

The background of the top half of the slide is a dark, grainy image of a construction worker wearing an orange hard hat and a blue shirt, seen from behind and slightly to the side, looking towards a construction site.

## Case Study

# RS Components

### **Indonesia and Vietnam Ecommerce Platform**

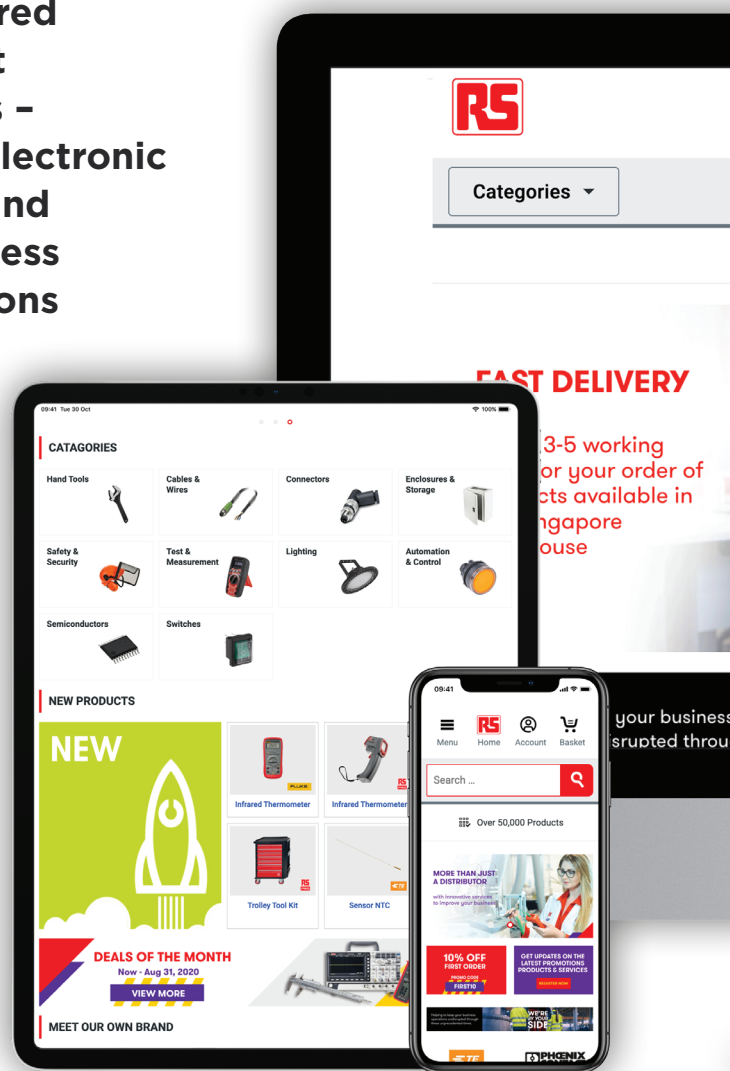
- ✓ Rapid delivery of two new sites targeting emerging regional markets
- ✓ Complex taxonomy and robust search aids consumers in finding relevant products
- ✓ Built using an innovative multi-site infrastructure to support future scalability

# Rapidly delivering a set of **multi-language and multi-currency ecommerce sites**, to help RS Components effectively target **valuable growth markets**.

Since first engaging with RS Components in 2013, the Box UK team have delivered numerous digital solutions to support its client's growth and strategic goals – immersing themselves in the global electronic retailer and omni-channel industrial and electronics solutions provider's business to apply specific knowledge and lessons learned across the full diverse project portfolio.

When RS Components wanted to increase their market share in the Southeast Asia (SEA) region, they once again turned to Box UK for help.

Working fully remotely with regional client stakeholders, the Box UK team **developed a new set of ecommerce sites** targeting the Indonesia and Vietnam markets, delivering these in just 9 sprints.



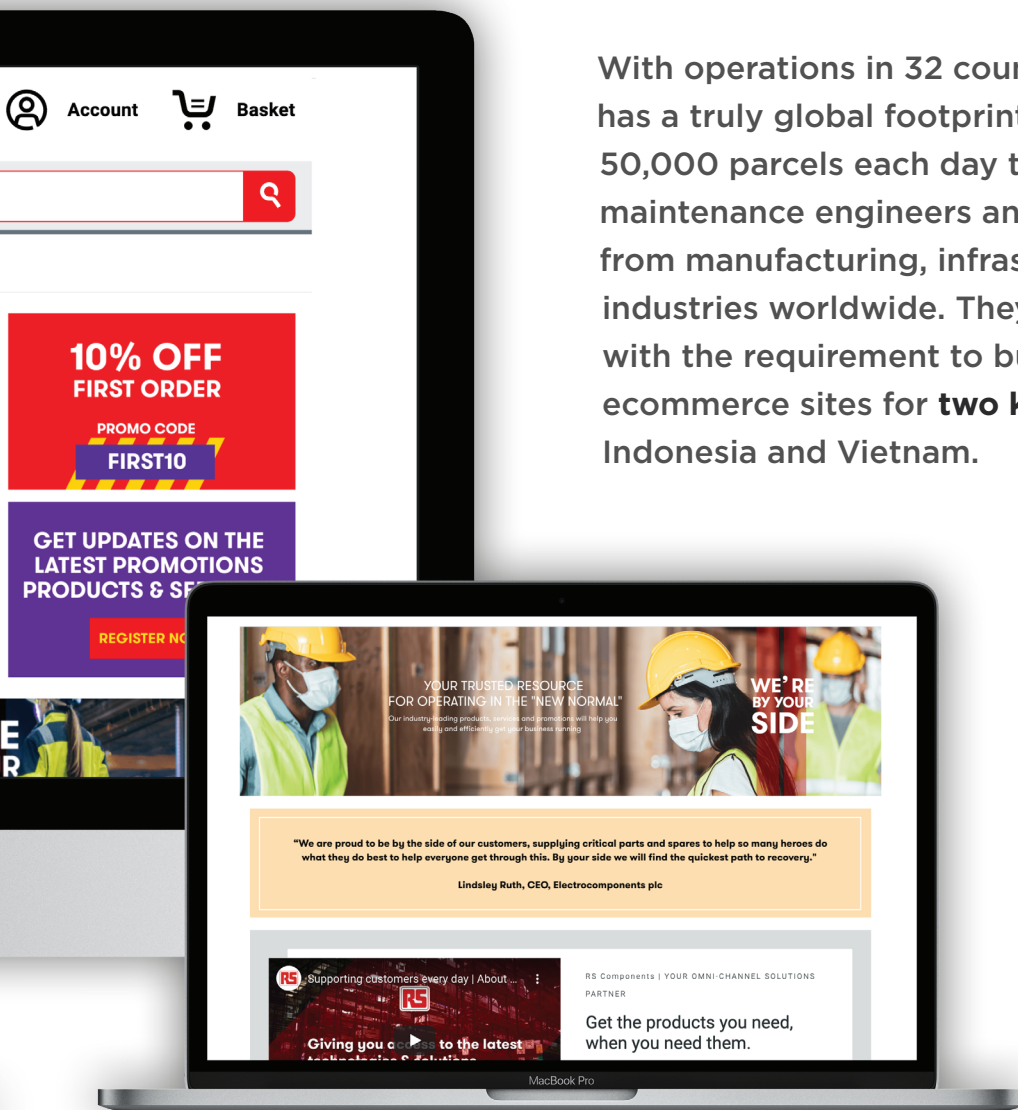


Providing customers in these countries with **access to over 50,000 products across the industrial and electronics ranges**, the sites utilise the full power of WordPress and WooCommerce, and represent some of the largest enterprise instances utilising this technology stack. They also accommodate **multiple languages, multiple currencies, and a complex pricing structure** to allow for variations and combinations across the product range, ensuring that customers are provided with a shopping experience that's both intuitive and convenient.

And, with everything built on an **innovative multi-site infrastructure** that supports the rapid deployment of new country sites, RS Components have the scalability they need to further grow their international proposition, in response to new demand and opportunities.

## Building a powerful ecommerce platform

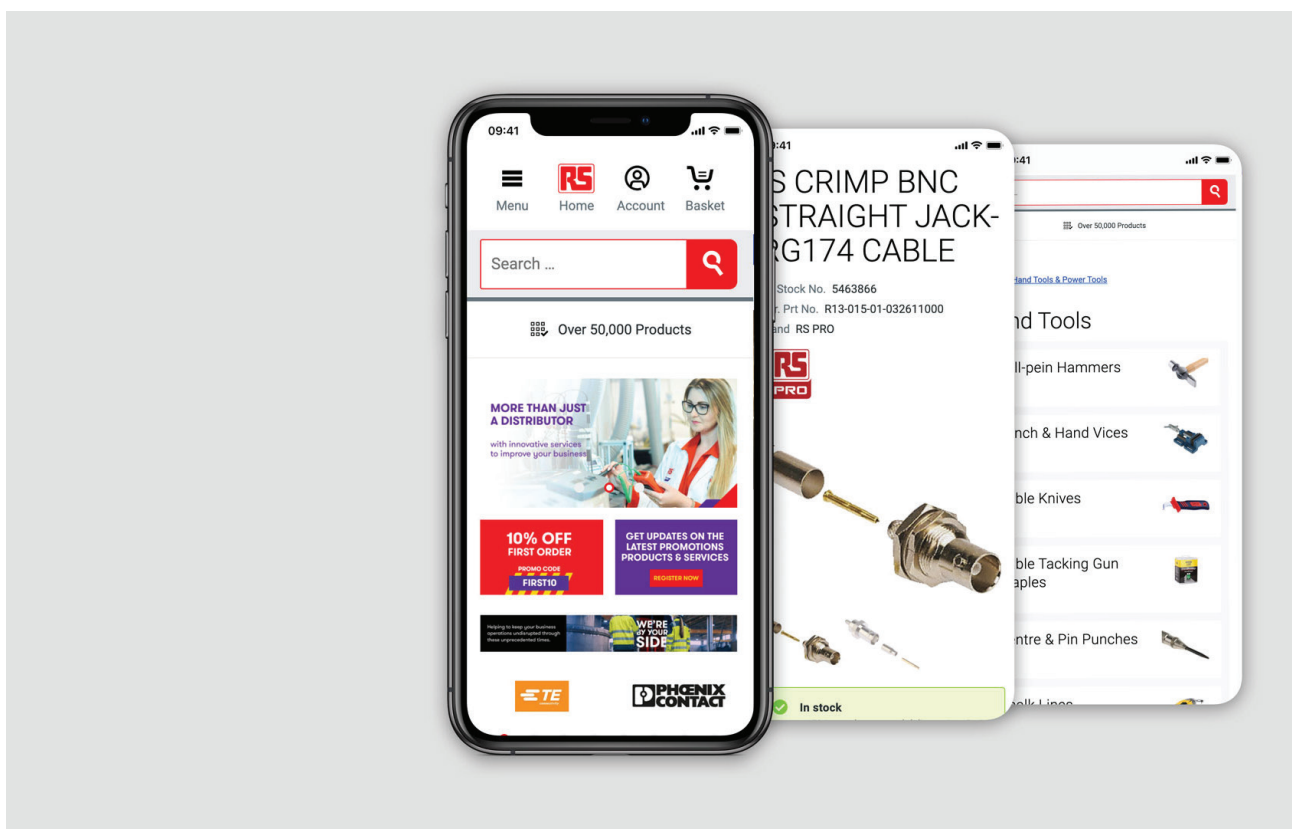
With operations in 32 countries, RS Components has a truly global footprint, delivering over 50,000 parcels each day to design and maintenance engineers and machine builders from manufacturing, infrastructure, and service industries worldwide. They approached Box UK with the requirement to build new dedicated ecommerce sites for **two key emerging markets – Indonesia and Vietnam**.



To drive **rapid and cost-effective delivery**, Box UK's development team recommended that the sites be built using the open source content management system WordPress – taking advantage of the framework's renowned **flexibility and ease-of-use**, as well as its extensive library of plugins and partner solutions. This included WooCommerce, an ecommerce platform built on WordPress that provides the tools needed to manage an international online store.

Importantly, having previously used these technologies to deliver a large-scale ecommerce platform for OKdo, the Box UK team knew that they were proven to work at scale. This was a crucial consideration for the new sites, which offer over **50,000 separate product lines**, representing the best-selling items from RS Components' wider catalogue of 500,000 items.

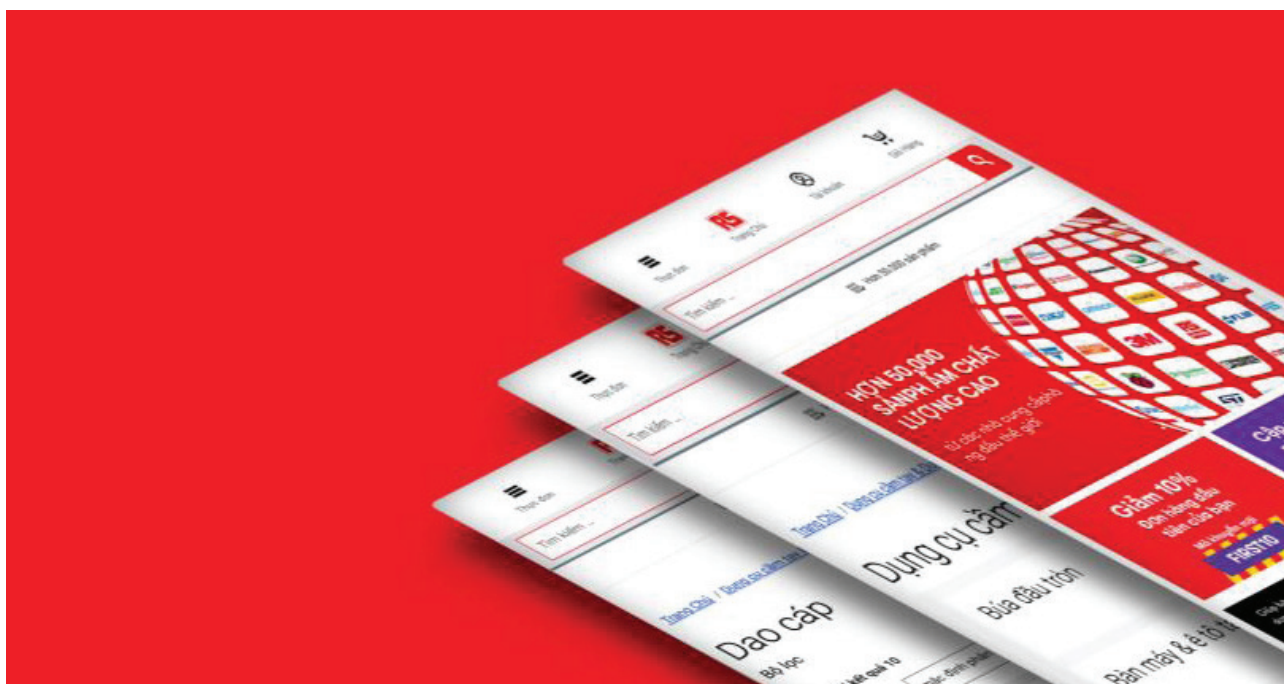
Managing such a large volume of diverse products required further bespoke development, to deliver an automatic import function that ensures product details remain accurate and up-to-date. Handling a flat file containing pricing and taxonomy information on all products, the import function **performs 18 million comparisons overnight** to make any necessary updates – doing so with minimal disruption to the sites' performance.



## International ecommerce considerations

With a strong enterprise platform on which to build, Box UK's developers then began to address the elements of the sites that would need to be customised to serve the specific requirements of each country. This included **currency conversion**, with administrators able to easily set the display currency for each site, and a special import built to allow custom pricing calculations from the initial flat import file. This provides accurate and rapid conversion so that customers can see indicative costs in their local currency prior to checkout.

**Languages** can also be set per country site, and both sites are available in English as well as the country-specific language (Bahasa/Vietnamese). New sites in new languages can be added quickly and easily through the WordPress plugin TranslatePress – which, importantly, can also be overridden with human translation where needed to ensure that products and categories are optimised for regional contexts.



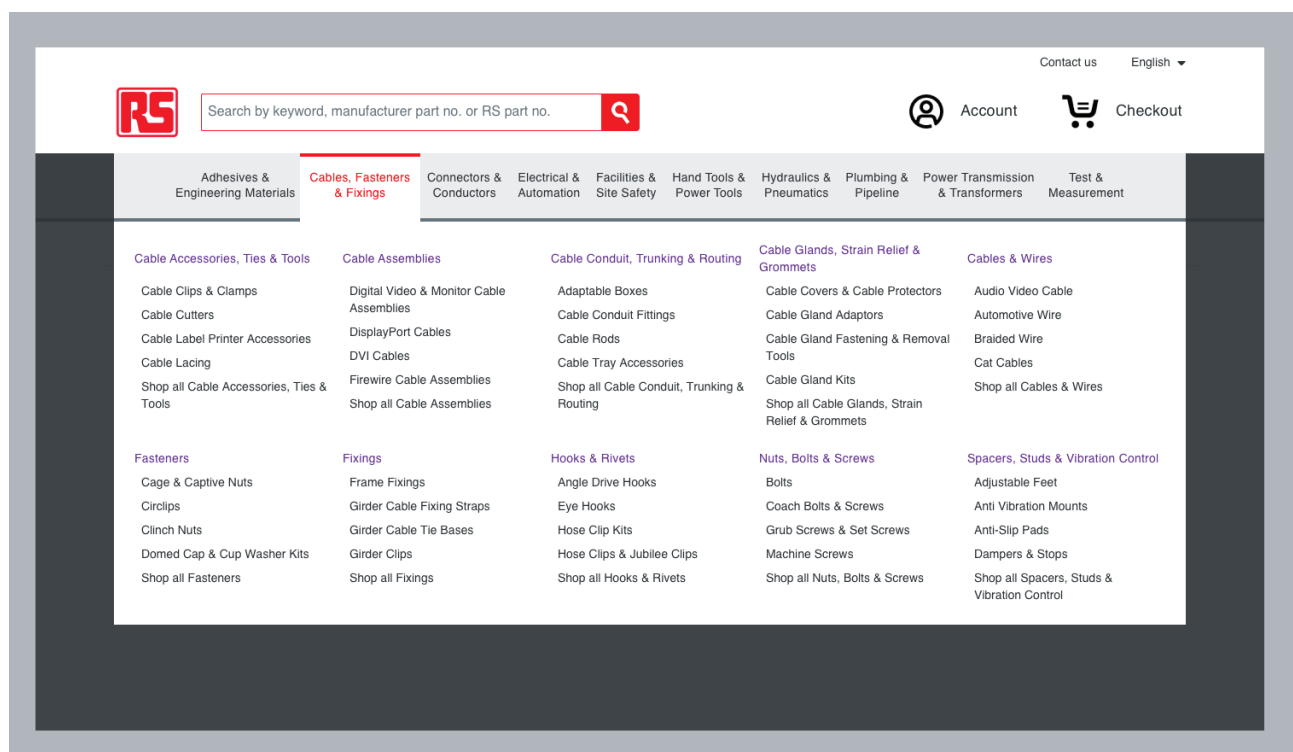
Additionally, the sites were built with **international Search Engine Optimisation (SEO)** considerations in mind, to ensure the right technical foundations were in place at the outset. Serving SEO-friendly URLs, schema and product mark-up, as well as appropriate tagging of multilingual content, the sites ranked highly in search results almost immediately, helping drive relevant and valuable traffic to key pages.

## Enterprise ecommerce excellence

To enable customers to intuitively search and purchase from the extensive RS Components product range, it was vital that the new sites offered an **exceptional end-user experience**. Box UK's User Experience and Design (UX&D) team therefore created a global theme to be implemented on RS Components' WordPress installation, drawing on best practice from leaders in the ecommerce space and beyond.

Built responsively to support the constraints and capabilities of different devices, this template also accommodates the unique considerations of the different languages, currencies and content across the separate sites. This ensures high levels of usability no matter what country it's deployed in, while streamlining the process of creating new pages for back-end administrators.

The team also supported the implementation of a **complex taxonomy** that allows customers to browse and find relevant products with ease, via a site-wide mega navigation menu. The potential differences in content length and layout again made it vital that this menu be thoroughly tested across all potential languages and devices, and required iteration by Box UK's designers to ensure readability across all contexts of use.



**Robust search functionality** provides customers with another way to quickly find products, searching through the 50,000-strong range by name or number to find what they need. Powered by Elasticsearch, the tool also integrates with TranslatePress to search for relevant results according to the user's chosen language.

## Extensible infrastructure

Tasked with building the two new dedicated country sites, the Box UK team were also aware that RS Components may need to rapidly respond to additional opportunities as they **continue to expand** their reach within the SEA region.

These initial sites were therefore built as two single install instances on a **multi-site infrastructure**, streamlining the creation of any future country sites. A **serverless architecture** was also implemented, using Kubernetes to allow simple automatic scaling within the region – while the templates put in place safeguard quality and consistency across the regional variations.

With the Indonesia and Vietnam sites launched in just 9 two-week sprints, RS Components have been able to begin directly serving these valuable markets without delay from a **reliable, usable and high-performance platform** that's tailored to their specific requirements and expectations.

### Skills

- › Enterprise CMS Implementation
- › WooCommerce Development
- › Bespoke Software Development
- › User Experience & Design
- › Platform Management

### Similar Projects

- › OKdo
- › Dexerto
- › RS Components DesignSpark



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**User Experience  
& Design**



**Software  
Consultancy**



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Development**

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**It's why blue chip organisations around the world, from airlines to car manufacturers, international banks to global charities, choose to trust us with the execution of their digital strategies, from the development of enterprise-level custom software platforms to the delivery of award-winning multi-channel experiences.**

**So if you want an effective, compelling software solution, talk to us.**

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