

Migrating an Online composite store from Magento 1 to Magento 2 & Introducing new functionality

ABOUT CLIENT

An online composite products store that also offers services, such as initial engineering and product development.

Region

USA

Client's URL

NDA

Client in figures



10 years working at the market



10 products categories



4K+ products items



500+ customer reviews



CHALLENGES

The client comes to us with a goal to execute an online store migration from Magento 1 to Magento 2, as back then, the ecommerce platform was going to stop supporting their 1.9 version in a year.

Another reason that drives the client's decision is the website performance and user experience, and the fact that it doesn't make any sense to fix it on the Magento 1 store. For optimizing these issues, the migration to Magento 2 looks like the most suitable solution, which completely covers the client's business needs, saves money in the long run, and opens the way for new opportunities.

Team

Project Manager

DevOps Engineer

4 Back-End Developers

4 Front-End Developers

2 QA Engineers

We start the project by gathering the background information and exploring the client's business and existing Magento 1 website in detail. Our team performs an initial website audit to build up a list of every custom feature and extension on Magento 1, and analyze online store information — customers, orders, invoices, discounts — all this data should be taken into account for the safe store transferring.

As the Magento 1 and 2 platforms have considerable technological differences, migration basically means developing a website on the new platform from scratch, so it's essential to make the right decision which Magento 2 edition to choose. The website audit helps us see that the most appropriate solution for the store migration is the **Magento 2 Open Source Edition¹** of the latest version, which delivers the foundation for many features the client expects and is also a cost-effective choice for their business.

We carry out an extensive UX research, performance and SEO audits to explore efficient web pages and user behavior on the existing pages, helping us to build a new **sitemap²** for the Magento 2 online store and maintain high-performance web pages.

1 Magento 2 Open Source Edition (formerly Magento 2 Community) is a self-hosted ecommerce platform for developers and small businesses with robust features available free of charge. Admin users can make configuration adjustments to the software to meet specific requirements of their companies. To access particular advanced functionality, merchants can extend the basic features of the Magento 2 Open Source Edition with specially designed modules.

2 Sitemap is a visual diagram of the hierarchy of pages within a website. Typically, sitemapping is one of the first tasks to be completed in any web design and development project.

SOLUTIONS

Based on a series of audits, we start working on building a high-level-features list, which includes our options on customizing and enhancing some parts of the project, such as introducing a **product configurator**³ and content organization in a user-friendly way.

The sitemap and high-level features list turn into a series of website page prototypes, which is a visual representation for the client and us to see how the website is going to look and how users are going to move around it.

After gathering the whole quantity of webpages, their basic look, and main functionality, we begin working on the **project specification document**⁴ that includes functional project requirements — prototypes, main features — and non-functional ones that cover website performance, its scalability, and security issues.

Our developers hand over the prototypes and insights to the client's design team, which is working on the web design. As a result of our collaborative work, the final website designs are completely aligned with the client's business requirements and objectives, our vision, and functional options.

3 Product configurator is a tool used for configuration of products based on their components. The tool makes it possible to add and/or change functionalities of a core product or build a fully custom product for purchase.

4 Project specification document is a comprehensive description of objectives for a development project. It contains all the goals, functionality, and details required for a development team to fulfill the vision of the client.

Data migration

We start the development phase from the most challenging point — data migration from Magento 1 to Magento 2.

The first step is to install all the third-party extensions onto the new Magento 2 instance, which is usually executed at the very beginning of the project development and helps us to indicate some probable code conflicts between them and tackle them at the very beginning of the project. After eliminating potential risks, we perform the first data migration from Magento 1 to get the relevant data structure, entities, tables, which is crucial for further development.

After completing the data migration, our Backend team starts working on developing several custom features (which you can find below in Features), while the Frontend team is ready to set on theme development according to the designs provided by the client. Our Quality Assurance engineers work with the developers along the way to ensure that all features, layouts, and extensions work as expected.

As soon as all the works within the scope are accomplished, we run the second data migration from Magento 1 to make sure the data structure is up-to-date and avoid any surprises on the D-day.

Project release

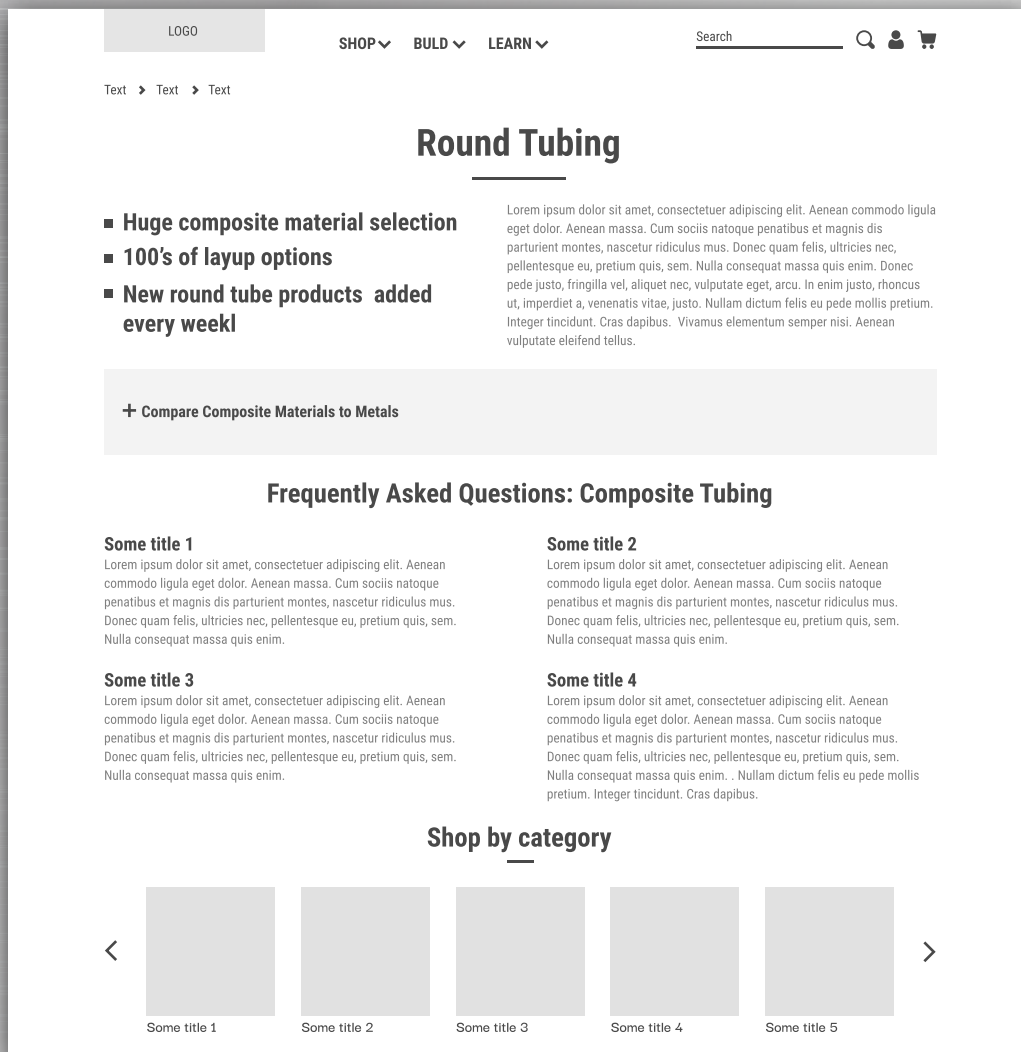
At the release date, we configure the production environment and change all the temporary credentials for extensions, payment and shipping methods used during testing with production ones. We execute the final data migration from Magento 1 so that all the latest changes in the database are there, test if the critical client path has no issues, and finally have the website go live.

FEATURES

User-friendly content organization

The client's business specifics requires a vast amount of information and specification for numerous categories and subcategories, which means we need to organize a great deal of data, divide it into sections, and make it clear for users.

We analyze conversion rate optimization practices, conduct UX research, and create user-friendly content sections for category and subcategory pages — description, FAQ, Shop By Category, where users can find comprehensive information:



FEATURES

The Shop By Category section is easily manageable — admins can change its heading and the section's content by inserting the necessary items into the carousel separately for each category page.

Adding table views for categories for B2B users

The client's store contains several categories of items with many parameters, such as pattern, material, inner/outer diameter, wall, length, price, etc. that should be easy to use and navigate for customers.



During the initial research of the client's business and the original Magento 1 online store, it becomes clear that the majority of the client's target audience are wholesalers. They are well versed in the assortment, purchase products in large quantities, and know exactly what they want. There is a relevance for the client's business to increase their loyalty and increase the average session duration.

Based on our UX research, it appears that B2B users need a smooth ordering process, and that is why we make it quicker and easier for them.

FEATURES

As Magento category pages offer only two views by default — grid and list ones, we decide to create an additional one to showcase the products and their parameters organized properly into a tabular view. It gives website users an option to sort out products and has an infinite scroll feature for usability and user convenience:

FILTER BY ▾

View:  

Unit: Imperial ▾

382 item(s)

P/N ▾	Pattern ▾	Material ▾	Inner diameter ▾	Outer diameter ▾	Wall ▾	Max lenght ▾	Price (starts at) ▾	Add to compare ▾	
Spinnaker-Pole-Group	Filament Wound- Painted	SM	-	-	-	-	\$240.00	<input type="checkbox"/>	<div>VIEW OPTIONS</div>
45102	2x2 Twill Weave	SM	-	-	0.04"	50"	\$89.99	<input type="checkbox"/>	<div>ADD / CUSTOMIZE</div> <div>QUICK ADD</div>
Samples-Tubes	Various	-	-	-	-	-	\$6.99	<input type="checkbox"/>	<div>ADD / CUSTOMIZE</div> <div>QUICK ADD</div>
46630-HM	Plain Weave	HM	0.25"	0.332"	0.041"	64"	\$109.66	<input type="checkbox"/>	<div>ADD / CUSTOMIZE</div> <div>QUICK ADD</div>
46604-DL	2x2 Twill Weave	SM	0.25"	0.392"	0.071"	72"	\$33.99	<input type="checkbox"/>	<div>ADD / CUSTOMIZE</div> <div>QUICK ADD</div>
45419-DL	2x2 Twill Weave	SM	0.25"	0.5"	0.125"	60"	\$54.99	<input type="checkbox"/>	<div>ADD / CUSTOMIZE</div> <div>QUICK ADD</div>

After selecting an item, a user can click on the ‘Add/Customize’ button next to it and see the product configurator popup with an option to customize the product.

Users can also choose to add a product to the shopping cart immediately by clicking ‘Quick Add’. The product is automatically added with the default parameters and measures — length, inner/outer diameter, cutting/sanding.

As several category pages contain table views with tons of information and can influence the speed loading and SEO performance, they are optimized by the Lazy Load extension to make them work well.


FEATURES

Product configurator popup

As the client's customers usually need calculations for certain products depending on a range of parameters, we implement a flexible feature to offer them a personalized customer experience.

The popup enables customers to enter product quantity, length, inner/outer diameter, cutting/sanding and submit a special note for the merchant, while the costs are being automatically calculated according to the chosen options.

Customize your Tube



img

Tube - Fabric - Tapered - RAW Ski Pole - 0.30-0.38x0.55-0.635x54 Inch

SKU: 45102


1 to 9	10 to 49	50 to 99	100+
\$89.99	\$81.79	\$76.59	\$69.39

PRODUCT DETAILS

- Specify Cut Lengths (optional)

Quantity

Length Max:50"



On the planning stage of our business analysis, we discover that some business operations and processes are overloaded because of specific products that require the client's sign off. It's the reason why our engineers implement an additional space into the popup for such items, where users should read a particular return policy and type their name first to add the product to the shopping cart.

Custom shopping cart

According to the Baymard Institute research, the average shopping cart abandonment rate is more than 69%, that's why it's worth working on the usability of the shopping cart and eliminating reasons to abandon it.

As the client's products contain numerous attributes and information that customers can change to personal preferences, it's better to make it available at different stages of the customer journey. The Magento out-of-the-box shopping cart functionality is limited and involves only quantity and an option to delete a product from the cart. We implement a functionality to customize products and easily change all the product information on both steps — in the popup and shopping cart. As a result, it immediately eliminates the shopping cart abandonment rate of the client's store by 11% and this metric keeps decreasing.

Product finder

One of the features implemented for an effective user search and customer excellence is a popup, which can be placed on any relevant page. It allows customers to find a product by setting specific product details — inner/outer diameter, wall thickness, materials, etc.

FEATURES

‘Unit measures converting’ option

The functionality that helps to browse and convert through the product list in millimeters, centimeters, or inches is also added to the store, which results in improving the website customers' user experience and friendliness.

‘Request a quote’ option for wholesalers

As the client's business has a considerable market segment of merchant wholesalers and distributors, it's worth providing them with an option to ask for a unique offer and price. That is why our development team creates a custom contact form to fill in all the product requirements and preferences. The completed form is sent to the client's CRM system, and then the wholesaler receives a unique personalized offer from the client by email.

To allow the client to quickly and safely manage all the store's functionality and change content on the web pages, we create a comprehensive guide with instructions in case of any issues that may appear in the long run and hand over it to the client's team.

RESULTS

Spent more than **4,700 hours** on developing the client's online store from start to finish.

Migrated the client's business from **Magento 1 to Magento 2** with a safe transferring of the store data.

Implemented the product configurator functionality, which boosted the engagement rate by **13.5%**.

Increased average session duration by **20%** as a result of organizing technical content in a user-friendly way.

Created an exhaustive **user guide** for the client to be on track with their website management, changing content.

C O N T A C T U S

Let's have a chat

Choose the most convenient way of communication for you — write an email or contact us in one of the messengers. We'll discuss your project — provide individual calculations and offer our suggestions on how to upgrade your business.

Email:

info@magecom.net

Phone:

+44 7491 43 5563

Office:

United Kingdom
102 Wornington Road
London W10 5QP

Messenger:

[SKYPE](#)

[FB MESSENGER](#)

[WHATSAPP](#)

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