

"The art challenges the technology, and the technology inspires the art."

John Lasseter

2006



The partnership with Forza Motorsport and the Turn 10 team catapulted VRX into an international brand. The marketing for the original Forza Motorsport was in full swing and being associated with the first turnkey driving simulator fared well for both companies.



2006 also saw the introduction of a VRX driver distraction simulator. This simulator was part of a government program centered around awareness for distracted driving.

The simulator would be taken to high schools and government agencies for people to try and understand the risks associated with distracted driving. It was one of the first simulators of its type to be used for such a program.



2007-2009

With technology improving and the VRX racing simulator gaining traction in an emerging marketplace, additional applications for the simulators began to surface.

The Greg Moore gallery in the BC Sports Hall of Fame was created following the Canadian Indy car driver's death in 1999. As part of a tribute to the driver, VRX donated a racing simulator as part of an experience for visitors to the exhibit. The simulator is still there to this day and is regularly maintained by VRX.



The popularity of racing simulators began to grow exponentially and other simulator manufacturers began to appear on the scene. The most notable of which is CXC Simulations. Started in 2007 in Los Angeles, CXC created their own version of the racing simulator that was a highly specialized tool designed specifically for race training applications.

The introduction of new products to the market marked the release of the VRX Mach 4 simulator - a turnkey production racing simulator designed for the home market. The simulator ran on PC and had the versatility of running a variety of racing games, removing the constraints of the limited console racing options at the time.

The goal of the Mach 4 was to ensure VRX's continued innovation in a market they virtually created and remain the leader in the industry.

2007-2009



VRX's relationship with the Forza Motorsport franchise was far from over. Another major event executed by the two companies was the famous 12 Hours of Sebring in Florida. Forza Motorsport sponsored a car as part of their Forza Motorsport promotional campaign.



VRX had simulators there to create a fan experience and also prove a point about simulation and race training, since the Forza sponsored car ended up winning the race.





2010-2011

MOTION: A SIMULATOR REVOLUTION

Since the introduction of commercially available racing simulators, the vast majority of units released into the market consisted of a chassis, racing seat, and driving controls. Coupled with some screens and a console or PC to run them, the experience was relatively similar across the board.

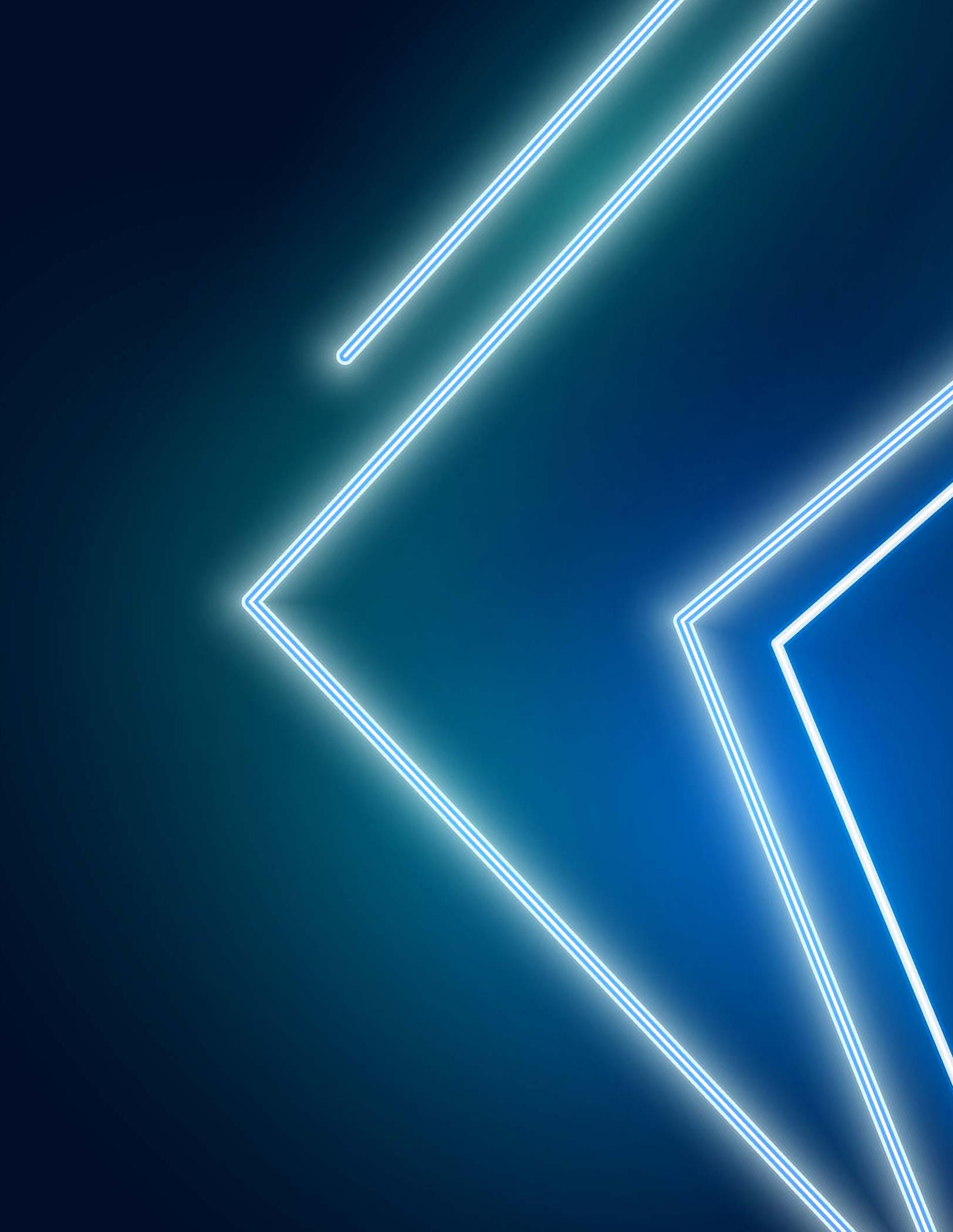
The introduction of motion to simulators available to the general population became a turning point in the history of the industry.

D-BOX

D-BOX Technologies Inc. was founded in 1998 but had mainly focused on the movie theatre and commercial entertainment market. It wasn't until the mid to late 2000s that motion simulation started appearing on the scene.



VRX debuted their very first motion simulator, the iMotion, in New York city in 2010. The iMotion had an excellent reception and became a defining moment in the racing simulator industry. It would go on to be VRX's most popular product for the next decade, with other simulator manufacturers creating variations of the product due to the success of motion simulation.





2012-2019

"Any sufficiently advanced technology is indistinguishable from magic."

Arthur C. Clarke

2012-2014

VRX
SIMUL

The years following 2011 kicked VRX into high gear. The years leading up to 2019 would see a multitude of new products, challenging projects, and a complete shift for the company from another racing simulator company to a globally recognized brand in simulation and entertainment solutions.



With a strong foothold in racing simulation, VRX began to explore other avenues for simulation. One of the more established markets was flight simulation. Aside from office flight simulator enthusiasts with homemade rigs, flight simulators were expensive, complex, and hard to move around. VRX's answer to this was to launch the five-screen Pro Flight and flight simulator add-on for the iMotion racing simulator.

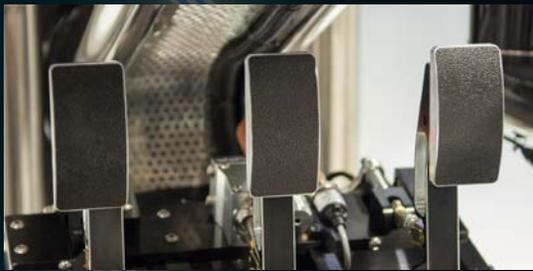


PRO FLIGHT

The Pro Flight was much smaller, easier to operate, and incredibly immersive. It still provided an authentic flight experience, which caught the attention of aircraft manufacturer ICON - the manufacturer of an amphibious flying car.

The demand for racing simulators was still going strong. Teams and enthusiasts became increasingly aware of the cost benefits of simulation vs. real track time.

VRX continued the development of the iMotion to improve its ease-of-use, accuracy as a training tool, and overall quality as a high-ticket machine. This led to the introduction of the iMotion Pro, which featured a larger screen display, hydraulic pedals, and a direct drive wheel.



The iMotion Pro was designed specifically for racing drivers with a desire to improve their track time and skills with the most accurate training tool available.

To celebrate the launch of the iMotion Pro, iRacing and VRX teamed up to show off a four-simulator, full-motion RaceRoom at SEMA in Las Vegas. The event was a huge success and continued VRX's trajectory into multiplayer racing as a commercial attraction.



VRX also got to show off their iMotion simulator with Discovery Channel's Daily Plant Christmas Special.



2015

VRX
SIMUL

2015 became the biggest year for VRX since the start of the company. The introduction of new products drew the attention of various companies and customers and positioned VRX as a company that could build anything. Whether was for racing, flight, or other motion experience, there was nothing stopping VRX's team from creating a solution.



The next major project for VRX was the design and creation of an interactive sports exhibit for the Richmond Olympic Oval. Part of the Richmond Olympic Exhibit, the experience featured five simulators as part of a tribute to the 2014 Winter Olympics held in Vancouver, BC. With the introduction of three new simulators, Bobsleigh, SitSki, and Kayak, VRX opened itself up to the world of sports simulation and experiences.



The Olympic Exhibit is still operation in Richmond to this day and sees thousands of people throughout the year. The installation showcased VRX's capabilities in the commercial-focused markets for public use.

The demand for racing simu With VRX’s capabilities expanding and the brand becoming recognized globally as one of the leading simulation and experience providers, the relationship with Forza Motorsport and the Turn 10 team expanded with it.



Forza Motorsport 6, follow up to the successful Forza 5, was on the horizon and T10 had a series of promotional events planned before the September release.

The first VRX-supported event was E3 in Los Angeles. The biggest North American gaming conference, E3 attracts tens of thousands of visitors each year to experience the latest gaming technology, titles, and hardware that the industry has to offer. Each year, the tier of experiences increases to attract consumer attention.



For E3 2015, VRX was contracted to build three iMotion simulators specifically for Forza Motorsport 6. The experience showcased Forza in full motion, something that had never been done before up to this point. The simulators also had to show Forza on a triple-screen display to create an immersive experience for the visitors at the booth.

The attraction caught the attention of hundreds of visitors each day and helped Forza Motorsport win Game of the Show. The simulators even saw Hollywood icon, Steven Spielberg, who took an iMotion for a spin at the XBOX booth.

The promotional events for Forza Motorsport 6 continued throughout the year. The VRX simulators also made their way to Gamescom (Germany), the European equivalent of E3, which allowed over 475,000 people to experience a taste of full-motion Forza.

On the North American front, Forza Fuel took place at Circuit of the Americas in Texas. Over 20 recognized Forza racers took part in a tournament for the fastest Forza driver on VRX simulators. Once complete, the fastest Forza racer competed head-to-head with a real racecar driver around the track, not unlike the Virtual Vs. Reality that took place 10 years prior.



LINK:

Scan this QR code to take you to the Virtual Vs. Reality video.



VRX also became the go-to provider for other tech titans such as Intel and NVIDIA. A collaboration between Intel, iRacing, and VRX was showcased at the Intel Developer Forum in San Francisco. Intel's RealSense technology was used to demonstrate the depth and head-tracking technology for use in gaming and simulation. A screen-based virtual reality setup that pre-dated the current VR headsets seen today.



VRX's products continued to develop. VRX's flagship product, the iMotion, expanded to offer additional features, higher fidelity and realism, and a variety of software options to cater to differing tastes.



A differentiating feature for the iMotion was the ability to customize the unit in various ways. From hydro-dipping, decals, and traditional painting, the iMotion became a canvas for expression. These products were often being used as main attractions in games rooms or garages and customization became an essential part of the buying process.

2015

VR
SIMUL

Although VRX had showcased multiplayer racing a few times in its history, the concept of a turnkey system that was easily replicated was still being developed. As VRX neared a complete product, the company teamed up with CAD-modelling giant, Autodesk, to showcase the power of the software in real-world applications. A two-simulator RaceRoom was demonstrated at Autodesk University in Las Vegas to showcase the real-world application of Autodesk in the industry - the software was used by industry leaders to design and manufacture their products.



2016 brought a series of custom projects for VRX. From the first Connected Car simulator to a mobile flight experience for the Breitling Jet Team, a suite of new products were introduced to the VRX product line that continued its rise to the top of the list of experience creators.

The success of the Forza/XBOX relationship attracted the attention of other departments within Microsoft. Microsoft Research contracted VRX to build a Connected Car simulator. The project was designed as a data capture and analysis tool to better understand driver behavior in order to develop autonomous and semi-autonomous vehicle technology.



The Connected Car underwent months of development and prototyping before VRX finalized a two-seat platform with a full molded dash. The Connected Car was debuted at the Microsoft Global Exchange in Orlando to showcase the work that Microsoft Research was doing with vehicle technologies.



2016

VRX
SIMUL

As the technology improved and its capabilities expanded, companies all over the world began looking for unique ways to engage consumers and connect them with their brand. Whether it was for commercial entertainment, product activations, or brand stories, VRX's simulators drew the attention of both national and global organizations looking to offer something special.



Following the release and development of the Pro Flight, world-renowned watchmaker, Breitling, connected with VRX to build a mobile flight experience for product activations and events. With deep roots in the aviation industry, the watchmaker wanted to connect consumers with its heritage and showcase the Breitling Jet Team's contribution to the company's brand.



VRX built three custom flight simulators modelled after the Breitling L39 Albatros jet. Featuring authentic flight controls, a full-scale instrument panel, and a five-screen immersive display, the Breitling Pro Flight was one of the most advanced products VRX had built to date.

RACEROOM

Multi-simulator experiences started to become more common as the thrill of engaging in a race with friends was an even more exciting way to entice consumers to hop in the seat.



Several years after its initial release, the VRX RaceRoom was ready to be marketed as a full-featured product. The first customer was Cineplex Entertainment, a national entertainment giant responsible for a large portion of the theatre and entertainment locations in Canada. Their Rec Room franchise, a high-end arcade and dining establishment, began to take hold in Canada and they needed the ultimate attraction for their flagship location in Toronto.



The success of racing simulation as a commercial entertainment attraction was well-known in the industry. This attracted the Rec Room to the VRX RaceRoom, especially since it was offering a unique, contained, and turnkey approach to the experience.

The Toronto Rec Room installed the RaceRoom in the summer of 2016 and the attraction has since become the most popular experience at their facility. The Calgary Rec Room location followed suit shortly after and installed another RaceRoom in the fall.



2016

VR
SIMUL

The popularity of the VRX simulator for events and activations continued to increase. The realism of racing simulation, as well as the thrill of the motion experience, attracted people of all types to tradeshow booths, corporate parties, VIP events, and more.

A perfect fit for the racing simulator aspect was the Daytona 500, NASCAR's largest event of the year. Not unlike the Super Bowl, the whole USA understood the importance of NASCAR in North American racing and event organizers wanted to leave a lasting impression on the in attendance.

For the Daytona 500 2016, Jeff Gordon himself hosted a celebratory kickoff party before race day. At his party, he had an iMotion simulator running Daytona and exclaimed that "though [he] may not be driving in the Daytona 500 this year, this is a pretty close second."



Continuing the VRX/Forza collaboration, the launch for Forza Horizon 3 at E3 2016 required another custom experience for the XBOX team. VRX converted the existing Forza simulators to a single 78" curved screen unit and adapted Forza Horizon 3 for motion.



E3 2016 was another huge success for all companies involved and continued VRX's momentum as the leading activation provider for world-class games and experiences.

Aside from racing, flight, and sports simulation, other applications for high fidelity simulators began to appear as opportunities for VRX as both their technology and product portfolio expanded.

With a history of providing hardware to government simulation programs, VRX took the opportunity to provide a vessel simulator to the Royal Canadian Marine Search and Rescue training facility in Sooke, BC.



The simulator featured a massive projection screen that provided a 180 degree peripheral view and a full-scale cabin similar to operational vessels in the fleet.

The program has since expanded and a rigid-hull inflatable boat simulator is in development that includes full six-degree-of-freedom motion with a complete ICE console mounted on top.



2017

VR
SIMUL

THE NEW MASTER OF MOTION

The past 18 years of VRX history involved many years of development, production revisions, improvements, and research. It led to extraordinary innovations in simulation of all types and positioned VRX as the leader in motion experiences. There were very few companies that rivaled VRX's ambition and dedication to creating game-changing products for a variety of markets.



The turning point for what VRX could achieve came with the introduction of six-degree-of-freedom (6DOF) motion into the VRX product line. 6DOF motion has been used for many years as a simulation and testing tool for aircraft and automotive manufacturers, as well as organizations such as NASA. Historically an industrial piece of equipment, home entertainment never saw a fully capable 6DOF motion simulator that worked with off-the-shelf software found on gaming PCs.

VRX's goal was to create a state-of-the-art motion solution that could be considered multipurpose. The idea was to keep the cost under USD 500,000 by allowing the platform to be easily switched between driving, flight, and experiential simulation. This was unheard of up to this point in the industry and was poised to make VRX a pioneer in large-scale simulation for entertainment purposes.



RAPTOR

For over two years, the VRX had been developing what would come to be known as the Raptor. A large-scale simulation solution that could be swapped from racing, flight, helicopter, and passive experiences in less than 15 minutes.



LINK:

Scan this QR code to take you to the Daily Planet video.



The Raptor ran on iRacing and Xplane 10, making it the first large scale simulator to work with consumer-ready software. Featured on Daily Planet and arguably the most advanced piece of hardware VRX has ever developed, the Raptor is unrivaled in the industry.

2017

VR
SIMUL

C·O·N·N·E·C·T·E·D C·A·R V2 & V3

The Connected Car caught the attention of executives at the automotive manufacturer, Toyota. Toyota and Microsoft had formed a joint venture under the name of Toyota Connected, a software company that creates artificial intelligence to incorporate state-of-the-art driving technology into real-world vehicles.



A refined research platform was required, which led to the development of the second and third versions of the Connected Car. These products featured a full fiberglass dash shell, improved driving controls, and a secure housing for all of the electronics housed onboard. The Connected Car V2 & V3 were stronger, more durable, and provided a much more polished experience than the prototype.



The Connected Cars are housed in Toyota Connected's offices and Toyota Motors North America's visitor experience center, respectively.

RACEROOM

The popularity of multiplayer competitive virtual racing continued to grow since the official release of the VRX RaceRoom. Companies were now looking to capitalize on the attraction by offering more seats in a smaller footprint. VRX began developing RaceRooms that consisted of more than two simulators.



In 2017, VRX released the first eight and 10-sim RaceRoom that fit into a footprint no larger than the original two-simulator RaceRoom installed in the RecRoom. By using the much-improved virtual reality technology, VRX was able to limit the size of the screens and maximize the use of space within the RaceRoom.

The first 10-simulator RaceRoom was installed at ICAR in Mirabel, Quebec - an exotic car test track that offers driving experiences to the general public.



Additional RaceRooms would go on to be installed in family entertainment centres across the continent in the years to come.

2018

2018 was arguably the biggest year for VRX. The company had an immense amount of momentum and had released products into several industries. Now a global name in simulation, VRX had an endless amount of opportunity in front of it.

This rapid growth also brought challenges to the company. Other simulator manufacturers were popping up all over the world as the expansion of virtual reality became widespread and the cost of manufacturing came down significantly. VRX had to leverage its partnerships and product arsenal in order to remain the leader in motion-based simulation.



The start of 2018 kicked off with VRX revisiting the roots of its inception - racing. The Daytona 500 was just around the corner and Jeffrey Earnhardt, nephew of the late Dale Earnhardt, had become the last Earnhardt left in NASCAR. As Dale Jr. was an inspiration for Robert Stanners and VRX, Robert took the opportunity to ensure VRX's support for Jeffrey in the Daytona 500. VRX sponsored Jeffrey's car for the race and made its mark known in the racing community.

The Daytona 500 marked a new beginning for VRX. By leveraging its racing roots and the national stage it had acquired through sponsorship, VRX World and VRX Live, two revolutionary concepts were announced. These messages would continue to be promoted throughout the NASCAR season, both in the US and Canada, with VRX's support of two other drivers, Ryan Newman (Camping World Series) and Pete Shepherd (NASCAR Pinty's Canadian Series).



The support of these drivers stirred up enough buzz about the company that the next step for VRX was to officially launch the products it had been developing over the course of 2017 & 2018: VRX Live, Vessel, Apollo, and the next version of the RaceRoom.



2018



These products would be debuted at IAAPA (International Association of Amusement Parks and Attractions) in Orlando, FL. The biggest and most important tradeshow in VRX's history marked a critical moment in history for the company. With leading-edge products under its belt, the company wanted to share its massive vision with the world in order to propel it to the next level.



IAAPA was a huge success for VRX, with its full product arsenal on display for the world to see. Months of preparation led to four jam-packed days that tested the VRX team as a whole.

2018 also saw VRX supporting national esports competitions such as The GT Canadian Championship and built simulators for global brands such as Hoonigan and Hyundai. VRX also sent simulators to Microsoft experience centers in New York, Seattle, and Sydney (Australia).



The years leading up to VRX's 20th anniversary created solid foundation for innovation and industry leadership. The company had accomplished so much in its two decades of existence, however it showed no signs of slowing down. With a top-tier portfolio of products that served a variety of applications, solid relationships with some of the world's biggest technology companies, and a vision of bringing interactivity to the world, the next 20 years for VRX will surely be as monumental as the last.

VRX also supported another esports tournament in partnership with XBOX and Cineplex. "Are You Canada's Faster Driver?" brought the fastest Forza Motorsport drivers to Toronto for a heated racing competition and included a first-place prize of \$7,500.



During 2019, VRX refined some of the products at IAAPA 2018. This included the Apollo, a turnkey motion chair that allows user to enjoy passive experiences or take control with flight controls.



2019

2019 also brought another huge milestone for VRX and Microsoft's relationship. After over 15 years of working together, Microsoft and VRX collaborated to create the ultimate racing simulation experience for Microsoft's flagship store in London, UK. The store designed to provide interactive experiences, showcase the company's newest technology, and allow the community to learn more about digital technology as a whole.



Specializing in motion simulation and experiences, the VRX engineering team worked tirelessly to retrofit a McLaren Senna with D-BOX motion actuators. The car was also fitted with wiring and button systems to interface with Forza Motorsport 7 on Xbox One S - the world's first and only full-car motion experience that works with a consumer game console.

An important milestone for VRX was the release and development of VRX Live. With almost two years in development, VRX Live is a groundbreaking technology that allows VRX simulators to remotely control vehicles of any size or type. Whether it be land vehicles, aircraft, or marine vessels, the vehicle can be controlled completely unmanned with full-motion, visual, and auditory feedback due to specialized sensors installed on the car.

LIVE



FEEL THE MOTION



SEE THE VISUALS



IMMERSE YOURSELF

The technology is designed for both entertainment and industrial applications, from competitive remote control racing to control unmanned vehicles in hazardous locations. VRX Live can also be used to passively experience live events from the driver/pilot's perspective. Whether you're watching a live F1 race or airshow, you can view everything from a first-person view and experience the sights, sounds, and movements from the vehicle - putting you right in the driver's seat.



THE FUTURE

"The technology you use impresses no one. The experience you create with it is everything."
Sean Gerety

THE FUTURE OF SIMULATION

Market Trend Summary

The global simulation market continues to grow at a steady rate and is expected to reach \$20.99 billion USD by 2022. There are several segments that make up that market, each growing at their own rates.

The segments that VRX are positioned to pursue are as follows:

- Driving simulation market
- Flight simulation market
- Land vehicle market
- Marine vehicle market
- Gaming simulation hardware, primarily racing

Training for commercial pilots is one of the fastest-growing markets for simulation. This is largely due to the demand for pilots and the rapid adoption of pilot training programs that mandate simulation as the first part of the program. With an estimated growth to \$7.7 billion by 2025, pursuing the flight simulation market is a natural fit for VRX.

Fastest Growing Regions for Simulation: The Asia Pacific and Europe

Driver Training and Unmanned Vehicle Control

Driver training simulators are among the largest market segment for simulation. OEMs and regulatory bodies are increasingly looking to simulation as a means to design and develop safe and efficient vehicles.

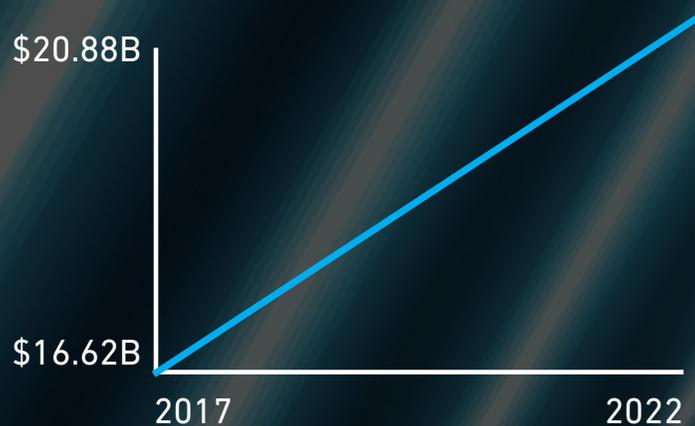
Unmanned land vehicles for military applications is driving the growth of land vehicle simulation.



The Global Simulators Market Worth \$20.99 Billion by 2022

For the last 20 years, VRX has innovated, adapted, and grown its product line to a diversified selection of solutions capable of serving a variety of applications. The simulation market shows no sign of slowing down and neither does VRX.

Simulation as a cost-effective training solution is continuing to grow on a global scale. As technology improves and the cost of adoption decreases, industry, military, and entertainment markets are looking to simulation to solve a variety of problems.



Flight Simulation & Pilot Training

The commercial segment of the simulation market is proposed to grow due to the increased need for cost-cutting in training programs. Pilot training programs are being rapidly developed to meet the increased demand for commercial pilots.

Flight simulation is an opportune market for VRX, with an estimated worth rising to \$7.7 billion by 2025 from \$5.7 billion (2019). This market growth is particularly prevalent in the Asia Pacific.

- **\$5.7 Billion in 2019**
- **\$7.7 Billion in 2025**



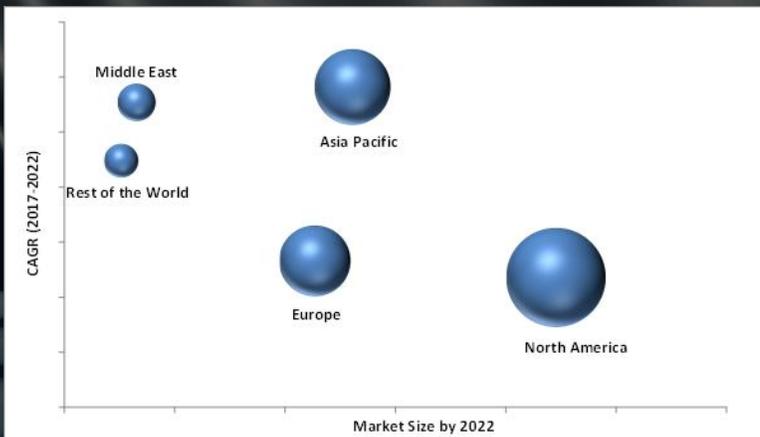
Highest Compound Annual Growth Rate: Land Vehicle

The Land Vehicle class of simulation is projected to grow at the highest compound annual growth rate (CAGR) over all other classes of simulation. This is due to an increasing demand for unmanned military vehicles. This provides an opportunity for driving and VRX Live-based simulations.

Increased Regulation for Simulation

Regulatory bodies are making it mandatory to use simulators in the initial training phase of training programs, supporting the growth of the simulation market globally.

Simulators Market, by Region, 2022



North America is estimated to lead the simulators market by 2022, largely due to military and commercial aircraft fleets dominating the rest of the world. The simulators market in Asia Pacific is projected to grow at the highest CAGR during the period due to the growth in the aviation industry,

Key Players in Industry

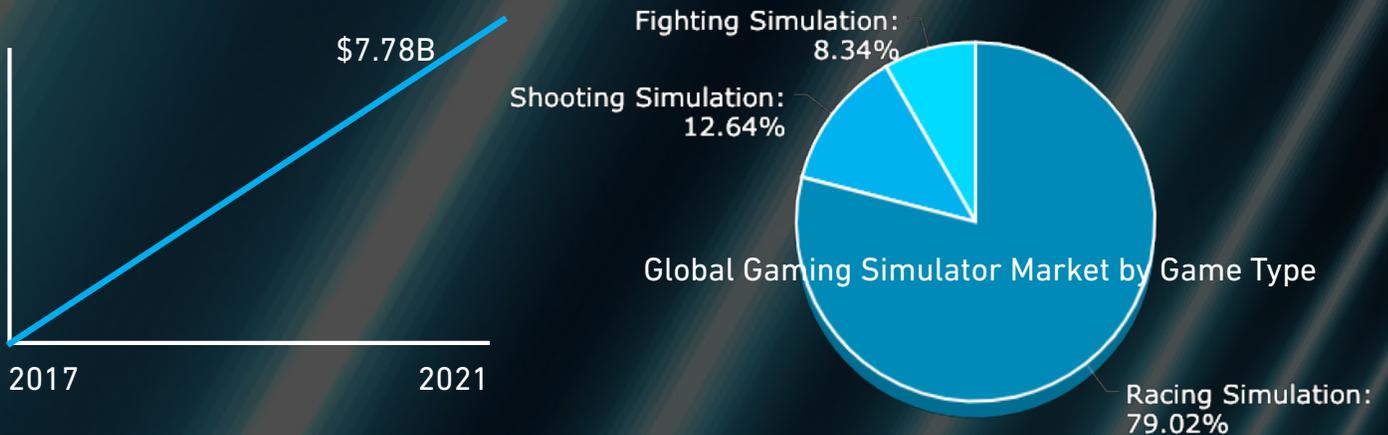
- CAE (Canada)
- L-3 Technologies (US)
- Flight Safety (US)
- ECA (France)
- Boeing (US)
- Thales (France)
- FAAC (US)
- Lockheed Martin (US)

Markets to Consider

- Truck simulation
- Bus simulation
- Driver training simulation
- Rigid hull inflatable boat (RHIB) simulation

Global Gaming Simulator Market: Fastest Growing for Hardware

The demand for hardware in the global gaming simulator marketing is expected to grow at a CAGR of 17%, reaching \$7.78 billion by 2021. The largest segment of gaming simulation is racing by a large margin.



Top Players in the Gaming Segment

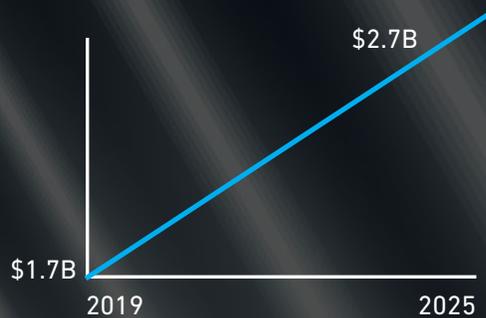
- VRX Simulators
- CXC Simulations
- Eleetus
- Vesaro
- D-BOX Technologies Inc.

CXC and Vesaro are VRX's primary competition, though they have a heavy focus on racing as opposed to a variety of motion-based experiences that VRX has been developing. They also do not participate in large scale motion development.

Racing simulation continues to be the fastest-growing simulation segment in the gaming market. This is largely due to the adoption of virtual reality, increasing the immersion of the experience. Racing simulation hardware also more accurately represents the true-to-life experience than other simulation segments.

Driving Simulator Market: Compact Simulators on the Rise

The driving simulator market is continuing to expand as many OEMs are opting for advanced driving simulators at their research facilities. The simulators are used to test technologies related to fuel efficiency, driver behavior, and autonomous driving.



2019-2026 CAGR

6.54%

Asia & Pacific Markets: Largest Growth Potential

Regulatory bodies in the Asia Pacific and European markets are projected to have the highest growth potential due to OEMs establishing R&D facilities in the region and regulations related to the safety and environment are becoming increasingly stringent. A key European market is Germany.

Compact Simulators: Driver Training Tools

Compact simulators used for training novice drivers are estimated to account for the largest market size between 2019-2025. This is due to OEMs using small units to train users on traffic regulations and driving proficiency. North America is estimated to be the largest market due to the developed infrastructure and sensitive approach towards traffic regulation.

Market Factors to Address

- Lack of skilled drivers
- Rising R&D on driving simulators
- Growing prevalence for high fidelity simulators
- Technological advancement and development is driving market growth

The VRX logo is rendered in a bold, metallic, 3D font. The letters are white with a grey shadow and a blue highlight, giving it a futuristic and industrial appearance. It is positioned at the top center of the image.

VRX

**EXPERIENCE
AMAZING**

The background of the entire image is a dramatic sunset or sunrise over a vast sea of clouds. The sun is a bright, glowing orb on the horizon, casting a wide, golden light across the sky and illuminating the tops of the clouds. The sky transitions from a deep orange near the horizon to a dark, starry space at the top. The clouds are dense and textured, with varying shades of orange, yellow, and blue.

ON THE HORIZON

VRX WORLD

2020

Ready to test in Q4 2020, VRX World marks the beginning of a revolution in how humans interface with technology - the theme park of the future.

VRX World is an environment where humans come to experience their connection with the living universe.

ENGAGE WITH THE LIVING WORLD

JOURNEY TO THE EDGE OF THE UNIVERSE

DISCOVER CITIES OF THE FUTURE

EXPLORE NEW WORLDS



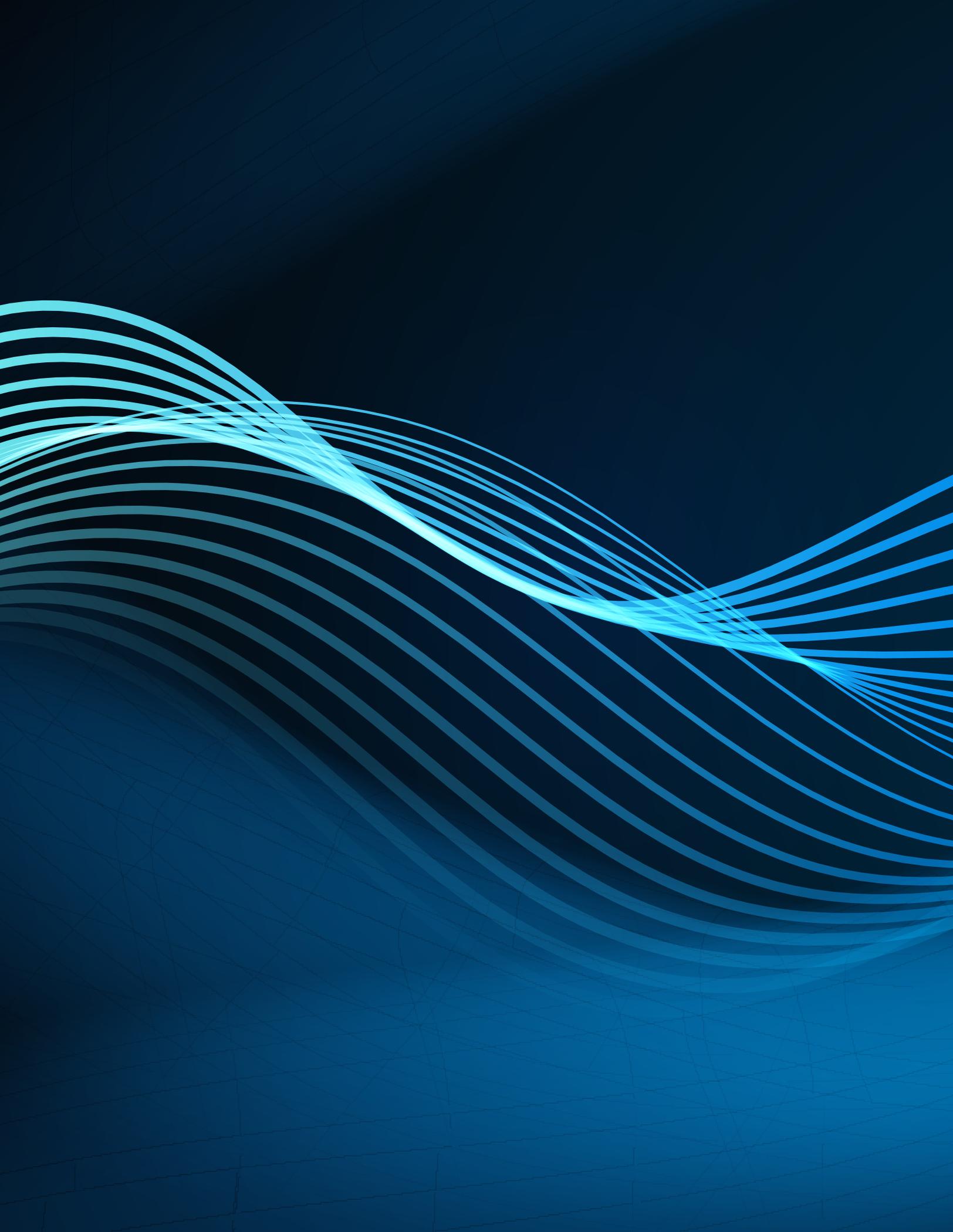




THE PRODUCTS

"Technology, like art, is a soaring exercise of the human imagination."

Daniel Bell



VRX

iMOTION

**THE ULTIMATE VIRTUAL
RACING EXPERIENCE**



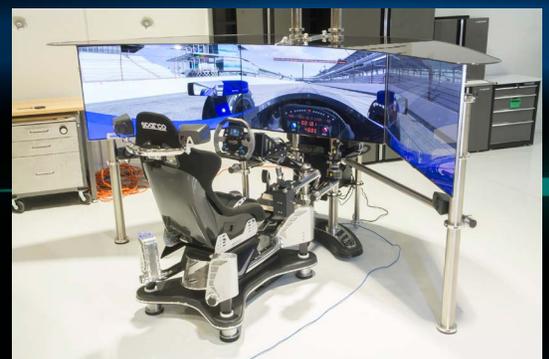
VRX iMOTION

A HISTORY OF THE WORLD'S DRIVING SIMULATOR

The VRX iMotion is a testament to motion simulation from both an experience and an industry perspective. Motion simulation on a consumer-level became available in the mid-2000s. VRX, already positioned as the first racing simulator provider, added to its arsenal by combining everything that made the product special and improved it by adding a full three degree-of-freedom motion experience.

Before the iMotion, motion simulation was reserved for large scale motion platforms such as the Stewart 6-DOF platform. These platforms were used in manufacturing and testing facilities and were not available for the general consumer. The iMotion brought high-fidelity racing simulation to the consumer market as a training tool.

Once the excitement of the experience became more well-known, the entertainment market began to adopt motion experiences as part of their line of attractions. The market exploded and led to a wide variety of other simulator providers, which kept VRX innovating and creating new and improved products.



S FIRST FULL MOTION

In the decade that followed, the VRX iMotion simulator was adapted to incorporate flight simulation and virtual reality motion experiences. The success of those avenues led to their specific motion simulators - the Pro Flight and the Apollo VR Chair.

KEY FEATURES OF THE iMOTION

- **QUALITY CONSTRUCTION**
- **TRUE MOTION FEEL**
- **AUTHENTIC DRIVING EXPERIENCE**
- **STUNNING VISUALS**
- **ANY CAR - ANY TRACK**
- **THE WORLD'S BEST SOFTWARE**



iMOTION CHASSIS LAUNCHED IN 2018



iMOTION

**FROM ADVANCED TRAINING
ENTERTAINMENT**

As technology evolved, so did the iMotion. The incorporation of better motion systems, sharper visuals, more realistic driving controls, and increasingly immersive software, led to the iMotion becoming widely adopted among global brands. The product is used to this day as an experiential marketing tool to provide customers a unique experience for brands from various industries and locations across the world.

PROUDLY USED BY GLOBAL BRANDS



TO WORLD CLASS

The evolution of the iMotion has encapsulated the very best innovations in technology and motion simulation. From multi-screen arrays to virtual reality, all improvements to how people interact with gaming and simulation experiences have been incorporated into the iMotion. This makes it the most popular product VRX has ever released.



TRIPLE SCREEN ARRAY



HTC VIVE PRO IMMERSION



VRX

P·R·O·F·E·S·S·I·O·N·A·L
SERIES

**BUILT FOR DRIVERS
BY DRIVERS**





P•R•O•F•E•S•S•I•O•N•A•L SERIES

THE WORLD'S FIRST DRIVING THE WORLD'S BEST DRIVING

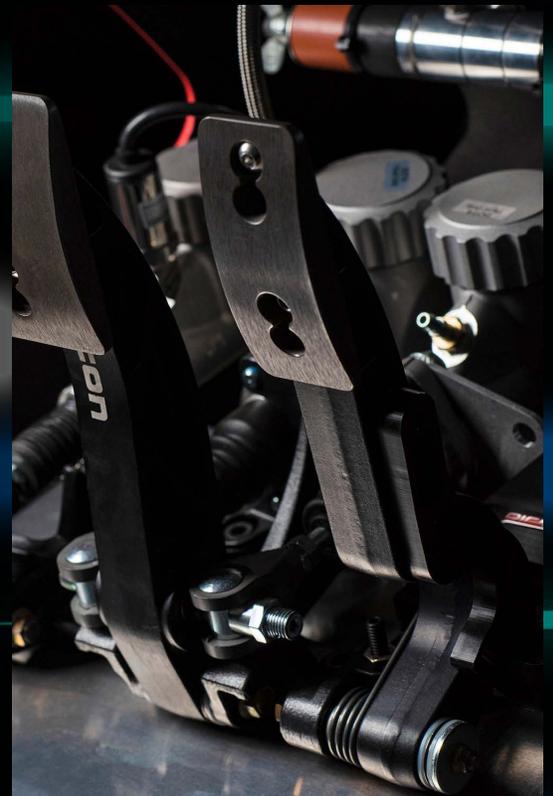
After establishing themselves as the leader in racing simulation and becoming a globally recognized brand in the industry, VRX aspired to create a truly authentic racing training experience.

With a strong foundation in driver training and a firm understanding of how to build premium products, VRX connected with racing driver David Smith to design a low-cost but extremely accurate driver training solution.

David Smith is the owner of Shockwave Seats, a world-renowned marine suspension seating manufacturer. As part of David's passion for performance and racing, he also founded Shockwave Motorsports, the Shockwave racing program.

To improve his skills in the off-season, David purchased a VRX iMotion and began to use it for track training and maintaining his fitness and performance at optimal levels.

Through feedback and extensive testing, Shockwave and VRX began developing the Professional Series - a racing simulator specifically designed for race car drivers.



IG SIMULATOR BECOMES G SIMULATOR

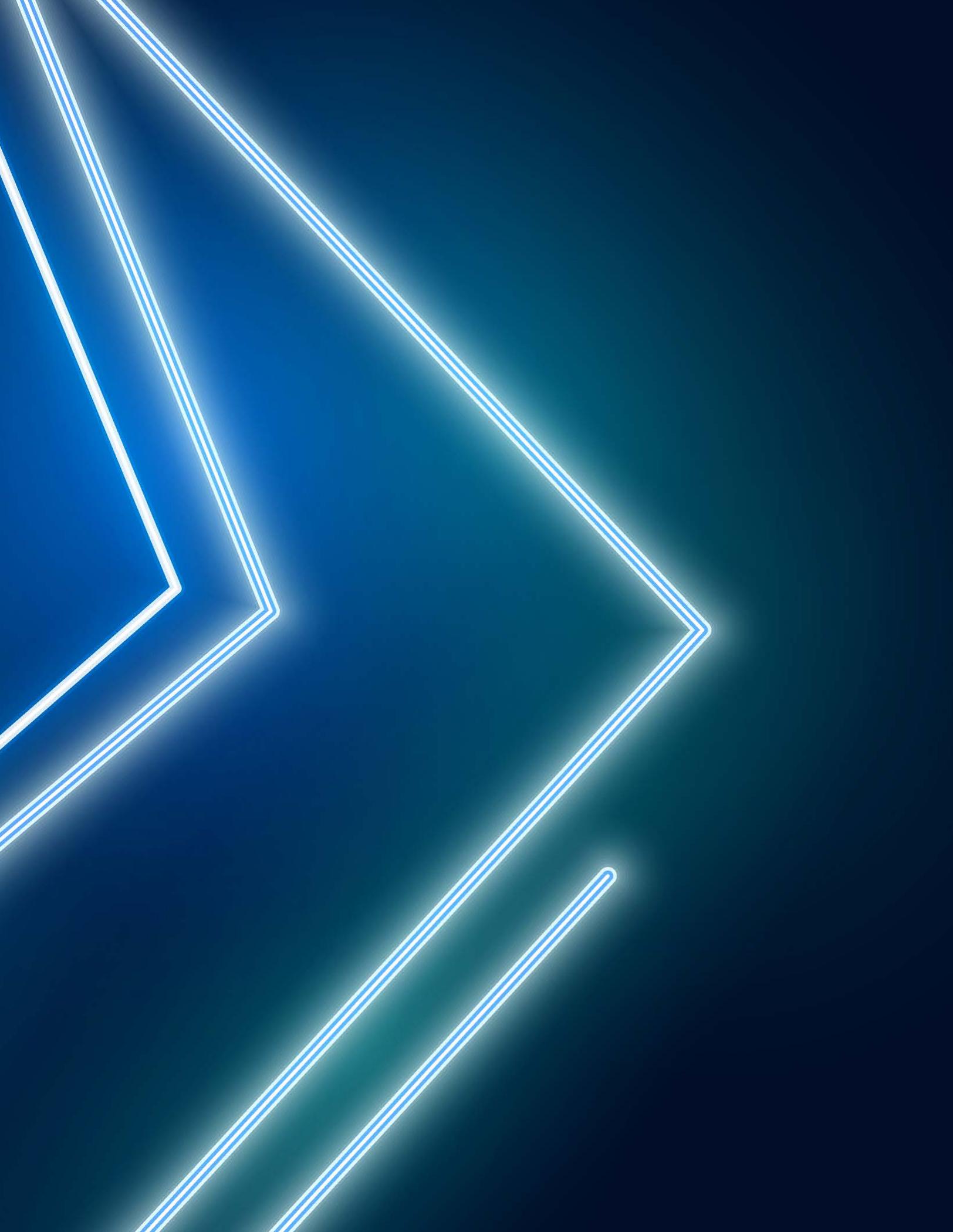
With some key modifications to the iconic iMotion, the Professional Series incorporates actual race car components in order to create an authentic feel for habit building. The user can also use their own seat and steering wheel to ensure the exact replication of their vehicle in-game.

KEY FEATURES OF THE PROFESSIONAL SERIES

- AUTHENTIC 5-DOF MOTION
- PERFORMANCE PEDALS AND DIRECT DRIVE STEERING
- ALLOWS FOR CUSTOM SEAT AND WHEEL
- STUNNING VISUALS
- ANY CAR - ANY TRACK
- THE WORLD'S BEST SOFTWARE



PROFESSIONAL SERIES LAUNCHED IN 2019



VRX

**PRO
FLIGHT**

TAKE TO THE SKIES





PRO FLIGHT

*THE WORLD'S LARGEST SIM
A DIFFERENT KIND OF SIMU*

The VRX Pro Flight simulator started as a custom project for ICON, an aircraft manufacturer in California. The project was to showcase a flying experience for the new aircraft they were building at the time. The first of its kind, the VRX Pro Flight simulator featured a 6-screen display, full general aviation flight controls, and the core motion platform VRX used on the iMotion simulator.

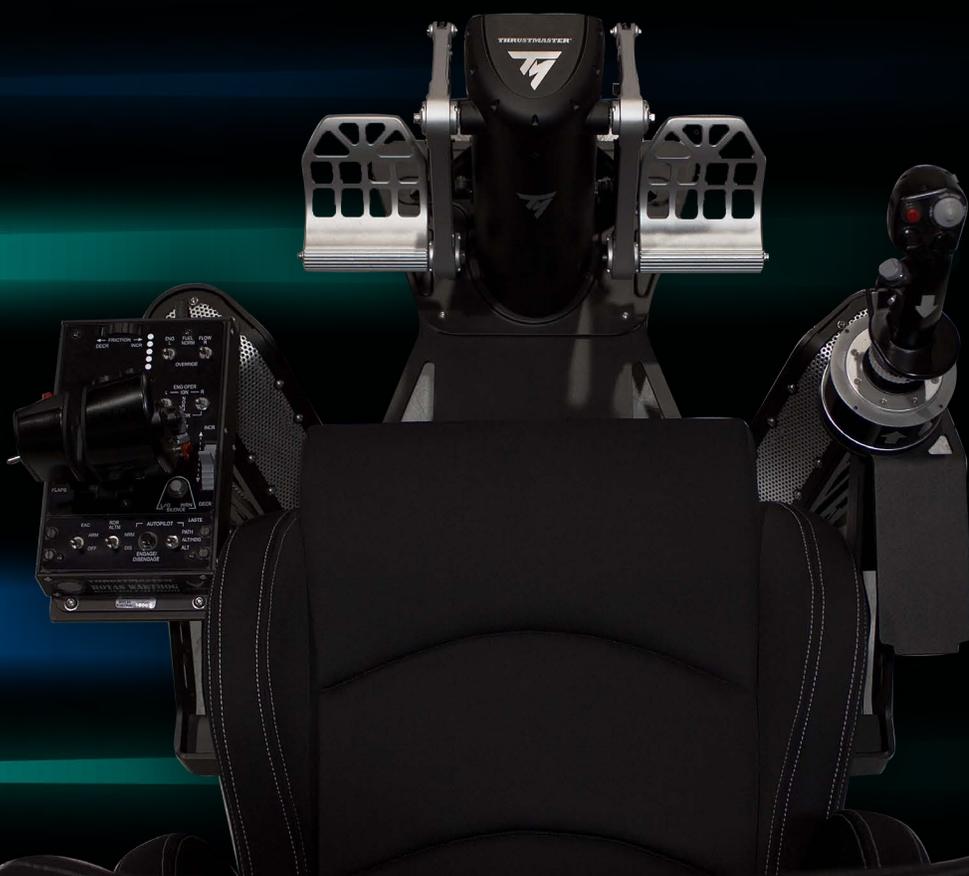
Since the first unit was built, VRX has continued to develop it into a fully-functional flight simulator that has been used to create true-to-life flight simulation experiences for a variety of customers.



MULATION MARKET MEETS ILATOR

Combining the leading flight simulator titles such as Microsoft Flight Simulator X and Xplane, the Pro Flight has been built for companies like Breitling and the Richmond Olympic Oval to provide realistic flight experiences for their customers.

Much like the iMotion, the Pro Flight was designed as a small-scale, full-featured flight simulator that could provide a comparable experience to products in much higher price brackets. With the demand for pilots increasing year over year, VRX's goal has been to reduce the footprint of the unit to provide a truly compact and portable flight simulation solution for the growing market.



PRO FLIGHT SIMULATOR CHAIR



THREE BREITLING PRO FLIGHT SIMULATORS

VRX

APOLLO

VIRTUAL REALITY THAT
MOVES YOU



VRX APOLLO

**WHEREVER YOU WANT TO GO
OUR MOTION CHAIR WILL TAKE YOU**

VRX's strong foothold in motion simulation positioned the company well for the strong takeover of virtual reality as both an entertainment and a training tool. With the release of the consumer Oculus Rift in 2016, the gaming industry was ready to embrace virtual reality experiences and begin offering them to the consumer market.

As consumers began to become more comfortable with virtual reality, and as the technology continued to improve, the demand for unique and immersive VR experiences continued to grow.

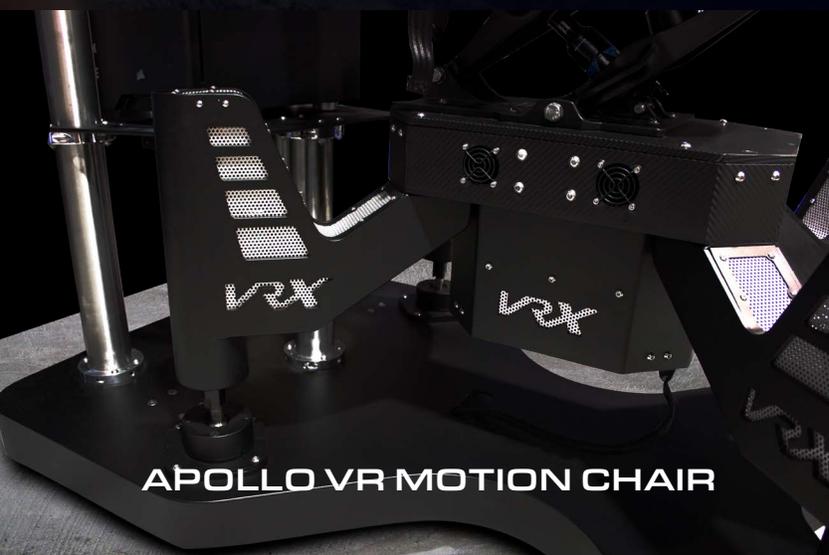
VRX's response to this was, not only to offer VR racing & flight experiences on their existing iMotion and Pro Flight platforms but to begin offering passive experiences that involved little to no interaction from the user.



GO, THE VRX APOLLO VR YOU THERE

The concept of a passive experience was for the user to sit in a motion-capable chair and “ride-along” with the content being shown. Whether this was a space shuttle cruising through the outer depths of our galaxy or to ride shotgun in an F1 car, showcasing content to consumers that is both immersive and comfortable was the ultimate goal.

This led to the birth of the Apollo - VRX’s completely turnkey VR motion chair. The first of its kind, the Apollo uses VRX’s industry-leading motion system to provide immersive passive VR experiences to riders. A stepping stone to VRX Live, which is a revolutionary content delivery system for VR experiences, the Apollo can be used in single-unit “pods” or connected for a unique multi-user motion experience.



APOLLO VR MOTION CHAIR



VRX SIMULATORS EXPERIENCE AMAZING

Coming in 2020, VRX world
a revolution in
attractions. The
World will redefi
with th

EXPERIENCE

VRX World will be a
craft their own exp



APOLLO MOTION CHAIR DURING PHOTO SHOOT



RACEROOM

**CONNECT. COMPETE.
ATTRACT.**





RACEROOM

***THE RACEROOM TAKES COMMERICAL
RACING TO WHOLE OTHER LEVEL***

The iMotion racing simulator became VRX's most popular product by a significant margin following its release. The excitement and immersion of a full-motion racing experience created an attraction that was hard to beat.

With the emergence of racing simulation in a commercial environment (tradeshows, arcades, museums, etc), the next step was allowing players to race against each other competitively. This added a whole new dimension to the gameplay and revolutionized the entertainment space for realistic racing simulation.



Although connected virtual racing had been around for some time, and VRX demonstrated a simplified version of their raceroom back in 2004, the official (re)release of the product was in 2016 as part of the flagship attraction for the Cineplex Rec Room franchise.

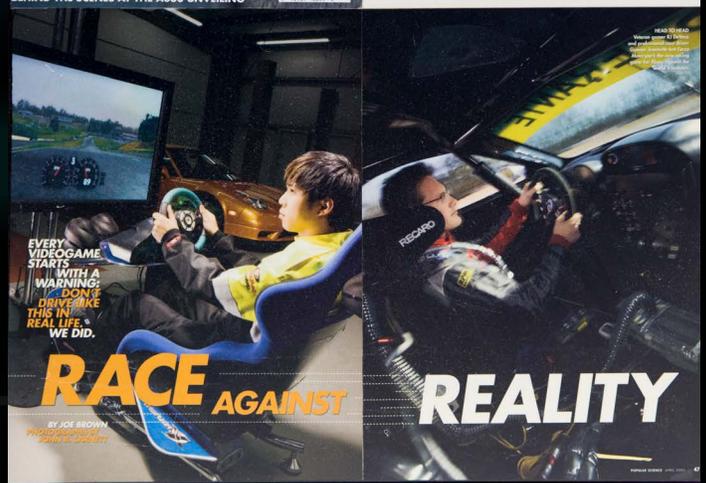


COMPETITIVE VIRTUAL LEVEL

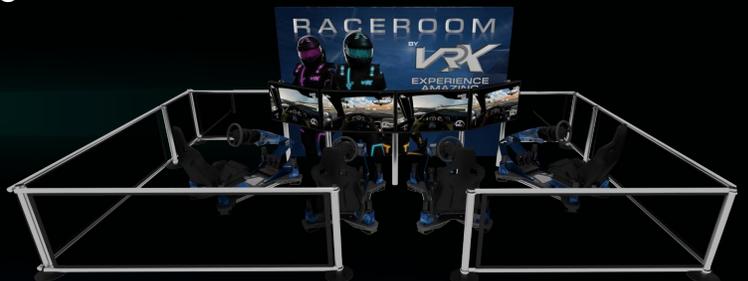
VRX's first demonstration of connected racing was at Road Atlanta in 2004. Two simulators were set up in race garages and RJ DeVera and Jeannette Gunnar did hot laps on both the real track and the simulators. The event was to demonstrate the accuracy of racing simulation and the effectiveness it had on improving lap times of real drivers.



Fast forward to 2016 and the officially branded RaceRoom was released as a turnkey competitive racing attraction designed for high-end arcades and family entertainment centers. Originally built around two iMotion simulators, the RaceRoom has expanded to include up to 10 iMotion racing simulators in a high-energy, realistic competitive racing setup.



RACEROOM





RACEROOM AT THE REC ROOM CALGARY



C·O·N·N·E·C·T·E·D C·A·R

**DRIVING THE FUTURE
OF SIMULATION**

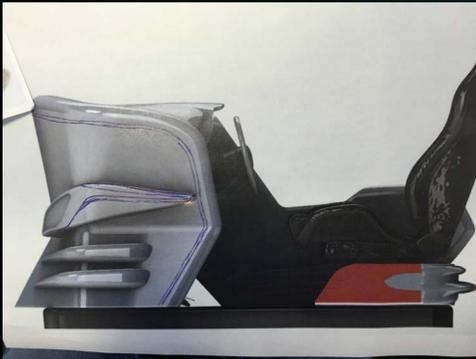




C·O·N·N·E·C·T·E·D C·A·R

THE VRX CONNECTED CAR EXPERIENCE TOOL

The VRX Connected Car was born from a joint project between Microsoft and VRX. Driver behaviour and analysis was a key area of research for Microsoft as the technology they were developing was to be used in real-world vehicles. Understanding how drivers reacted under certain situations and building profiles of drivers through hours and hours of data capture through use became very important in developing the Connected Car concept.



VRX and Microsoft's relationship has spanned almost two decades so naturally, VRX was Microsoft's choice as the hardware provider for this project.



In 2016, VRX was tasked with building the first Connected Car prototype. The concept was to include two seats (driver and passenger) and a full vehicle dash to replicate a typical passenger vehicle. Giving drivers a relatively familiar driving environment was important in capturing accurate driver data.

IS THE ULTIMATE DRIVER

In the summer of 2016, the first Connected Car prototype was built and sent to Orlando for the Microsoft Global Exchange summit - a showcase of the latest technology and projects that Microsoft is developing across its many departments. The product was a big success and this led to the improvement and developments of two more versions of the Connected Car, before arriving at the current model.

Through a partnership between Toyota and Microsoft, called Toyota Connected, another Connected Car was to be designed and built to further the development of the technology inspired by the initial model. Toyota Motors North America would go on to acquire another unit to place in its headquarters and a visitor experience. This would showcase the importance of the product in the vehicle manufacturer's development story.





CONNECTED CAR IN TOYOTA CONNECTED HQ

VRX

RAPTOR

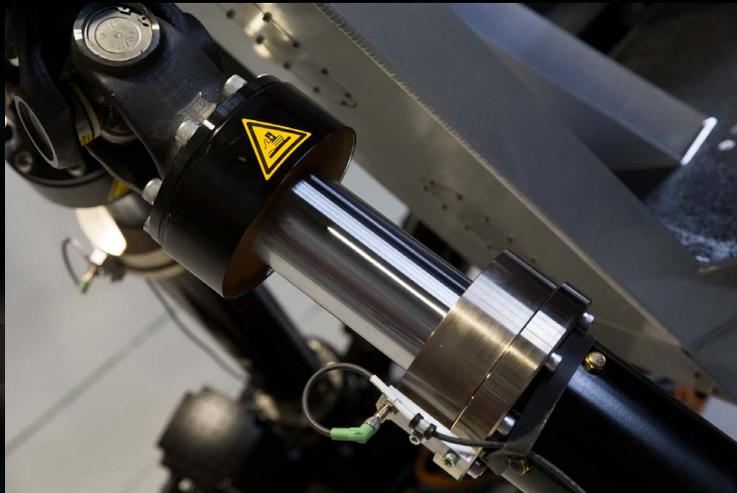
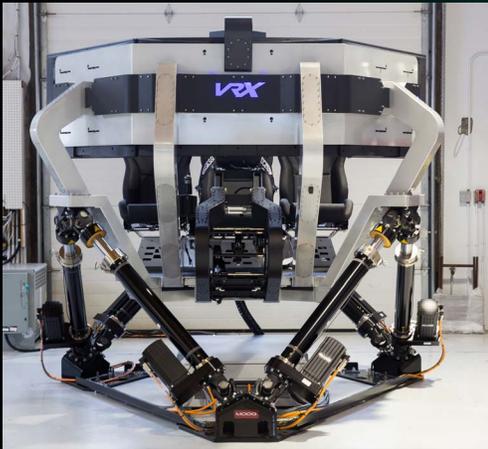
**THE NEW
MASTER OF MOTION**



VRX RAPTOR

STRAP YOURSELF IN AND TAKE THE JOURNEY FROM TARMAC TO THE STRATOSPHERE

For almost 20 years, VRX had continued to innovate and change the way that motion simulation was done. The craftsmanship, design and overall attention to detail that went into building each and every simulator was unrivaled in the industry. Since 1999, VRX had risen to the top of the simulation industry and position itself among the top brands in such a niche market.



The next step for VRX was to combine everything the company had learned up to this point and develop a truly revolutionary product. This product had to be the defining moment for VRX and establish itself as the company that could do anything. It was then, in 2016, that the VRX Raptor was born.

TAKE A RIDE FROM THE SPHERE

Six degree-of-freedom (6DOF) motion simulation was generally reserved for advanced testing and training purposes. Companies like Boeing and Airbus used 6DOF platforms to test their aircraft shells. Flight schools used 6DOF platforms to recreate realistic scenarios for pilots in full-size 737 aircraft. The platforms were advanced, extremely technical, and expensive. They also required specialized software to operate, with many manufacturers opting for proprietary solutions that ensured rigid adherence to the software they provided.



VRX RAPTOR

VRX's goal was to create something more universal - a complete solution that could incorporate off-the-shelf software and be adapted to meet the needs of any client that wanted it. With a strong understanding of racing and flight simulation, VRX wanted to combine the best parts of each aspect of simulation into one adaptable product. This would keep the costs of individual solutions down while maintaining integrity in the training aspect of the platform.

VRX set to develop an interface that took motion data from traditional games like iRacing and Xplane and converted it to 6DOF motion data. This was the first time anyone had done this and it changed the game for creating large-scale motion experiences out of mainstream software.



Almost two years in the making, VRX had produced the first Raptor. A combination of racing, flight, and helicopter simulation, the Raptor allowed for three riders (one driver, two passengers) to engage in a truly immersive, six-degree-of-freedom motion simulation experience.

RACING • FLIGHT • HELICOPTER • EXPERIENCE

With additional features like overhead touch panels, a three-screen immersive display, and 7.2 surround sound, the Raptor combines everything that VRX offers into one incredible package for the ultimate simulation



The Raptor was featured on Discovery Channel's Daily Planet, which showcased the innovation and technological prowess of the VRX team. Since then, VRX has been developing other applications for the Raptor, which include marine simulation and military convoy training.



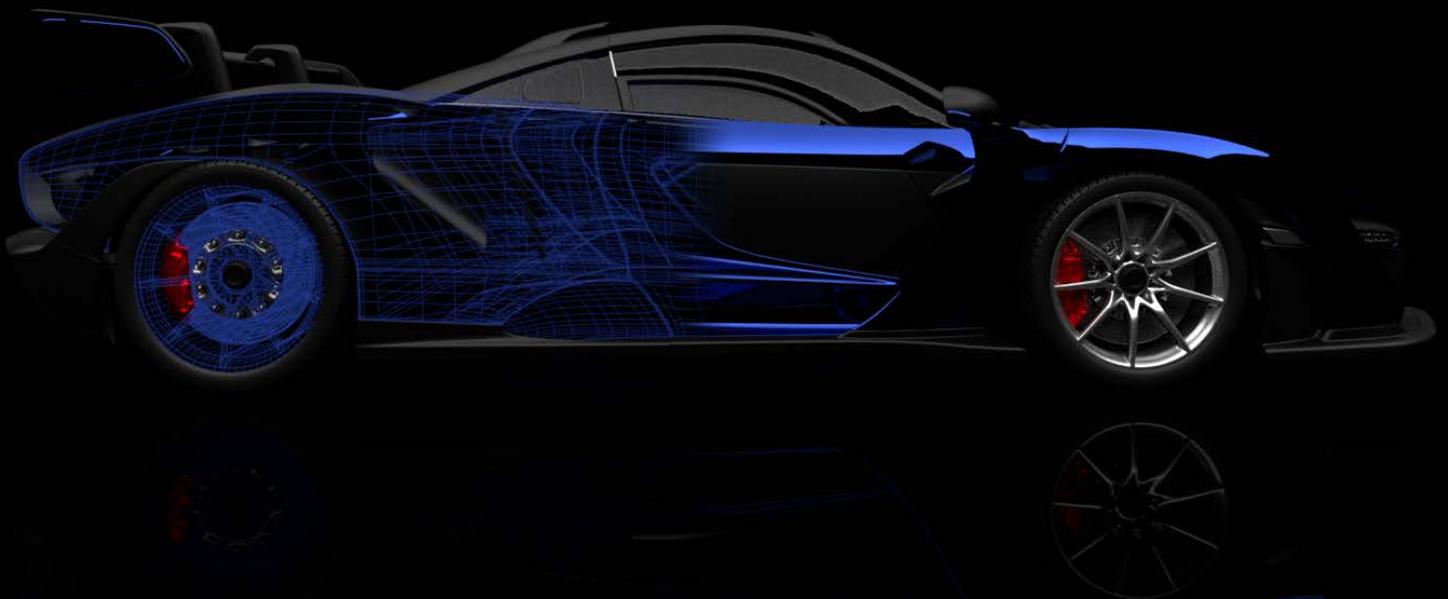


VRX RAPTOR IN VRX HEADQUARTERS



**MCLAREN MOTION
CONVERSION**

***TURN A REAL CAR INTO A
RACING SIMULATOR***



IF YOU CAN DREAM IT, WE CAN BUILD IT.



THE WORLD'S MOST EXPENSIVE POWERED BY VRX

Specializing in motion simulation and experiences, the VRX engineering team worked tirelessly for over two months to retrofit a McLaren Senna with D-BOX motion actuators. The car was also fitted with wiring and button systems to interface with Forza Motorsport 7 on Xbox One S - the world's first and only full-car motion experience that works with a consumer game console.



Situated in Oxford Circus, the McLaren simulator is part of Microsoft's flagship store in London. A 21,932 square foot (spanning three floors) behemoth, the tech giant's store is designed to provide interactive experiences, showcase the company's newest technology, and allow the community to learn more about digital technology as a whole.



"We were incredibly excited to be part of this project," said Robert Stanners, CEO of VRX. "Microsoft has been a close partner of ours for over a decade. Joining forces to show the world what technology and simulation can do is exactly what VRX has been doing for 20 years."

IMMERSIVE FORZA SIMULATOR



Forza Horizon 4's cover car is the McLaren Senna. This simulator is designed to show the unique relationship between technology, entertainment, and the automotive industry.

"VRX started out creating a unique way for people to experience old school racing games," says Stanners. "Games today have become so realistic and provide such an amazing experience. Our team at VRX continues to find ways to provide something that you can't experience at home. There's no better company to work with to do that than Microsoft."





MCLAREN SENNA IN MICROSOFT FLAGSHIP STORE | LONDON, UK



**REMOTELY OPERATED
CAMERA STATION FOR
SAUDI**





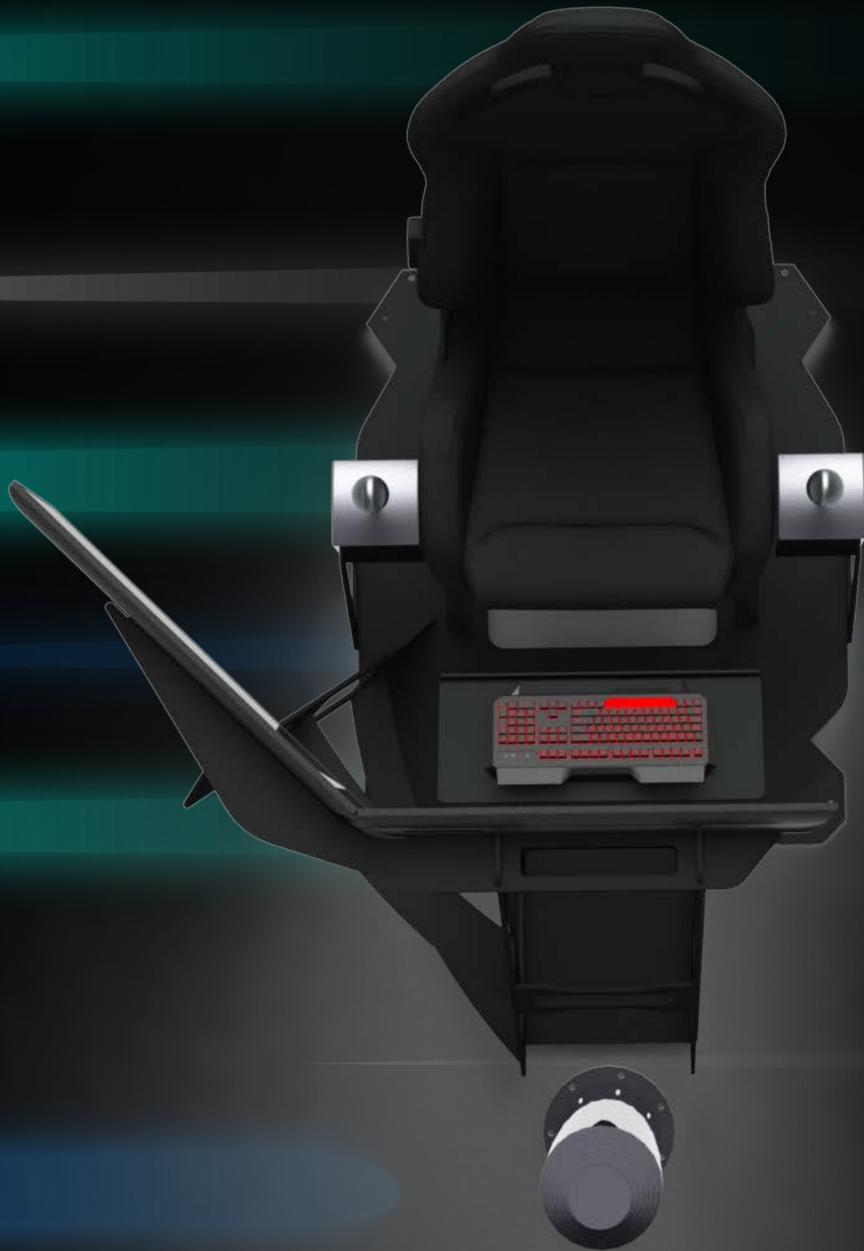
CREATING A SUITABLE ENVIRONMENT FOR MONITORING OF VEHICLES

As part of a collaboration between Camosun College and VRX, the Saudi government wanted help developing a solution for remotely monitoring thermal cameras on a fleet of Toyota Sequoias.

Due to the rough terrain, the camera operator found it difficult to monitor and maintain accuracy of the thermal cameras as the vehicle was traversing through the landscape. To combat this, VRX designed a remote operators station that allowed the cameras to be monitored remotely.

The cameras also had a gyroscopic shock mitigation system installed to reduce the amount of overall movement of the cameras during operation. This allowed the camera operator to accurately monitor the feed and provide instruction to the driver of the vehicle remotely.

IRONMENT FOR REMOTE





VRX

BQBSLED

SITSKI ❄️

KAYAK

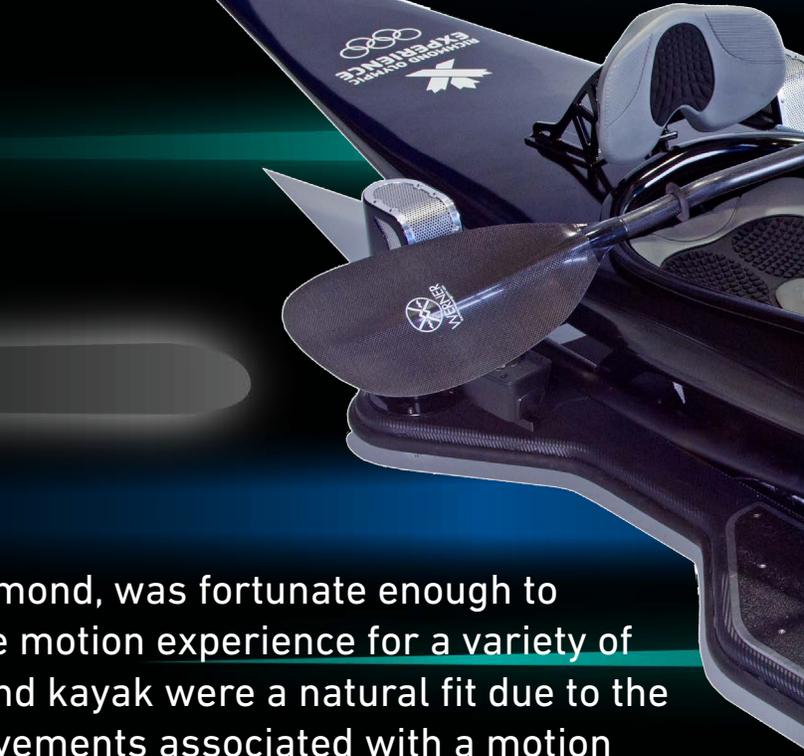
FULL MOTION OLYMPIC EXPERIENCES





REDEFINING HOW MOTION EXPERIENCES

The bobsleigh, sit-ski, and kayak simulators were created as part of an Olympic exhibit paying tribute to the Canadian 2010 Winter Olympic Games. Located in Richmond, BC, the Richmond Olympic Oval is host to a variety of interactive exhibits and galleries commemorating Vancouver's role in hosting the 2010 winter games.



VRX, in partnership with the City of Richmond, was fortunate enough to have the opportunity to develop a unique motion experience for a variety of Olympic sports. The bobsleigh, sit-ski, and kayak were a natural fit due to the implied seating position and natural movements associated with a motion platform.

IS USED IN SIMULATION

BQBSLED

The Bobsleigh simulator consists of a to-scale fiberglass shell mounted to a four-post motion platform. The experience showcases a mixture of captured footage and computer-generated overlays for a “gamified” experience.

Riders can experience racing down the Whistler bobsleigh track and use the onboard driving controllers to steer the bobsleigh and achieve a high score. This was the first experience VRX had built that combines real-world footage with CGI overlays for a true-to-life interactive experience.

KAYAK



The Kayak simulator features a replica fiberglass kayak shell with mounted paddles mounted to a four-post motion platform. Users passively engage in a full-motion experience that highlights the skill and maneuverability of the athletes in whitewater environments.

SITSKI



The Sitski simulator is built using a true replica sit-ski seat mounted to a four-post motion platform. Similar to the kayak, users passively engage with the experience as they race down the mountain in a slalom-style event. Providing a window into paralympic skiing aligns with VRX’s vision of showing a unique perspective on lesser-known sports. Highlighting the skill and athleticism of these athletes is an important part of VRX’s vision and integrates well into the message showcased by the museum.

BOBSLEIGH



FEEL THE FREEDOM

Sit down, find your balance and experience the thrill of riding on a sit-ski.

ONE SKI INSTEAD OF TWO

Sit-ski racing demands extreme agility, strength and balance with racers reaching speeds of 140km/h or more. The sit-ski, or mono-ski, is designed for people with lower-body disabilities or spinal cord injuries. Sit-skiing feels like normal skiing just closer to the snow, with most of the moves created by the core and upper body. A great skier will use the side cut of the ski and centrifugal force to turn effortlessly. The seating system and leg fairs, or covers, work like a ski boot to transfer each move to the ski. Special poles with a short ski blade on each end, called outriggers, help with balance.

JOSH DU

- Para-alpine skier
- Born January 13, 1980 in British Columbia
- Former freestyle skier
- Won a silver medal in the sit-ski race at 2010 Paralympic Winter Games and then one gold medal at Sochi 2014
- In 2012, he became the first person to complete a bi-

SIT-SKI

VRX

EXPERIENCE
AMAZING

ON THE HORIZON



VRX WORLD

2020

Ready to test in Q4 2020, VRX World marks the beginning of a revolution in how humans interface with technology - the theme park of the future.

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ENGAGE WITH THE LIVING WORLD

JOURNEY TO THE EDGE OF THE UNIVERSE

DISCOVER CITIES OF THE FUTURE

EXPLORE NEW WORLDS





