

From make-to-stock to make-to-order

The power of customization with a 3D configurator

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Customize your chair

Color seat:



Color legs:





OVERVIEW

From make-to-stock to make-to-order – the power of customization

Useful Terms

On-demand:

At any time that someone wants or needs something.

Make-to-stock:

A way of producing that works on the assumption that a customer will require the product at some point, and thus it should be made in advance.

Make-to-order:

A way of producing that works on the basis that a product doesn't need to be manufactured until the customer requires it.

Configure-to-order:

The process of configuring and making products the way the customer wants them before they're actually produced.

Augmented Reality:

Consumers see digital renderings of products in their own context (for example a sofa in a living room).

The number of eCommerce sites worldwide has rocketed since the start of the pandemic and it shows no signs of slowing down.

According to figures compiled by the United Nations Conference on Trade and Development,^{*} Covid 19 increased online retail's share of total retail sales from 16% to 19% in 2020. What's more, sales in online stores are expected to reach 22% of global retail sales by 2023, up from 14.1% in 2019.

But the problem for retailers now is – how to stand out from the crowd? In this overfull market it's absolutely vital to be able to out shine your competitors. How? With 3D configuration.

More companies are heading down this bespoke production route, but the methods used to do so are yet to evolve.

Even though businesses aim to make products to order, they're still stockpiling components that are not needed, wasting space and money – while having a detrimental impact on the environment and as a result, their own reputations.

Companies that want to adapt to modern consumers, cut down on waste, and keep costs in line need a fundamental shift in how they view stock and production.

In this whitepaper, you can find:

- Make-to-stock, make-to-order, and configure-to-order concepts
- The main problems of make-to-stock way of producing
- The benefits and challenges of make-to-order
- How companies are building solid business models with configure-to-order manufacturing

^{*} Global e-commerce jumps to \$26.7 trillion, COVID-19 boosts online sales. (2021, May 3). UNCTAD. Retrieved August 2, 2022, from <https://unctad.org/news/global-e-commerce-jumps-267-trillion-covid-19-boosts-online-sales>



Make-to-stock vs make-to-order

TRADITIONAL IDEAS ARE REWRITTEN, WHY NOT REWRITE PRODUCTION?

These aren't the kind of terms people throw around all that often, but anyone in eCommerce – or any type of commerce for that matter – will know what they mean.

Make to stock is a wordy term for the most traditional and some might say – outdated – way of stocking up.

It means guessing what the customer is going to get, purchasing plenty of it, and leaving it on the shelves in the hope that someone stumps up the cash and buys it off. Since the dawn of time, this is pretty much how most businesses – big and small – have done things. That's because it wasn't easy to make things to order, there were no available tools and it was just simpler to have it all ready to offload.

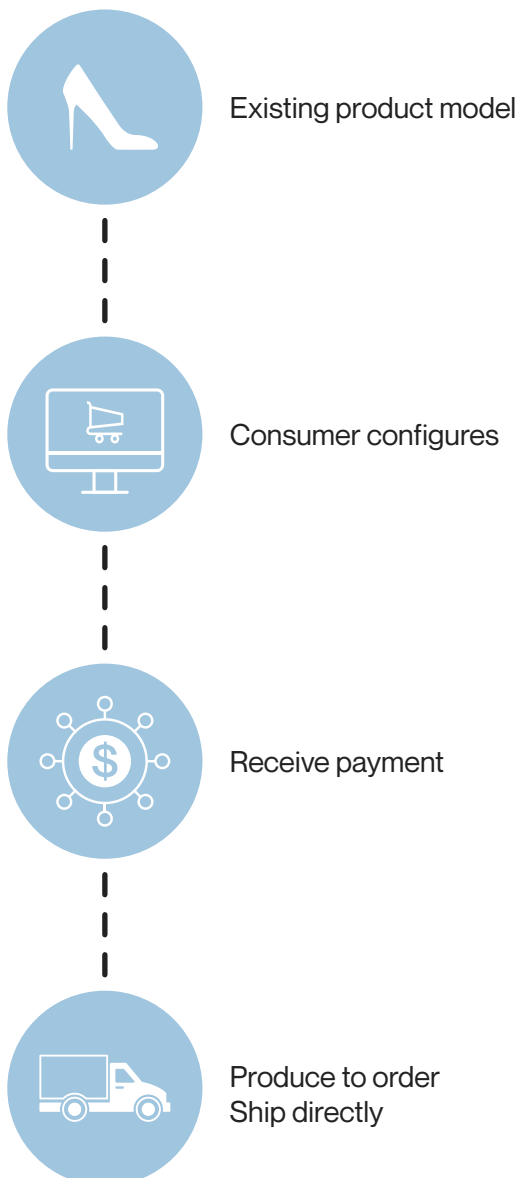
But make-to-order is the bespoke way of doing things. Think artisan, think craftsman, things tailor-made. Make to order means just that – something is made especially for one who orders it.

A customer asks for something and rather than taking it down off your shelf, where it's sat for months (or even years) next to 10 others, you go and make it there, and then – or one of your suppliers does. You only buy the materials you need, materials your customer has already paid you for. And you know – for a fact – that you're going to sell it because the customer has already told you they want it.

Problems with make-to-stock

As said before, make-to-stock is the 'traditional' way of doing things, but sometimes traditional ways aren't the best.

When you think about eCommerce, from marketing and branding to everything in-between – so many rules of traditional shopping are being rewritten, why shouldn't the way we stock our businesses be any different?





Make-to-stock vs make-to-order

GIVE CUSTOMERS THE POWER TO CREATE CUSTOMIZED PRODUCTS

**“I think the
3D product
configurator
will increasingly
become the
norm in the
future, for all
products”**

**- CEO of
IMOTANA and
T1TAN**

Make-to-stock relies on the predictability of customers' needs. You have to anticipate what they will buy and when they will buy it. But nobody has a crystal ball. It is hard to know what product will be in demand a month from now, let alone a year.

In this day and age, it only takes one Instagram post from a influencer to make or break a new product. And then there you are, with shelves full of stuff you can't sell.

Many of the most successful eCommerce companies out there deal with things that are difficult to find elsewhere. They specialize and they have a very particular kind of client base.

These customers increasingly want customizable and innovative products and guess what – if they can't get them from you, they'll go to your competitor.

Make-to-stock can also mean production levels vary throughout the year. A company may have to ramp things up during the season, which can lead to peaks and troughs in production with the associated disruption and costs that go along with that.

Make-to-stock often leads to overproduction. The companies end up with lots of components and products they don't need and probably won't sell. This is hugely wasteful and has a negative impact on the environment.

Modern consumers and companies simply will no longer tolerate practices that are so wasteful and don't respect the environment.

Making items in bulk before they're sold takes a big toll on budgets. Many companies have to spend a lot of money upfront in order to buy up components or materials to create products, and only get that money back when – and if – that product is sold.



Make-to-stock vs make-to-order

IT'S FUTURE-PROOVING A COMPETITIVE ADVANTAGE FOR THE METAVERSE



With soaring costs of materials due to global inflation, this puts more pressure on companies than ever before.

Moreover, the company needs to maintain a large storage space to keep its inventory. This storage space itself costs money to rent or buy or may simply mean the firm has to occupy bigger premises than it really needs.

Make-to-order and on-demand manufacturing

Make-to-order is when a product is made specifically when an order is received from the customer. Fueled by the growth of eCommerce and cloud technology, its popularity has grown in recent years. So much so that the market is expected to reach an eye-watering \$207 billion by 2030, a pretty spectacular annual growth rate of 16.11%.*

Using this model, a company only has to buy the materials and components it needs to make a specific product. The business doesn't have to rent or own large storage areas because there's nothing to store.

Modern buyers can be pretty picky (and rightly so) about what they want. The personalized gifts market is set to be worth more than \$34 billion by 2026, up from \$23.5 billion in 2019.**

The way we consume products is also changing, many things now are 'on demand'. Customers are used to getting what they want, exactly when they want it – and physical products are no different. In fact, 63% of millennials want to be unique and stand out, rather than fit in with people their own age.

* Keepers, H. (2022, June 30). Cloud manufacturing market, by size, CAGR of analysis assessment & opportunity forecast 2030. MarketWatch. Retrieved August 2, 2022, from <https://www.marketwatch.com/press-release/cloud-manufacturing-market-by-size-cagr-of-analysis-assessment-opportunity-forecast-2030-2022-06-30>

** Statista. (2022a, June 15). Estimated size of the global personalized gifts market 2018–2026. Retrieved August 2, 2022, from <https://www.statista.com/statistics/1283363/global-personalized-gifts-market-size/>



Make-to-stock vs make-to-order

LOWER THE THRESHOLD OF ONLINE-SHOPPING WITH LESS RETURNS

Benefits of make-to-order

There is a wealth of potential benefits to this model, not only to businesses and consumers but to the environment too.

It reduces the storage needs and logistics pressures on companies and manufacturers, while also allowing for greater personalization of products. This helps control costs while also boosting brand appeal.

Another big profiler of make-to-order is the environment. Making custom products tailored to clients' needs means nothing is wasted.

This helps reduce the waste of both money and materials. It is important for trust building with customers, with more than a third saying they would pay more for sustainable products.* It's the perfect time to reshape into an environmentally-friendly brand.

On-demand and make-to-order highly influence on lowering return rates. How? If you order something that is not yet produced, it means you really want it. It's not just some spur-of-the-moment purchase. This saves companies a lot of money.

Besides, this type of model comes with additional benefits when it comes to innovation. There is less cost in research and development and prototyping.

Known as a way to achieve rapid prototyping, it allows a company to develop a product to order and test it on the market faster with the reduced prospect of wasted time, money, and material.

“Saying ‘we don’t have this bike or accessory in the shop right now’ is a thing of the past.”

- CEO of Doppio

* Recent study reveals more than a third of global consumers are willing to pay more for sustainability as demand grows for Environmentally-Friendly alternatives. (2021, October 14). Business Wire. Retrieved August 2, 2022, from <https://www.businesswire.com/news/home/20211014005090/en/Recent-Study-Reveals-More-Than-a-Third-of-Global-Consumers-Are-Willing-to-Pay-More-for-Sustainability-as-Demand-Grows-for-Environmentally-Friendly-Alternatives>



Make-to-stock vs make-to-order

MAKE THE SHIFT TO MASS-CUSTOMIZATION

This is particularly helpful for smaller and medium-sized companies which do not have the resources to buy lots of materials to mass produce products early on.

Challenges of make-to-order

However, this method doesn't come without a catch. There can be a lack of uniform quality standards due to many different components being employed along with methods of manufacturing.

The supply chain can become more complex due to a wider variety of components that's needed. As things get more complex, the challenges inherent with increased communication with suppliers can become more of an hassle.





What is configure-to-order?

MIX THE DIGITAL WITH THE PHYSICAL TO GET THE BEST OUT OF BOTH

Configure-to-order (CTO) is the process of configuring and making products the way the customer wants them before they're actually produced.

Using 3D configuration technology, make-to-order challenges are tackled efficiently as it, among other things, empowers the shopper to personalize and customize.

Expivi's tech falls under the CTO's way of producing. It allows customers to configure products in real-time. Using 3D interactive software to create realistic 3D visuals of the products which can change and be customized in every possible way, within the boundaries that you as a company lay down.

This offers both hyper-personalization and gamification. Shoppers can view products in 360°, rotate, zoom, size, and change colors. As a company you would be able to choose as many features as you want, from accessories to lettering. Whatever fits your product or brand.

Your products can be taken to the next level with augmented reality, where one can actually see the 3D creation in the the real world, using a smartphone or a tablet.

By empowering customers, CTO cuts down the risk of them buying something which doesn't match their expectations. Once they're involved at this stage, the customers feel greater ownership of the product. It's real from the get-go. No need to imagine the final result. It's personal to them.

This level of connection gives online companies a competitive advantage in the crowded eCommerce marketplace. What's more, people would keep coming back. The cheapest price no longer helps businesses set themselves apart from the competition. A 3D configurator allows a better customer experience at a lower cost.



Customize your scooter

Main color:



Color accent:





What is configure-to-order?

DECREASE RETURNS WITH A 3D CONFIGURATOR AS YOUR TOOL

**“The 3D
configurator
helped us
achieve a
completely
new business
model which
transformed the
way we roll.”**

- Eduard

3D configuration, and therefore configure-to-order, elevates the entire customer journey. It's no surprise then that those that used it saw a 12% uplift in sales according to Gartner, while Shopify reported a 40% decrease in returns thanks to the use of 3D visualization.

Expivi's technology helps get rid of communication problems, it allows the suppliers and producers to utilize the same software. All involved parties can see the product at every stage of the supply chain so that everyone is working from the same Bill of Materials.

This removes the risk of human error in the ordering stadium and internal communication because the company can follow its ordered product through the configurator straight to their manufacturing systems.





Configuring in the real world

BRINGING BACK THE TAILOR-MADE IS A WHOLE NEW WAY OF STANDING OUT



Expivi's 3D configurator can be used on desktops, tablets, and smartphones. It is tried and trusted and it's out there now, helping companies to help their customers.

One firm which has harnessed it is Prominent. The company produces tailor-made sofas and chairs. But with more than 200 different materials and colors as well as lots of options for finishings, sometimes customers could find it difficult to visualize what the end product would look like. Other times, the customer doesn't actually know what they want, which slows down all the sales process.

But the use of a 3D configurator made it possible for their clients to customize their perfect chair and sofa as they view it from any angle. They could also bring in every choice of color, material, and finishing, while the price is immediately adjusted and displayed.

Another firm which has found the tech helpful is Buster + Punch. The London-based firm uses rare metals to turn everyday functional fittings into pretty impressive home details. For their chandeliers line, they were looking for a visualization tool that could showcase its high-end finish and allow would-be buyers to customize them.

Thanks to Expivi's configurator, now customers can view things like chandeliers in 3D and choose the finish and the light bulb type. Online commerce shouldn't be massified. It's already difficult to choose something we can't touch. To have something that doesn't consider the customers' particular needs adds no value to online businesses.

3D configuration introduces a sensorial experience into an otherwise senseless equation and that's essential when it comes to make-to-order. Expivi embodies those senses.



Bringing the make-to-order journey to life

MAKE-TO-ORDER FOR A ZERO-WASTE FUTURE

**“With the help
of Expivi, our
percentage
of errors
decreased by
50%”**

**- CEO of 123
Maatkussens**

The eCommerce market is huge and it's only going to get bigger. Competition is everywhere and standing out from the crowd is getting tougher and tougher. Rising costs of materials added to a growing awareness of green issues mean waste really is a thief. Being able to make things specifically to order is an ideal way to reduce costs and waste, while also giving the customer what they're increasingly looking for – a dedicated, bespoke experience.

The problems can arise when the customer isn't sure what they want in that initial design phase. Most customers aren't designers, they don't want to be – they just want to be helped to visualize what they need before they click 'buy'.

Expivi's tech helps them do just that. It enables them to visualize things in 3D, in real-time, and make choices on special features like color and material. The 3D configuration platform empowers customers to 'feel' the product before they make that final decision – it's 'theirs'.

It's simple to use too. As a cloud-based SaaS solution, a company only needs to set up 3D models of their products once. Then they can use the same data across all of their channels and locations, from design and development to manufacturing.

Cutting down on back-office work is pretty simple because with every order a complete bill of materials is generated for each product. A list of all of the raw materials, parts, and quantities of each needed to manufacture a product is produced. This allows the company to automate the sales, inventory, and production.

Make-to-stock is a thing of the past. Make-to-order, more than that, configure-to-order, is where the future lies. It is better for the environment, stimulates innovation, and is just a great way for any online seller to really stand out from the competition, as well as reduce waste and overall costs.



Get more information

Reach out, and a member of our sales team will tell you all the ins and outs of our 3D product configurator: sales@expivi.com

About Expivi

Expivi is a Software-as-a-Service that enables businesses to offer an amazing customer experience powered by a 3D configurator and Augmented Reality tech.

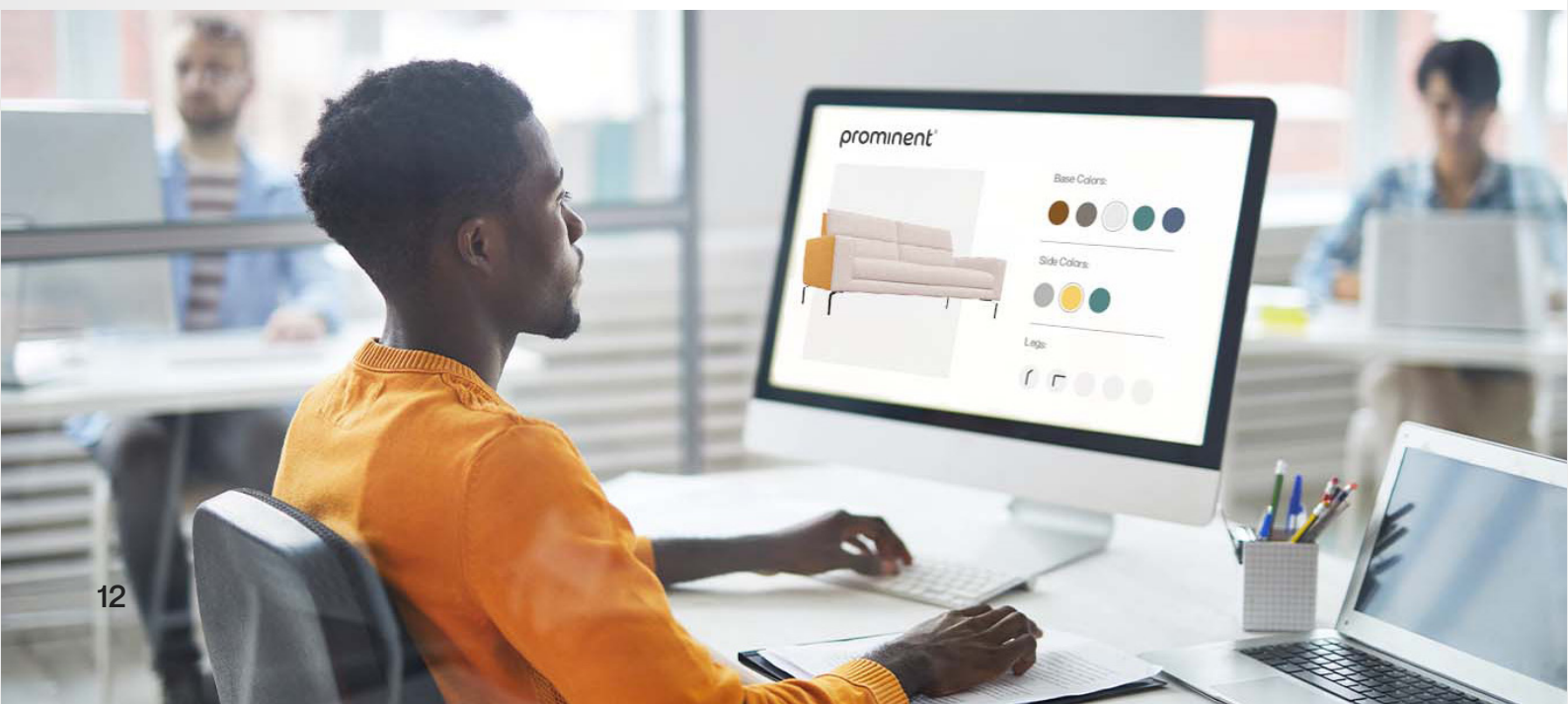
The platform instantly configures prices and quotes; streamlines the flow from manufacturer to the customer by automating the bill of materials for production; provides greater sales velocity; and reduces production errors.

Brands can give customers more choices without consuming an excess of products and reducing inventory.

Expivi accelerates the path towards a direct-to-consumer future.

Founded in 2017, Expivi is headquartered out of Eindhoven in The Netherlands, and has established a team in Salt Lake City, USA since 2020, and in Munich, Germany since 2022.

www.expivi.com





Sources

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