

The Material Sourcing Paradigm Shift

The convergence of demographic and technical changes has dramatically impacted the B2C market; the impact on B2B markets is just beginning.



MATERIAL SOURCING

Sourcing Report & Analysis

Advanced flexible materials represent a large global market that spans a wide variety of industries and applications. As a result, the market is influenced by global economic trends and new technologies, as well as the engineers and technical staff responsible for them.

Over the last year, at Boyd Technologies, we have pinpointed some of the trends affecting global markets, particularly advanced flexible materials. We have also conducted our own material sourcing survey of over 200 material-sourcing professionals. This report interprets and summarizes the results, as well as focuses on key factors that may influence the future landscape.

We plan to conduct this survey each year to observe the shifting trends affecting our industry. We will use the information we have collected and the inferences we have made to guide us in improving the way advanced materials are sourced.

DEMOGRAPHIC CHANGES

The Paradigm Shift

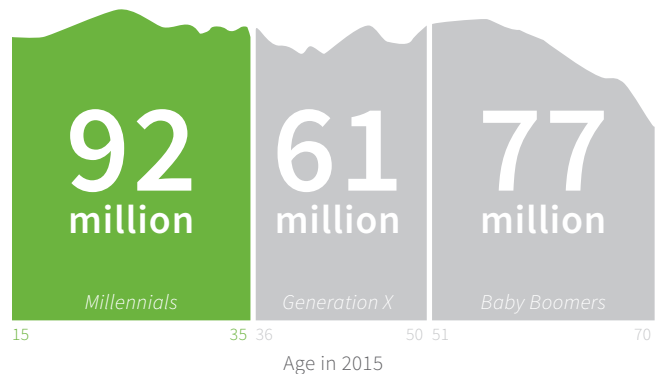
According to data collected by the U.S. Census Bureau in 2015, and reported by Goldman Sachs, there are an estimated 92 million Millennials in America¹ — those between the ages of 15 and 35 in 2015. That number not only represents 25% of the nation's population, but it also exceeds that of the 77 million Baby Boomers.

1. Millennials Infographic. (n.d.). Retrieved October 18, 2016, from <http://www.goldmansachs.com/our-thinking/pages/millennials/>

What Does This Mean for the Future of Purchasing?

Over the last two decades, technology has advanced further and faster than ever before. Global connectivity and access to technology have given rise to the Millennial population as we know it today.

As this population group enters the workforce in vast numbers, it is important to recognize the effect it will have on the future of advanced material sourcing.



Source: U.S. Census Bureau

Millennials have matured into digital natives and, as a result, have become the most technologically connected consumers ever. They are the first generation to grow up in an “always-on” digital world.²

Thanks to online and social media outlets, Millennials now have a surplus of platform to reach the world—one that previous generations lacked.

2. Millennials Infographic. (n.d.). Retrieved October 18, 2016, from <http://www.goldmansachs.com/our-thinking/pages/millennials/>

How do Businesses Deliver to Multiple Groups Simultaneously?

According to a Nielson report released in 2015, approximately 92% of Millennials own a smartphone, compared to 76% of Baby Boomers (born between 1943 and 1964).³ Technology has proven to be an integral part of Millennials' lives and a key component of their shopping experience. The report indicated that 19% of Millennials and 31% of upscale Millennials (those who live in \$75,000+ income households) spent over \$1,000 online in 2015. The majority (66%) use the Internet to purchase hard-to-find items.

As the consumer landscape evolves, businesses must remain relevant and restructure accordingly in order to deliver to multiple groups simultaneously. It is important, from a business perspective, to not only adapt to new consumers, but also to hold long-standing customers close.

The overall goal becomes winning over Millennials without losing the Baby Boomers.

BABY BOOMERS Debunking Digital Myths

A 2014 Synchrony Financial report indicates that Baby Boomers have driven the previous marketing and merchandising strategies set by

retailers. Though they are now outnumbered, they still make up a large percentage of retail sales with a shopping force well above 70 million people.⁴

The report smashes some of the myths associated with the Baby Boomer generation by pointing to even more reasons that marketing groups should focus their attention on digital tactics.

90% of Millennials and 86% of Baby Boomers perform online research regarding retail products.

For example, Baby Boomers and Millennials are actually both very comfortable with online shopping, with 90% of Millennials and 86% of Baby Boomers performing online research regarding a retail product.

And while some may assume that Millennials are far more likely to own a digital device than their Baby Boomer counterparts, the Synchrony Financial research points out that 54% of Boomers own a smartphone and 31% even own a tablet.

The real difference lies in the way each generation relates to their digital devices. Baby Boomers may possess the devices, but may not be as inclined to use them for interactive shopping purposes, whereas Millennials are much more likely to use their mobile phones for consumer-related tasks, such as browsing retailer websites, accessing digital coupons, or even discussing purchases via social media platforms.

3. (n.d.). New America. New Consumers. Retrieved October 19, 2016, from <http://www.nielsen.com/us/en/insights/news/2015/new-america-new-consumers.html>

4. Balancing Multi-Generational Retail Strategies. (n.d.). Retrieved October 19, 2016, from https://www.synchronyfinancial.com/8131_SYN_MultiGenWP.pdf?cmpid=OGOLABUS_NE0_OLA_0000549

The research also pointed toward a heavy reliance on print advertisements and word-of-mouth sales as important purchasing factors for Baby Boomers.

PURCHASING One Hundred Years of History

Purchasing is a common process in many organizations. Many businesses have to endure the procedure of acquiring goods, services, or equipment from other organizations in both a legal and ethical manner.



E-PROCUREMENT Setting the Stage for a Purchasing Revolution

The Chartered Institute of Procurement and Supply (CIPS) refers to e-procurement as “the combined use of electronic information and communications technology (ICT) in order to enhance the links between customer and supplier, and with other value chain partners.”⁵

It is a system that embraces the digital age, allowing procurement officers, or end users and

“If you are an engineer with a problem to solve that requires new materials, you’ve got to start with Sourcebook.”

DAVID ROUSSE
President, INDA

In the early 1900s, purchasing was seen as merely clerical work, only rising in importance after World War II when it became vital to acquire raw materials, services, and supplies that would keep mines and factories up and running.

By the early 1970s, procurement of materials became part of a company’s strategy, and more dedicated departments began to appear.

Fast-forward to the 2000s, where purchasers have entered a much broader role and developments are shifting. Factors that are opening up a world of new opportunities to foster competition are technology and an improved logistics network, creating an expanded, globally oriented network of suppliers.

buyers, to make purchases of goods or services indirectly and electronically. The automation systems in place take hold of the entire buying process, including comparisons and final order-placing and invoicing.

According to CIPS, this automated purchasing process was sparked in the 1980s with the development of electronic data interchange and flourished even more in the 1990s, as Internet software became more readily available and software companies began to develop electronic catalogues for use by suppliers.

5. P&SM: EProcurement—cips.org. (n.d.). Retrieved October 20, 2016, from <https://www.cips.org/Documents/Knowledge/Procurement-Topics-and-Skills/5-Strategy-and-Policy/Procurement-Policy-Development/POP-eProcurement.pdf>

Some benefits included a reduction in paperwork, lower overhead costs, and a boost in communication between companies and suppliers.

MILLENNIALS

Predicting Business Trends by Observing Consumer Behavior

Can we use insights from Millennial consumers to better predict the behaviors and preferences of Millennial professionals? Our annual material-sourcing survey will help us stay relevant in the industry, tracking how behavior changes as this demographic shift occurs. For now, we can combine our knowledge of the Millennial professional and our first survey's results to understand what the future will look like.

The Future Workforce

Although the youngest is only 15 years old, Millennials will quickly comprise more than 75% of the U.S. workforce by 2025. With much of the engineering and technical workforce eligible for retirement, this demographic shift will dramatically affect the composition of the technical and engineering communities for advanced materials.

In 2015, the oldest Millennials were 35 years old, which means they are not nearing retirement anytime soon. So what can we discern from Millennial consumer behavior in order to better prepare for the future preferences of Millennial professionals?

Boyd Technologies aims to track how behavior changes as a result of this demographic shift with an annual material-sourcing survey.

Our introductory survey was conducted in the first half of 2016 and consisted of over 200 Material-Sourcing Professionals (MSPs). The survey respondents were from all over the world



and from companies that ranged in size from one to over 1,000 employees, with anywhere from one to over 10 people solely responsible for material sourcing.

Because our focus is on the future generation's effect on the procurement process and because technology is so heavily intertwined in Millennials' consumer behaviors, we looked at the current state of project and supplier management.

We were particularly interested in collecting data from our respondents on the procurement process, specifically in how technology is used and the expectations that managers have.

2016 SOURCING REPORT

Here Is What We Discovered

70% of MSPs start a new sourcing project with existing resources.

- 34%** (email existing contacts)
- 20%** (call existing contacts)
- 23%** (search online)
- 16%** (search internal resources)
- 6%** (other)

72% of MSPs currently use online databases to conduct material sourcing.

60% of MSPs do, or would, purchase materials online.

52% of MSPs would prefer to both search online and work with a sales representative.

SOURCING PLATFORM

Addressing the Challenges of the Future

As it becomes more apparent, via a plethora of research on the topic, that Millennials rely heavily on technology tools for purchasing products, this trend will seep into the material sourcing world as well.



R&D SUBSCRIPTION

Premium R&D is ideal for smaller organizations or business units looking to expand their access to materials and samples quickly and efficiently.

LEARN MORE



The average material-sourcing cycle consumes **3.5 to 4.5** months. The presence of online tools, such as Sourcebook, changes the traditional advanced material-sourcing structure, allowing product developers, engineers, and sourcing departments to connect directly to material manufacturers.



COMMERCIAL SUBSCRIPTION

Premium Commercial is an enterprise offering for larger organizations and business units looking to gain a competitive advantage in sourcing and supplier management.

LEARN MORE



Such tools reduce the time and cost associated with sourcing materials and improve innovation, product development, and commercial success.



TUTORIALS

Tutorials will help you and your team start making use of the Sourcebook suite of tools. Learn about the Material Finder, Sample Library, Sourcebook Support, and more.

LEARN MORE



Online tools shift the focus to improving the process of material sourcing with better services, driven by new technologies, that bring data to the forefront of decision making on both sides of the value chain.

the smart **material source**

