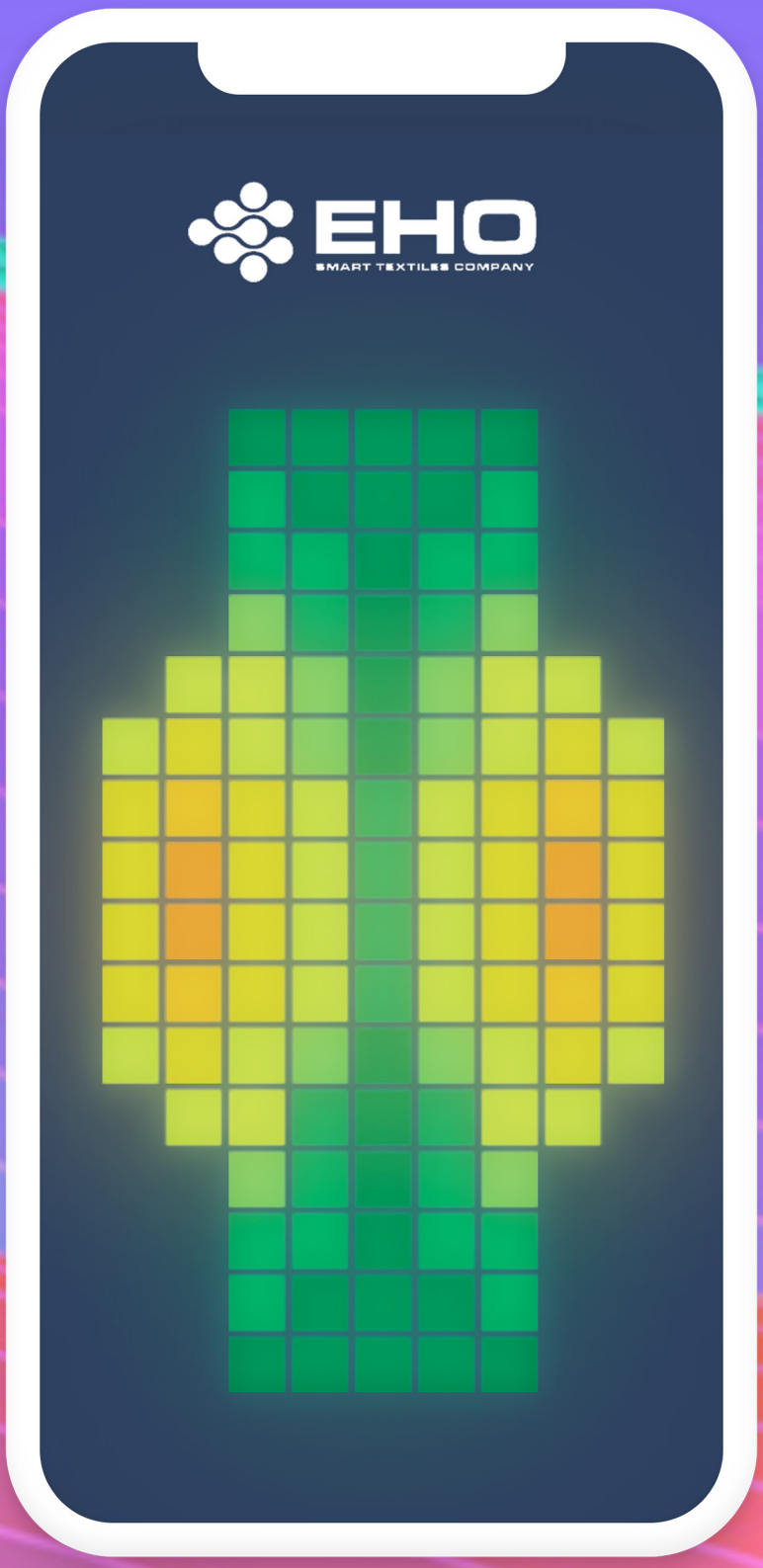
EHO ICO

White Paper



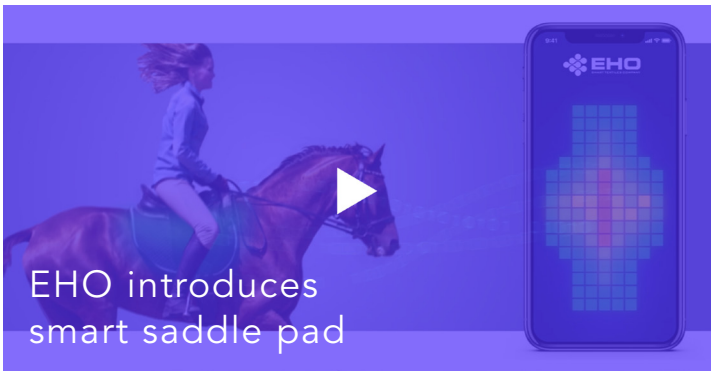
EHO Technologies

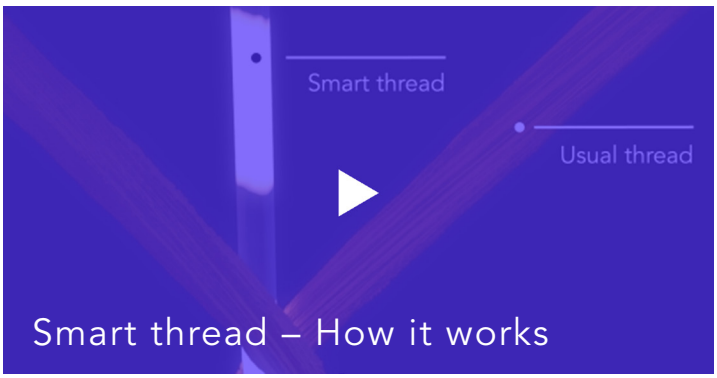
EHO Technologies is a spin-off from Riga Technical University, in Latvia. It started around scientific elaborations related to smart textiles and data processing and interpretation.

Currently EHO develops an innovative proprietary technology to produce pressure sensitive and stretching sensitive textile sensor systems. Combining textile sensor data with data interpretation algorithms, EHO solutions provide meaningful motion analysis to end-users. EHO develops algorithms for data interpretation, thus providing valuable information for monitoring horse and rider performance.

The team that involves both – R&D capacity and business development skills, has worked in bootstrapping mode and achieved significant results - proof of concept, in-depth understanding about end user needs, regional network, prototype, and pilot customers.

Visualisations





Problem & Solution

EHO initial product application is dedicated to horse riders. About 45% of horses experience problems with saddle fit. A poor fitted saddle will cause the horse pain and eventually back problems and even lameness. A saddle with good fit on the other hand enhances the performance of the rider and horse.

Saddle pad with EHO sensor technology provides following benefits:

- saving on saddle change – choosing the right saddle for the horse;
- reducing horse injury costs – right saddle fit;
- improved riding performance – monitoring rider in-saddle position, benchmarking possibilities.

Market

Today the vast majority of riders don't use anything to digitally track their riding performance and the saddle fit. Half of them hurt their horses without knowing it.

There are around 60 million horses globally, ~13% of them in Europe.

The European Horse Network (EHN) estimates that the total horse industry in Europe could be over 100 billion euros a year. According to Alltech's Steve Elliot, the annual economic impact of the equine industry is significant – involving some $300 billion dollars and 1.6 million full-time jobs.

UK is selected as the primary/fast-to-reach market with about 900 000 horses. As secondary markets, Germany, France and Scandinavia have been selected.

Initial market research shows that there are different user groups interested in product offerings. Horse riding trainers are the primary user group. The riders themselves have been identified as a secondary group.

The estimation is that 500k to 1M horse owners could potentially benefit from the EHO system. The serviceable addressable market in the first 2 years: 20 000 clients.

Initially the sales focus will be UK. In 2015, more than 2 thousand instructors were trained in England; the total number is more than 10,000 trainers. The market has 900k horses; every year around 2.8b pounds are spent on horse accessories alone (i.e.,> 3k pounds per horse per year).

Product Validation

A number of steps have now been taken to verify the product's demand on the market. In particular, an assessment of the technological solution of the product has been carried out, which resulted in identifying technological requirements and their compliance with the product. At the moment, EHO has completed work on the demo, which is being shown to potential customers. In addition, in-depth interviews were conducted with clients to identify customer problems and needs.

The industry leaders and experts who were involved in the early stages of developing the product concept and who will provide advice on the first product version stage were identified. At present, the recruited experts are from Latvia, Finland and UK. Possible partners for the development of the product technical solution were evaluated. The technical development of the product demo solution has been carried out in Riga Technical University (Latvia).

> EHO has run tens of interviews with end users and industry professionals. The typical reaction is – “Finally, there’s someone solving this!”.

Currently the communication is done with riding trainers and horse saddle fitters, the top experts in the market with extensive experience. We ask for consultations about prototype, required data about saddle fit and riding performance tracking. We show them interim results and get feedback. We are constantly reminding ourselves not to build something we want, because of the risk that market wouldn’t need it.

We try to make our solution and include only the necessary features. We're currently testing our demo in stables, with real riders on real horses.

The product is considered unique on a global scale. So far, no equivalent product has been created in the world. Experts from UK, Finland and the United States have shown interest in introducing such a product on the market. Combining the unique characteristics of textile sensors with data processing algorithms and IT technologies, a significant product innovation with worldwide product sales potential is being created.

USP

EHO sensor system helps setting saddle in the right position and taking care of physical and emotional state of the horse. Like no one else, EHO system gives:

- Reduced horse back injury risks;
- Improved riding skills;
- Peace of mind about horse;
- Savings on saddle change (choosing the right saddle from the beginning).

Customer Acquisition

To create initial inquiries and sales EHO is already communicating the product value in horse riding communities, thus reaching professionals and enthusiasts.

In order to create awareness of the product it is planned also to use equestrian authorities as opinion leaders in PR activities.

Company's webpage is planned as the primary sales channel, yet participation in industry's biggest exhibitions is essential to establish partnerships and additional sales channels to ensure considerable scale and sales increase.

Revenue

At present, the first version of product in serial production is planned to be marketed for 500 euro per unit. The cost includes physical product manufacturing and product delivery costs, advertising and marketing costs, product research and development costs, and salaries. According to the current estimates, it is planned to reach at least 50% profit margin.

The primary sales channel is the Internet sales that are planned on the company's homepage. The product's visibility will be shaped by participation in industry exhibitions and conferences, as well as using local horse owner communities and associations. Client acquisition costs is planned to be around 70€.

The serviceable market share in the first 2 years is planned to be 20k clients which translates as 10M EUR in turnover.

In a short term, EHO is sold to the end users directly, to achieve critical mass for product validation and future development. End-user lock-in is done using platform for horse riding data storage, monitoring and processing, as well as benchmarking among users.

After obtaining critical amount of horse riding data, additional in-app subscription services will be introduced to ensure recurring revenue.

Competitor Analysis

Today there are several solutions developed by other companies, still none of sensor systems are suitable for a daily use to measure riding performance. Alternative products are used by veterinary specialists or saddle fitters for the saddle fitting only and are expensive (starting at ~5000 EUR). EHO system would do much more for a tenth of that price (~500 EUR).

Existing systems (Pliance-s test system, Body Mapping: Saddle Fitting, Medilogic, Seddletech Xsensor, Teskan and Pressure Profile Systems) are not suitable for daily use to measure riding performance. Competitive products are used only for the saddle fitting, and products are too expensive for regular riders (~5000 EUR). They seem too costly even for professional riders and veterinarians.

Smart textiles are developed around the world, so at some point existing companies that produce conventional pads can come up with the smarter product and create competition (or instead – create business opportunity and license the technology from EHO).

Execution Plan

The team has achieved significant progress, we have a demo. The thing that separates us from the MVP is the user-friendly software to interpret what the saddle pad "senses". We have demo software that we use for tests though, but it is not sufficient. To address this challenge, we need to attract more technical competences to the team and create software using in-house and outsourced signal processing, IT algorithm and electronics skills. Since we've built working prototype we know the level of complexity and are able to do this.

Another challenge – sale of the first batch. To do that we plan to attract opinion leaders, use PR opportunities and communicate with equestrian communities. For this task existing capacities of the team are sufficient.

Roadmap

2016

- The team meets in Green Technology Incubator, Latvia.
- Various technology applications are assessed.
- Team decides to focus primarily on equestrian industry as the market potential is huge and customers have unsolved problem.

2017

- Team is bootstrapping the business concept and creates laboratory level prototypes.
- Numerous client interviews and prototype tests are done to understand the job that product has to do for customers.
- Team invests 20k EUR and attracts additional 15k EUR form Riga Technical University for product development.
- EHO achieves significant progress with prototyping and attracts coverage by Latvian media, thus creating interest in horse riding community.
- Team participates in highly competitive business idea contest held by Riga City Municipality and ranks as #1 among all inventions, thus also raising 12k EUR as a grant.

2018

Q1

- Creation of MVP
- ICO launch

Q2

- Finishing MVP, testing with early adopters
- Product development
- Production set-up & tests with customers
- Presales for product start ICO finish
- Roadshow in Royal Windsor Horse Show, UK

Q3

- First batch of products shipped
- Development of mobile application & server connections for data services
- Roadshow in European Horse Fair, Germany

Q4

- Development of deep machine learning algorithms (i.e., AI functionality)
- Roadshow in International Equine Trade Exhibition, UAE
- Launch of data services to ensure recurring revenue from customers(includes mobile apps, usage of data servers and deep machine learning to provide customers with valuable data about horse riding patterns and possible improvements)

2019

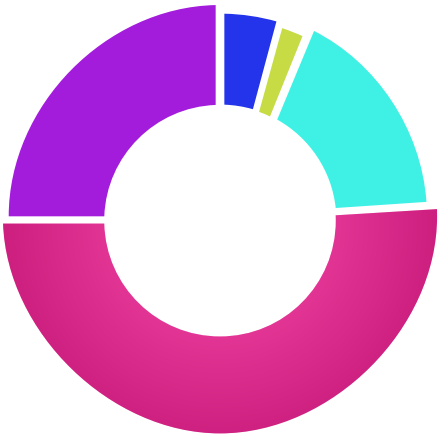
- Launch of data services to ensure recurring revenue from customers, that includes mobile apps, usage of data servers and deep machine learning to provide customers with valuable data about horse riding patterns and possible improvements.
- Further development of data services, introductions of self-couching service for smart saddle pad users.
- Development of other technology applications & smart fabric products.

Capital Requirements

In upcoming 24 months EHO requires 1 750 000 USD for successful development of business.

This sum covers business development and sales; technical competencies and R&D; production materials; working capital, IP protection.

EHO Token



- 25% to incentivize the ecosystem, partner engagement token stacks
- 51% sold in the token sale
- 3% maximum bounty amount
- 1% to cover tokensale
- 20% retained by the team, locked for 3 years

Token type:	ERC20
Token price during ICO:	$0.01 per EHO token
ICO hard cap:	$1,750,000
ICO soft cap:	$950,000
Symbol:	EHO
Purchase methods accepted:	ETH, BTC, ShapeShift widget

EHO token faq

- **How will it work?**

Imagine EHO product along with an app being offered in EHO eCommerce site. The product will have a price in conventional fiat EUR/USD/CNY, but at the same time will be denominated in EHO tokens as the unit of exchange, possibly with a discount.

- **A buyer can either pay with EHO bought during crowdsale, connect to an exchange, where token will be listed, buy it and use for payment or buyer still can pay in fiat. How then this purchase will be converted in tokens?**

By an agent on behalf of EHO or by EHO team themselves - they can use a segregated account for this purpose and channel all incoming fiat to the exchange to buy EHO tokens at the current market rate, whatever it would be.

- **What if the market rate for EHO tokens will be very high?**

It makes no difference - if EHO will end up costing $100 then, say, a smart saddle mat sold for $2,500 will be proceed at EHO 25 and if paid in fiat then EHO team will get 25 EHO tokens sending fiat to the exchange.

- **What if EHO team runs out of money just channeling all their revenue to an exchange?**

It will not - they can simply sell some of the EHO tokens they are buying back to maintain their cashflow.

- **Will some day EHO end up holding all the tokens and stopping the project?**

It is possible, but it may take some time and also living token with liquidity, supply and demand drives product marketing and user acquisition in itself. EHO might consider keeping token alive forever and use it as a means of working capital or even another crowdsale to finance further advances and applications of smart textile technology.

Intellectual Property

The two professors from Riga Technical University (A. Okss and A. Katasevs), the EHO team members are the inventors. They have patented the technology of knitted textile sensors (patent LV14920 (B), 2015-08-20). To ensure smooth transfer of IP, EHO owns the legal rights to use the unique know-how via licensing agreement with the University.

The core object in terms of IP is the knitting pattern that ensures magical features of this fabric that has senses.

Team

EHO team has required competences, including bio engineering, textile engineering, business and product development, marketing and communications.

Aleksandrs Okss is a professor and leading researcher at the Design Institute of Technology, Faculty of Material Science and Applied Chemistry in Riga Technical University where he also acts as textiles engineer. Since 2012 he started co-operating with medical engineers to find the application of sensed sensors who feel pressure and stretching and been actively working on it since.

He has previously developed and patented a new type of pet bindings, for better treatment after surgery. This is a unique textile product, still being sold in a market. Aleksandrs is an expert in textile production and technology, developer of new types of textile sensors for smart applications having 3 patents for:

- Resilient knitted fabric control systems and method of its use;
- Textile Transformer (TPI) for tensile and compression measurements, a system for controlling and stimulating skin and muscle control of TPI-based devices, and a TPI production method using current-conductive piezoresistive threads and tweezers or tweezers;
- Textile Transformer (TPI) for tensile and compression measurements, a system for controlling and stimulating skin and muscle control of TPI-based devices, and a TPI production method using current-conductive piezoresistive threads and tweezers or tweezers;

Aleksandrs has more than 10 scientific publications and been part of the projects like:

- Smart Textile Gloves for Luge Athletes Paddling Monitoring
- Smart Textile Garment for Breathing Volume Monitoring
- Smart Sock System for Gate Analysis and Foot Pressure Control
- Artificial Neural Network Based Approach for Control Points Detection in Smart Textile Signals
- Smart Textile Signal Clustering by Self-Organizing Map
- and others

Aleksejs Katasevs is a Professor of Biomedical Engineering and Nanotechnology, Faculty of Mechanical Engineering, Transport and Aeronautics in Riga Technical University. He has been developing innovative healthcare systems and methodologies. Worth to mention is a method, how to reduce irradiation for cancer treatment, as a result reducing required treatment hours.

Aleksejs holds 4 patents for:

- Cellulose enzymatic hydrolysis preparation recovery
- Astronomy Test Measurement Assist
- Textile Transformer (TPI) for tensile and compression measurements, a system for controlling and stimulating skin and muscle control of TPI-based devices, and a TPI production method using current-conductive piezoresistive threads and tweezers or tweezers
- Textile Transformer (TPI) for tensile and compression measurements, a TPI-based device for controlling and stimulating skin and muscle, and a TPI production method using power-guided piezo-resistive threads and plaited or tufted.

He has published more than 50 Biomedical Engineering and Nanotechnology scientific researchers and took an active part in more than 20 projects. To mention few:

- Application of 3D Scanner for Estimation of Chest Movement in Scoliotic Patients
- Mobile Telemedicine Screening Complex
- Effect of Environment on HAP Surface Potential Measurements at Nano-Scale
- Application of Gamma Criteria for FIF Therapy for Wide Breast Size Range
- Mobile Telemedicine Screening Complex
- and others

Davids Stebelis

Davids Stebelis contributes to the success of EHO with his background in marketing, communication and PR that he inherits from serving as a Media Director at Leo Burnett Riga - leading regional creative agency. Being a renowned expert in the media and advertising field he has contributed to the community serving as a university professor in Advertising and Management course for more than two years. He decided to further advance his competence in product development joining Telia - a regional giant in Communication and Technology in a capacity of the head of Product Development.

Gaining competences in both marketing, communication, PR and product development in the technology sector, Davids decides to focus on business modelling and gets certification from Alex Osterwalder, renown inventor of Business Model Canvas. Following this decision, Davids joins as a board member, business trainer and mentor in multiple successful startups for example Fabula "Spotify for books" pioneering subscription model for books before Kindle Unlimited emerged in the US. His advice is sought after by Nordea Bank Innovation Incubator, City High Technology Park, Latvian University Open Mind Project and Regional Development iNcubators and Accelerators.

Oskars Priede, has extensive expertise in partnerships. Oskars used to be the manager of the Green Technology Incubator in Latvia that was founded by two major universities and served as an environment for knowledge-intensive business development.

Oskars is one the most recognised public speech trainers in Latvia with his Public Speaking Academy www.runaskursi.lv serving likes of ABB, Statoil, pwc and Telia. Oskars is a frequent guest speaker, moderator

or event host both within his country and abroad recently moderating biggest regional TEDx event (URL: http://tedxkaunas.com/speaker/oskars-priede/).

Oskars has been the founder of Alumni Association of Riga Technical University, where he holds MBA with a specialisation in Innovation and Entrepreneurship as well as MSc in Telecommunications. He has been an active member of the student body being the President of Student Union, where he contributed to running Career Days matching tech students with prospective companies and being voted for the Golden Graduate Award. Besides graduating with excellence Oskars also kick-started and headed Riga Technical University Department for Continued Education.

Oskars is an excellent leader for a startup due to his background in technology and business, excellent presentation skills and more than 4 years of experience in worldwide sales all contributing to the success of EHO Smart Textile products.

Our advisors

Antons Sapriko

CEO and founder of Scandiweb

Co-founder of Publica.com

Aigars Pavlovics

COO of Scandiweb

Glebs Vrevsky

CMO of Scandiweb

ICO is run in Partnership with Scandiweb

Team History

The team met in Green Technology Incubator in Latvia where two scientists Aleksandrs and Aleksejs from Riga Technical University who are now in EHO team introduced the technology.

They didn't exactly know what would be the best applications. Oskars and Davids offered scientists to join forces and establish smart textiles company. This happened in 2016. Team has been bootstrapping in the laboratory/garage mode and achieved significant progress finalising and patenting technology.