

Customization  
Around the World

**FURNITURE  
MANUFACTURERS  
REVEAL CHALLENGES  
AND SOLUTIONS**



*Gone are the days  
when manufacturers  
only offered five or  
six collections a year,  
with a few possible  
variations.*

*Variety is now  
**the lifeblood of  
the upholstered  
furniture industry.***

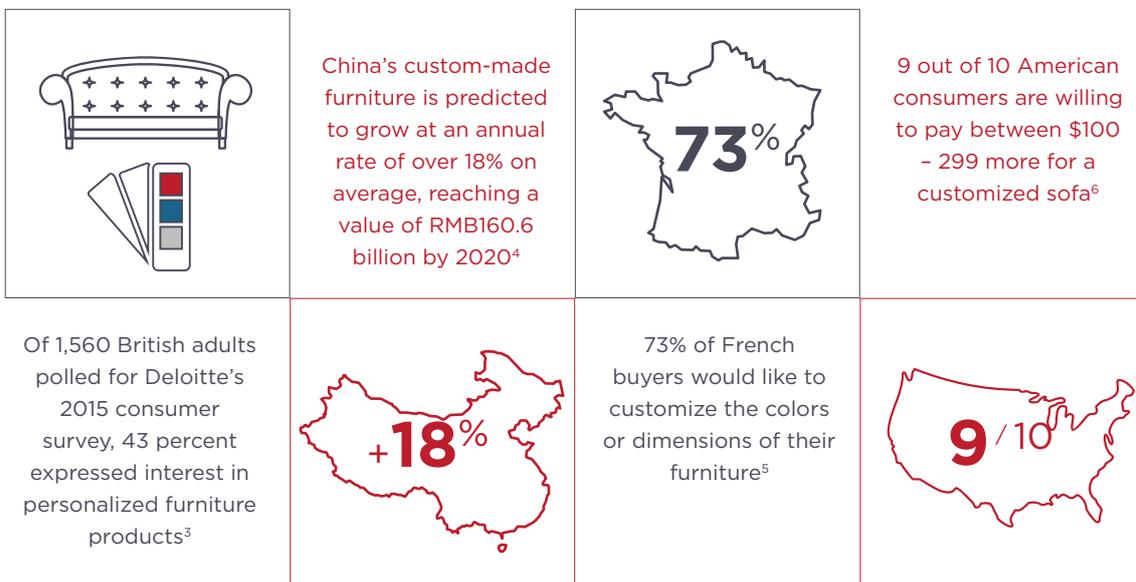


As the fast fashion ethos makes its way into the furniture industry, home decoration has ceased to be a one-time endeavor. For modern consumers, furniture has become a **short-term style statement rather than a long-term investment**. In 2006, the average life expectancy of a sofa was 7.8 years, down from 12.1 years in 1996 and 14.2 years in 1985<sup>1</sup>.

According to a 2016 Furniture Today survey, **36% of respondents expect to keep a newly purchased sofa for only 5 – 9 years**<sup>2</sup>.

In a world of rapid-fire trends, consumers across all markets are also shifting their purchasing patterns away from standardized, mass-produced products in favor of highly customized furnishings that express their individual, unique styles.

Consider these statistics:



To understand how furniture manufacturers are managing the rising demand for customization, **Lectra, in association with the Centre for Industrial Studies (CSIL)**, interviewed 200 upholstered furniture-manufacturing professionals from China, Europe and North America. As two-thirds of the respondents to our survey affirmed that **“offering many product variants is necessary to succeed in the upholstered furniture market”**.

This increasing demand for customization is straining the efficiency and profitability of current manufacturing models.

However, companies that are unable to offer the increasingly high levels of customization and variety demanded by the marketplace risk losing revenue and customer loyalty.

In this study, we will examine the main drivers propelling companies' **customization strategies, challenges in efficiently and profitably implementing customized production and the impact on future investment plans**.

<sup>1</sup>“Sofas: How old is too old?” Star Tribune. November 7, 2012. <http://www.startribune.com/sofas-how-old-is-too-old/177662441/>

<sup>2</sup> Fung Deep Dive: US Furniture Market. October 2016.

<sup>3</sup> Deloitte Consumer Review. Made-to-order: The rise of mass personalization. 2015. <https://www2.deloitte.com/content/dam/Deloitte/ch/Documents/consumer-business/ch-en-consumer-business-made-to-order-consumer-review.pdf>

<sup>4</sup> China's Furniture Market. HKTDC China. August 21, 2017. <http://china-trade-research.hktdc.com/business-news/article/China-Consumer-Market/China-s-Furniture-Market/ccm/en/1/1X000000/1X002L63.htm>

<sup>5</sup> IPEA. Cahier des tendances. November 2017.

<sup>6</sup> “What will entice consumers to spend more?” Furniture Today, July 4, 2016. <http://www.furnituretoday.com/article/532985-what-will-entice-consumers-spend-more/>

# DRIVERS OF CHANGE

While demand for more variety and customization options crosses age, regional and income groups, executives that participated in the survey specifically cited millennials and contract clients as the two market segments driving their increased customization offer.

## Millennials

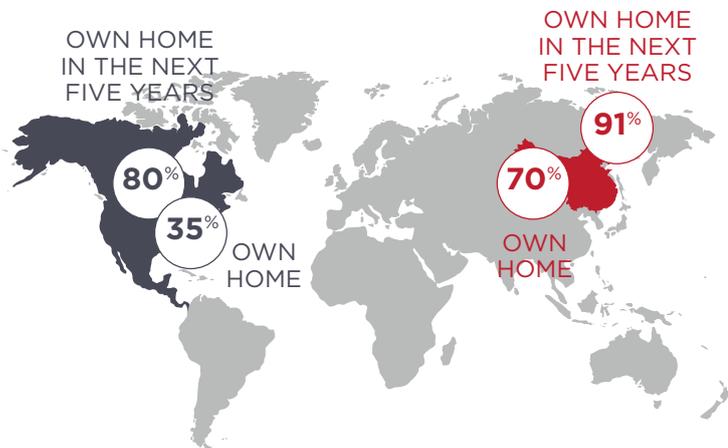
For Chinese and North American respondents, millennials are a key factor in their mass customization equation. At 75 million strong, they comprise almost a quarter of the American population<sup>7</sup>. **China's 415 million millennials, or 31% of China's population, represent an even stronger force to be reckoned with<sup>8</sup>.**

*“Personalization and customization are key factors to stay in the market. We think this trend will continue growing, particularly in the US where the new generations only want personalized products.”*

🇺🇸 Headquarters: United States

\$\$\$\$\$ Upholstered furniture sales: Less than US\$10 million

★★★ Market range: High end



Though creating a home interior that reflects personality and personal tastes is a common desire among furniture buyers of all ages, **millennials are unique in the extent of their desire for self-expression.** They have spent years building their personal brand on social media, and when looking for furniture to outfit their home, they look for pieces that feature their personal taste.

Older millennial consumers in both countries have now entered the phase in their life where they are marrying, buying a house and beginning to invest in higher quality furniture. Contrary to the myth that home ownership is dead for millennials, a recent HSBC study showed that **70% of Chinese millennials and 35% of American millennials own their own home<sup>9</sup>.** For millennials that don't yet own, **91% of Chinese millennials and 80% of Americans intend to buy a home in the next five years<sup>10</sup>.**



## Contract

The contract furniture segment is the primary driver of bespoke furniture demand across all regions. However, in Europe, where growth has been relatively slow compared to the Asia-Pacific and North American markets, the bespoke contract furniture segment has been a source of stability and growth.

During the Global Recession, European furniture exports to South East Asian and Middle Eastern markets were a decisive factor in maintaining positive annual market growth. According to the CSIL, European producers of contract furniture saw over **15% growth of sales between 2010 and 2015**<sup>11</sup>.



The redefinition of the office from a staid, formal environment **to a collaborative, creative space is driving the adoption of custom furniture elements in office design**. However, the ‘resimercial’ style is not limited to the corporate sector. In the hospitality industry, more hotel brands are striving to incorporate a boutique hotel feel by bringing elements into the designs that are unique to their surrounding cities and cultures.

*“A few years ago, we did not produce any bespoke products. Things changed as we entered the contract business. Years ago, only a few specialized producers were involved in the contract business. Now many companies are trying to enter this segment. //”*

 Headquarters: Italy

\$\$\$\$\$ Upholstered furniture sales: From US\$10 to US\$50 millions

★★★ Market range: High end

<sup>7</sup> “The Millennial Generation: A demographic bridge to America’s diverse future”. Brookings Institute, William H. Frey. January 2018. [https://www.brookings.edu/wp-content/uploads/2018/01/2018-jan\\_brookings-metro\\_millennials-a-demographic-bridge-to-americas-diverse-future.pdf](https://www.brookings.edu/wp-content/uploads/2018/01/2018-jan_brookings-metro_millennials-a-demographic-bridge-to-americas-diverse-future.pdf)

<sup>8</sup> “The Chinese consumer: Chinese millennials”. Joshua Lu and Anita Yiu. Goldman Sachs. September 8, 2015. <http://xqdoc.imedao.com/14fcc41218a6163fed2098e2.pdf>

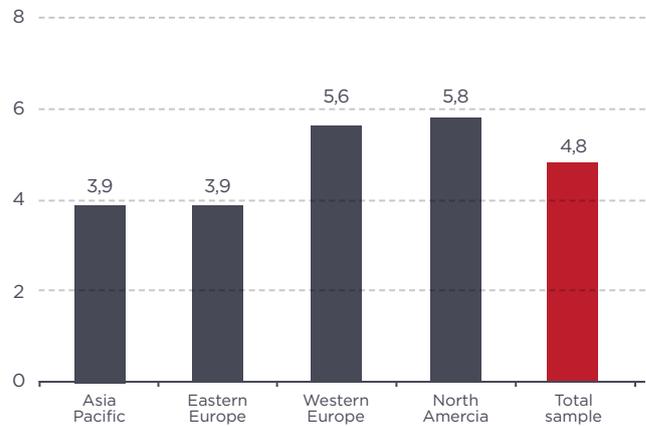
<sup>9</sup> “Beyond the Bricks: The meaning of home”. HSBC. 2017. <https://www.hsbc.com/news-and-insight/media-resources/media-releases/2017/generation-buy>

<sup>10</sup> Ibid.

<sup>11</sup> “Contract furniture. A growing business for European companies”. World Furniture Online. 08/22/2016. [https://www.worldfurnitureonline.com/research-market/\\_0074172.html](https://www.worldfurnitureonline.com/research-market/_0074172.html)

# CURRENT CUSTOMIZATION OFFER

AVERAGE NUMBER OF PRODUCT FEATURES THAT CAN BE CUSTOMIZED, BY COMPANY'S LOCATION\*



## Price is king

To determine the depth of companies' current customization offer, we asked respondents to select all of the customization options they offer from a list of eight. On average, respondents offer five out of the eight options. **Color and covering material were the options most frequently offered by respondents, at 81% and 76% respectively**, with modular options and dimensions close behind. Companies offering a wide variety of customization options are able to charge a certain price premium.



According to a Deloitte study, **1 in 5 consumers are willing to pay up to a 20% price premium on personalized products**<sup>12</sup>.

Therefore, it is not surprising that companies operating in the relatively wealthier North American and Western European markets would offer a higher number of variants. The premium positioning of customization also explains why companies distributing their products through independent retailers offer a significantly higher number of variants than those distributing through other channels. However, as customization becomes standard and a prerequisite for competitiveness, **the price premiums that companies are able to charge will shrink.**

8 products features were considered: Colour, Covering material (e.g. fabric, leather); Different modules combinations; Size; Combination of materials (e.g. leather and fabric); Motion options; Design details (e.g. skirt, tufting, stitching); Different shapes for back, arm, base.



# OBSTACLES TO CUSTOMIZATION

As the demand for personalized furniture increases, so too does the complexity of manufacturing. A company's success depends on its ability to balance the production of a wide number of variants at a near mass-production level of cost and efficiency. According to survey respondents, the three roadblocks to efficient and profitable customization are:



## Complexity of production planning and impact on lead times

**Fifty-one per cent of respondents consider the complexity of production planning a major hindrance to expanding customization options.** High mix, low volume production makes it difficult to optimize production planning, group and efficiently prioritize

orders. Incorporating small batches, batch-size one and last-minute orders into their existing production schedule considerably slows process times. While older consumers to some degree understand that purchasing customized furniture involves a longer waiting period, this is not true for millennial buyers.

<sup>12</sup> Deloitte Consumer Review. Made-to-order: The rise of mass personalization 2015. <https://www2.deloitte.com/content/dam/Deloitte/ch/Documents/consumer-business/ch-en-consumer-business-made-to-order-consumer-review.pdf>

## Increased production costs

Pursuing a competitive cost structure is a critical element of a furniture customization system. The increase of unitary production costs due to reduced economies of scale is **a major obstacle for 49% of firms** responding to the survey. It is difficult for a company to get discounts from suppliers when it buys material in small lots.

To meet shorter lead times, companies must have model components already available in their warehouse. **This implies higher warehouse, inventory and procurement costs as well as a different organization.**



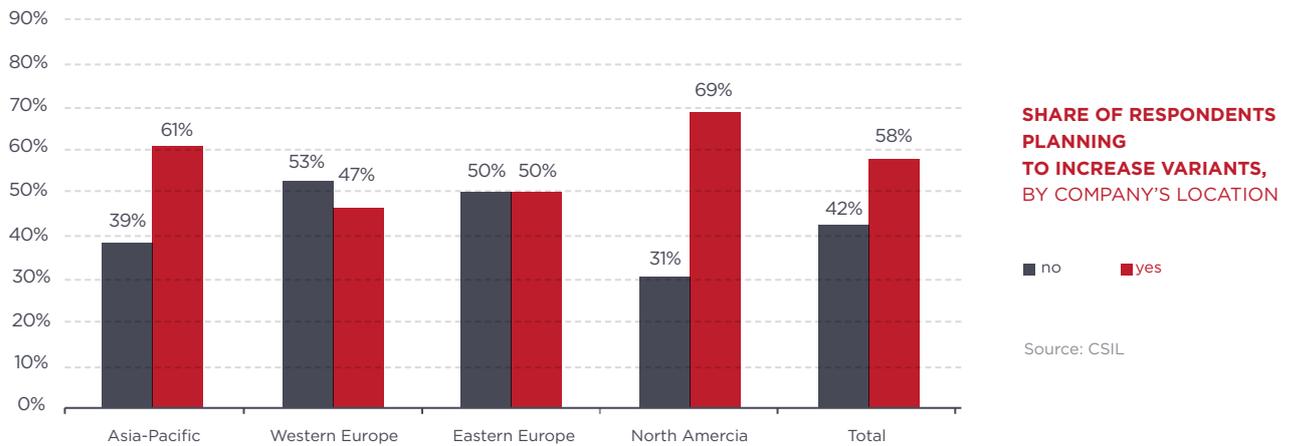
## Lack of skilled labor

The manufacturing industry is already suffering from a dearth of skilled labor. Customized production exacerbates this issue. A higher level of technical competence is required to manage the complexity of customized production. However, the current, aging workforce is often unfamiliar or unwilling to work with the new technology that can facilitate the company's product customization offer, such as digital prototyping software or produce new variants offered by the company, such as motion technology. However, many young people—many of whom associate **the industry with tedious, manual labor and limited career advancement opportunities**—are not moving in to replace those who leave. It is especially difficult to attract these digital natives if a company has not already embarked on its digital transformation journey.



# WHO WILL GO FURTHER WITH CUSTOMIZATION?

Despite the difficulties inherent in the mass customization production process, 57% of respondents reported that they plan to increase the number of variants they offer over the next three years.



At 69%, American companies show a clear trend toward increasing the already high number of variants they offer. As stated in a previous section, the millennial and post-millennial generation place a high value on customization. With steadily growing import penetration (currently at 39%), expanding the degree of customization provides a powerful source of competitive advantage and value creation for American companies trying to succeed in a commoditized market.

Chinese companies were not far behind Americans in their desire to increase the number of variants they offer (61%). As China's consumer economy continues to mature, its consumers are developing higher expectations for products and services.

Western and Eastern European companies have a slightly lower propensity to increase the number of variants they offer in their catalogues (47% of Western European companies plan to increase variants and 50% for Eastern European companies).

*// We think that customization represented about 20% of total sales over the past five years. We think that, in the future, it will increase to 50% on the domestic market. //*

 Headquarters: China

\$\$\$\$ Upholstered furniture sales: Less than US\$10 million

★★★ Market range: Middle

# SOLUTIONS AND STRATEGIES FOR SUCCESS

Whether or not companies plan to increase the number of variants, the inevitable truth for all is that demand for customized products will only continue to escalate. Improving production efficiency and product quality, while achieving a manageable cost structure is critical. Manufacturers looking to thrive—not just survive—must leverage automation and smart production to accommodate new marketplace realities and deliver greater value to their customers.

## Process optimization

The shift to a more customer-centric, customized business model means companies must reimagine and restructure how they produce furniture. **Robust, agile production processes are essential for the success of any company's customization strategy.**

Survey respondents reported connectivity between different stages of production and different areas of the company and different stages of production—from order receipt to production and delivery—as a key factor in the efficiency and speed of their customized production process. Digital connection speeds up the flow of information between all relevant players in the value chain and increases the **accuracy of the information needed to better schedule production.**

## Design & product development

Modular design is key to maintaining the “mass” in mass customization. Survey respondents consider virtual prototyping with CAD software a critical element in improving the efficiency of the design process. In order to reduce product development times, faster prototyping and use of standardized parts and components is critical.

**With an advanced 3D virtual prototyping software program, designers can build a library of standard design solutions and features that can be used for new products.** Once defined and stored in the software, this easily accessible information accelerates prototyping and time to market.

Sophisticated virtual prototyping software also allows companies to quickly and efficiently communicate product design information within different areas of the company and with externally, such as with architects working on contract projects. In addition, virtual design reviews, enable design, prototyping and production departments to work collaboratively to ensure **the finished product respects feasibility constraints, production costs and standardization procedures.**



## Production and cutting technology

Those companies who have invested in, or are considering investing in, automated cutting technology cite advantages such as **waste reduction, material optimization and time savings** as the most important aspects in maintaining margins when producing customized furniture.

When grappling with the complexity of production planning where no two orders are the same, an automated, digitized cutting room provides the necessary process agility and speed to meet ever-shorter lead times.

Investing in solutions that provide full integration and connection between the cutting room and the organization's information systems, **guarantees greater real-time visibility of operations and ensures a consistent, error-free data flow between people, processes and technologies.**

Digital delivery of cutting jobs to the cutting room not only increases throughput but also ensures that design modifications made upstream are automatically taken into account.

In addition to the numerous benefits that automated, digital cutting systems provide (reliability, speed, precision, and material savings, just to name a few), many companies believe that the fast pace of technological change necessitates investing in the most up-to-date technology. This is especially important for companies working with large retail chains. **Their retail partners often require manufacturers to have the latest technology in order to ensure reliability.**

*Demands for customization are placing immense pressure on manufacturing companies, pushing them towards higher productivity, efficiency and flexibility goals. Companies must adapt and digitalize to survive. **Companies must learn how to anticipate customers' future requirements and increase production agility in order to put their business firmly ahead of the competition.***



DISCOVER  
HOW LECTRA  
CAN RESPOND TO  
**YOUR CHALLENGES**



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**About Lectra**

For forward-looking companies that breathe life into our wardrobes, car interiors, furniture and more, Lectra is committed to crafting the premium technologies that facilitate the digital transformation of their industry. Lectra's offer empowers brands and manufacturers from design to production, providing them with the market respect and peace of mind they deserve. Supporting the furniture industry, Lectra offers CAD software, cutting room solutions and expert services dedicated to upholstered models. Founded in 1973, today Lectra has 32 subsidiaries across the globe, serving customers in over 100 countries. With more than 1,700 employees, Lectra reported revenues of \$313 million in 2017. Lectra is listed on Euronext (LSS).

**LECTRA**