

# Developing a state-of-the-art digital learning platform to gain a competitive advantage

## Industry

Retail

## Company

Schrack Technik Group

## Employees

500+

## Services

Transformation & Modernization,  
Application Development

## Technologies

Multi-Platform Mobile App,  
Microsoft Azure



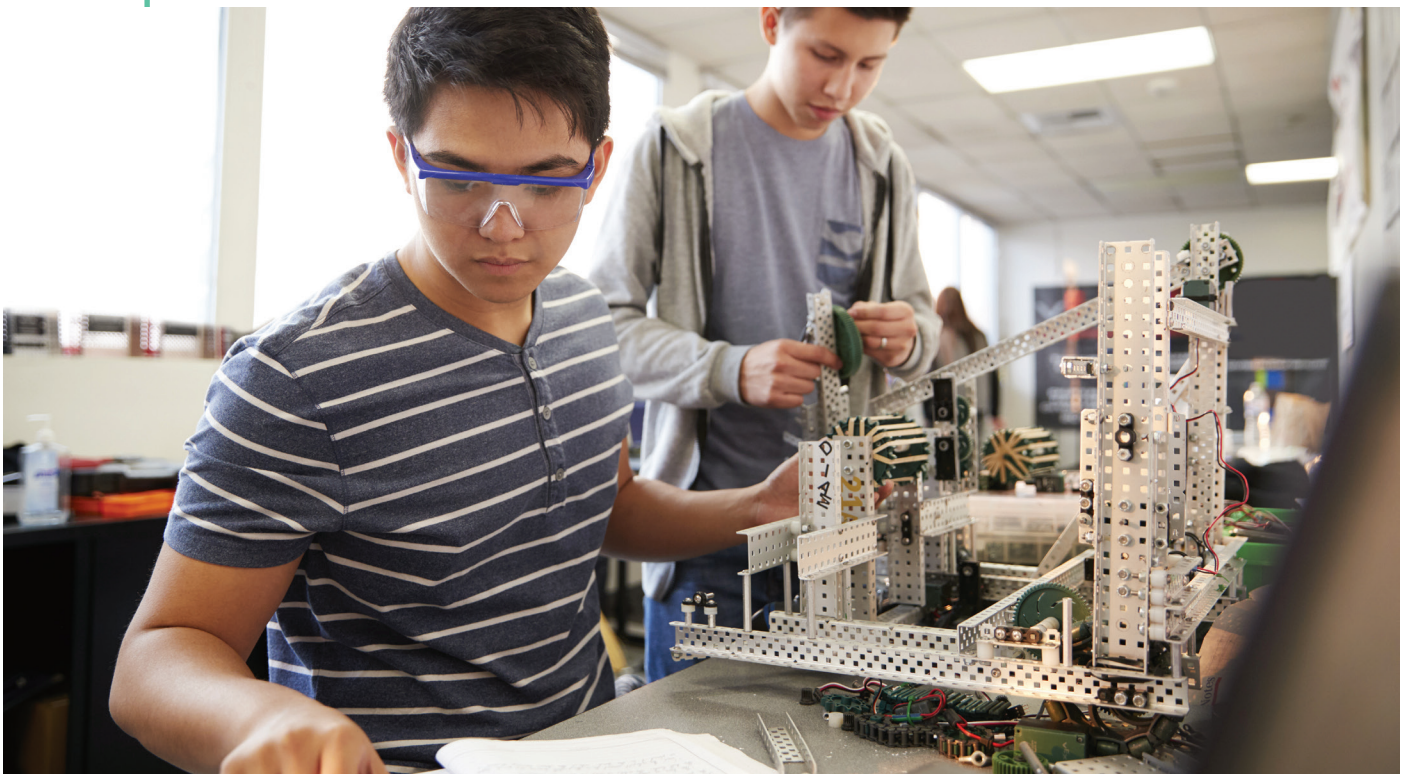
## Client profile

# Schrack for Students: Making skilled workers across the industry

The Schrack Technik Group is a leading technology company specializing in creating products and solutions for energy and data distribution. Networking, optimization, and security of energy and data are the main areas of focus of the company. Starting from Austria, a strong market presence in Central Europe has been achieved by establishing its own subsidiaries. Since the takeover of Highspeed Cabling, the company has also become a specialist for products and solutions in data networks.

The product portfolio ranges from switch control panels, relays and circuit breakers to security lighting and data network products. Schrack is a market leader in strategically important areas such as circuit breakers, network technology, security lighting and relays. The highest quality products for cost-effective solutions strengthen the competitive position of Schrack customers'.

The starting signal for Schrack for Students was given in the context of Lukas Großeibl's diploma thesis in 2016, which led to the idea of developing a learning platform for electrical engineering pupils and students, to address the acute shortage of skilled workers in the entire industry. Nagarro and Schrack Technik joined hands to collaborate on developing a new-age learning platform for electrical engineers and encourage a conducive learning environment for their employees or customers.





The team of "Schrack for Students" (SfS)

## The challenge

### A learning platform adapted to today's digital age

An important goal of the learning platform for Schrack Technik was to provide students with a form of learning adapted to today's digital age (paperless). This led to the idea for a mobile application (as a separate app in 13 countries), which aimed to put the SfS programme on a broader spectrum on the learning plane. The platform would be free of charge for the target group (between 13.000-15.000 electricians).

The aim, in addition to developing a state-of-the-art learning platform, was to promote long-term loyalty of electrical engineers to the "Schrack Technik" brand as employees or customers.

A team of 16 employees at Schrack Technik worked on the Schrack for Students (SfS) project, mainly responsible for the cooperation with all educational institutions for electrical engineering students - about 60 educational institutions all over Austria (vocational schools, technical colleges, colleges).

Schrack Technik has its own IT department, but not a large software development team. This was one of the major reasons why collaborating with the global development team of Nagarro was necessary and helpful.

# 15,000 electricians 13 countries

## The solution

### Building a futuristic solution with an agile approach

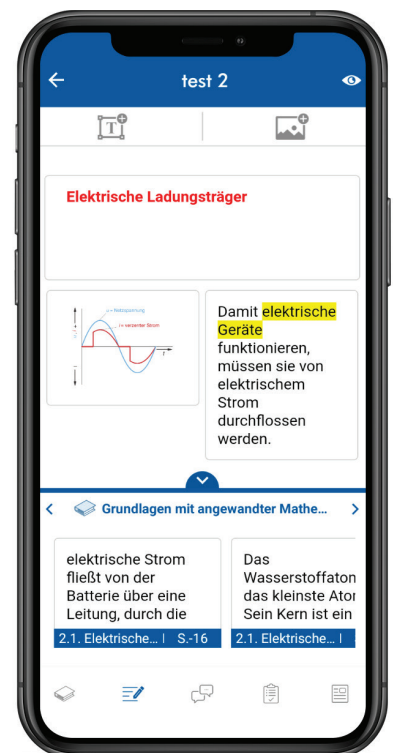
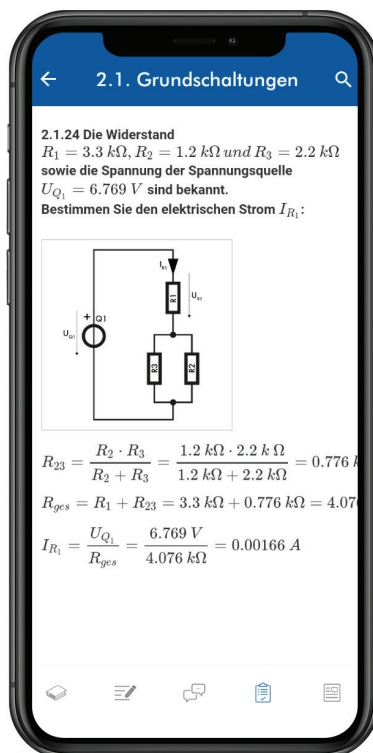
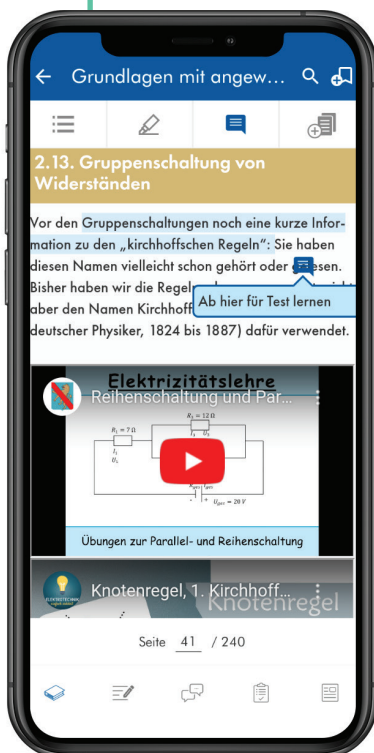
In August 2019, based on their product vision and with the help of so-called personas, high level stories were created and the backlog was initially filled in with two requirement workshops together with Schrack Technik. With UX design team support, mock-ups were created that provided an idea of the product to the customer as well as the development team.

In terms of the technologies used, Xamarin was chosen as the cross-platform development tool to maximize synergies in the development of the iOS and Android apps. Due to the already existing Java infrastructure of the webshop at Schrack Technik, Java was used for the backend on customer request. There is an interface to the existing webshop so that users of the Schrack for Students App can also access the Schrack webshop.

The complete platform for all countries (Back-end, Administration UI and CMS) is hosted on the Azure Cloud. This facilitates scaling-up and is cost effective when compared to an on-premises solution. We operate and maintain the entire platform.

Nagarro demonstrated the advantages of an agile approach and took the first steps to establish agile in Schrack Technik's IT. The implementation of the platform was done using the agile software development approach.

Nagarro established a global team consisting of software architects, software developers, QA experts, a Scrum Master and a Product Owner Proxy, who locally supported Lukas Großeibl in his role as Product Owner. This ensured that discussions and decisions were made immediately and communication within the global team was efficient.





The physical meeting of the local team (at Schrack Technik and at Nagarro) with the global team during a kick-off and mid-project visits played a crucial role in the overall success of the project.

During the first phase of the Schrack for Students project, the textbooks on electrical engineering were licensed by the publishers and made digitally available in the existing CMS.

Currently, the mobile app offers model exam questions and its expertise and is designed to provide support for the learner in all phases of the training. Moreover, it also provides direct access to the Schrack for Students community.



### The benefit

#### Impact to business

- Competitive advantage through early contact with electrical engineers during dire shortage of skilled workers
- Revamping the Schrack Technik brand with innovation and training investment
- Simple, integrated access to the Schrack Technik product world for the SfS community
- Scaling-up and broad platform expertise through a global team
- Cost-efficient operation and scalable platform based on Azure Cloud
- Easy adaptation and roll-out to global markets thanks to multi-lingual capability
- Regular updates and extensions of the app are easily possible with its constant operations and maintenance ensured
- White labeling and licensing of the platform to interested companies can be easily planned
- Nagarro also supports Schrack Technik in marketing the platform as well as the Schrack for Students program



## Client Testimonials



“With the App-Launch we have now reached an important milestone in the development of the Schrack for Students community, starting with an initial idea 5 years ago. With access to Nagarro experts around the world and the important local advice and support, we were able to jointly develop a state-of-the-art learning platform and mobile app that will continue to meet all the needs of our target group also in the future.”

*Lukas Großeibl*  
*Project lead, Schrack for Students*

### About Nagarro

Nagarro helps clients transform, adapt, and build new ways into the future through an entrepreneurial, agile, and caring mindset. We excel at digital product engineering and deliver on our promise of thinking breakthroughs. Today, we are 8,400+ experts across 25 countries, forming a Nation of Nagarrians, ready to help our customers succeed. [www.nagarro.com](http://www.nagarro.com)