



North Mountain
CONSULTING GROUP

June 2023

Next-gen materials: A 2023 assessment of the potential for U.S. consumer adoption

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Suggested citation

Szejda, K. (2023). *Next-gen materials: A 2023 assessment of the potential for U.S. consumer adoption*. Consumer Research Report. North Mountain Consulting Group.

Executive Summary

Purpose. The purpose of this survey study was to assess the potential for consumer adoption of next-gen materials in the U.S.

Methods. We obtained a large sample representative of the U.S. population in terms of age, gender, race/ethnicity, income, and geographic region (N = 1,012). In the survey, participants first provided their demographic information and current shopping habits, then viewed photos and information about next-gen materials, and lastly answered questions about how they thought they would shop in the future.

Findings. A majority of participants were open to purchasing next-gen materials, including 51% who are *somewhat* or *moderately* likely to purchase and 41% who were highly likely to purchase (*very* or *extremely likely*). This latter group, who we defined as potential early adopters, were all willing to pay at least the same price for next-gen materials in comparison to conventional materials, and 63% were willing to pay more. In a shopping scenario, 60% of the full sample selected a next-gen leather item over a conventional item. Purchase Interest was broad in terms of material type (next-gen leather, wool, silk, down, fur) and product categories (clothing, accessories, bags, footwear, bedding, home furnishings, and automotive interiors). Top motivations for purchasing included quality, sustainability, cost, and animal welfare. In terms of interest in technologies, familiar production methods (such as processing from recycled textiles) were the most appealing. The potential market shares for each next-gen material type ranged from 55-62%. We defined potential market share as the average percentage of next-gen products participants would purchase over the course of a year, among those who would purchase within each respective material subcategory.

Implications. We found broad U.S. consumer interest in purchasing fashion accessories and apparel, home furnishings, and automotive interiors made with next-gen materials. About 1/3 of the participants reported a high likelihood of purchasing at a higher price point. If next-gen materials become widely available and affordable options within the U.S. market, we expect next-gen materials to become widely adopted by consumers.

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Method

Participants

The sample was representative of the adult US population in terms of age, gender, race/ethnicity, and geographic region. Participants (N = 1,012) were recruited from Dynata research panels. Sociodemographic characteristics of both the full sample and the potential early adopter segment can be found in [Appendix A](#). Participants were included in the study if they met the demographic quotas and passed quality checks.

Procedures

Participants first answered questions about their demographics and current shopping habits (see [Appendix B](#) for details). Following an introduction to next-gen materials, participants responded to questions related to their likelihood of adoption, motivations for purchasing, and preferences toward next-gen and conventional materials.

Stimulus

At the beginning of the survey, participants read a short introduction to next-gen materials that described the types of products, technologies and qualities of next-gen materials (see description below). They also viewed photos of a variety of products made with next-gen materials, including clothing, accessories, footwear, home furnishings, and automotive interiors.

What are next-gen materials?

In the last few years, rapid advances in science and technology have given rise to a next-gen materials industry. Mission-driven companies are designing new types of materials for fashion accessories and apparel, home furnishings, and automotive interiors.

Next-gen materials are sustainable alternatives to:

- Conventional animal products (leather and exotic skins, silk, fur, wool, and down)
- Current generation synthetics (acrylic, polyester, and polyurethane)

Next-gen materials are made using a variety of ingredients and methods. They can be:

- Processed from recycled textiles
- Processed from plants and algae
- Grown from mycelium, the rootlike structure of fungi
- Grown by programming microbes to produce proteins
- Grown by cultivating animal cells

Although made in different ways, next-gen materials are all:

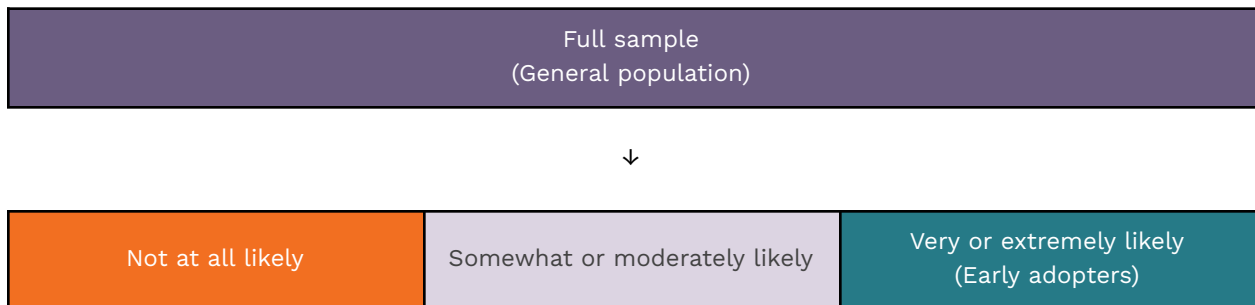
- High quality
- High-performance
- Sustainable
- Animal-free

Measures

Where relevant, answer choices and questions were randomized to prevent an order effect. The full questionnaire is available to freely download on Open Science Framework.

Data analytic plan

For most questions, we reported results for the full sample. For some questions, we segmented the sample into three groups based on their purchasing likelihood. The segments are shown below using the same colors we used in the charts.

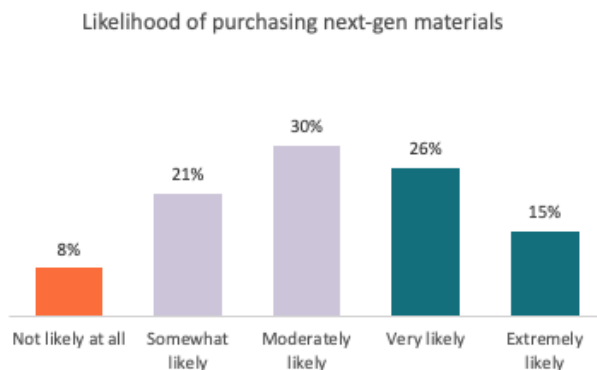


Results

Likelihood of purchasing next-gen materials

Full sample

Nearly all participants (92%) stated they were at least somewhat open to purchasing next-gen materials, including 51% who were somewhat/moderately likely to purchase and 41% who were very/extremely likely to purchase.



Segmentation

We segmented the full sample into three groups based on their purchasing likelihood:

- **41%** very or extremely likely (early adopters)
- **51%** somewhat or moderately likely
- **8%** not at all likely

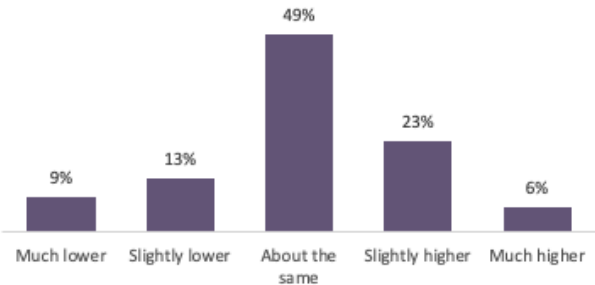
We found only slight differences between segments in terms of their sociodemographics (including age, gender, region, race/ethnicity, education, and income). An exception was political orientation; the early adopter segment was somewhat more liberal (see [Appendix A](#) for more details).

Likelihood of paying a higher price for next-gen materials

Full sample

In comparison to conventional materials, about ¾ of participants (78%) would pay the same or more. About ⅓ (29%) indicated they would pay more.

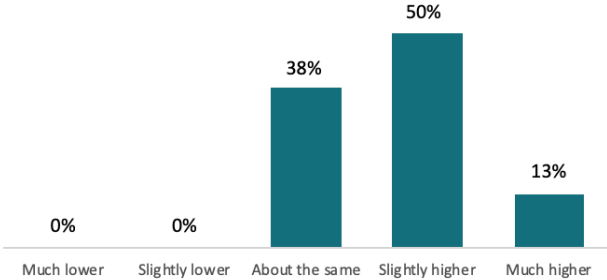
Price consumers are likely to pay for next-gen materials, in comparison to conventional



Segmentation

Among the early adopter segment, all were willing to pay the same or more for next-gen materials, in comparison to conventional. Most early adopters (63%) were willing to pay more.

Price early adopters are likely to pay for next-gen materials, in comparison to conventional

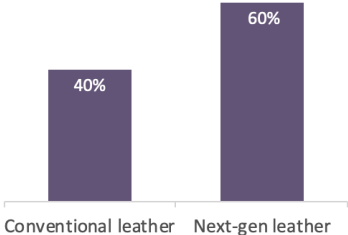


Leather preferences in a shopping scenario

Full sample

We asked participants to imagine they were shopping for a new leather clothing or accessory item, and that the item they liked was available in both conventional and next-gen leather. Given a choice between the two, 60% of the full sample indicated would purchase the next-gen item.

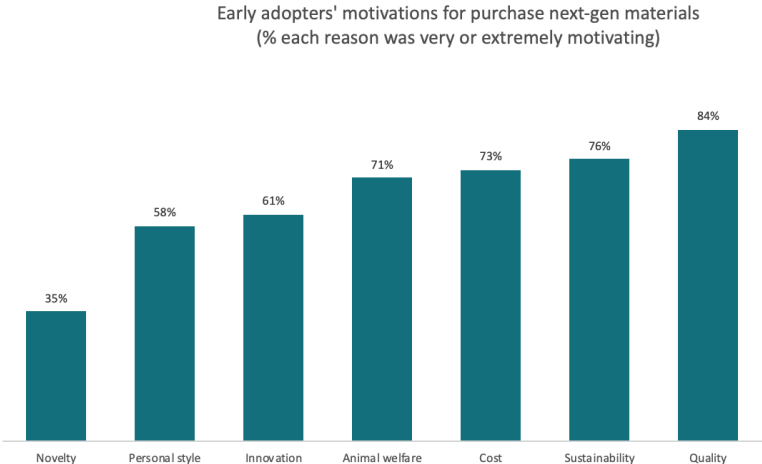
Leather preference: conventional or next-gen



Motivations for purchasing next-gen materials

Segmentation

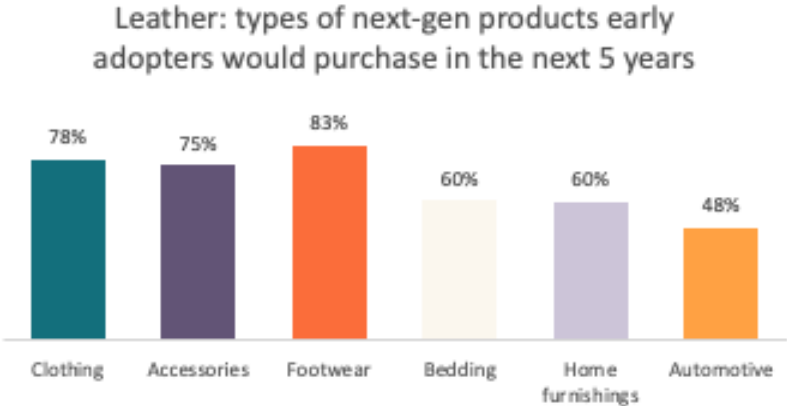
For early adopters, quality, sustainability, cost, and animal welfare were the most motivating reasons for purchasing next-gen materials.



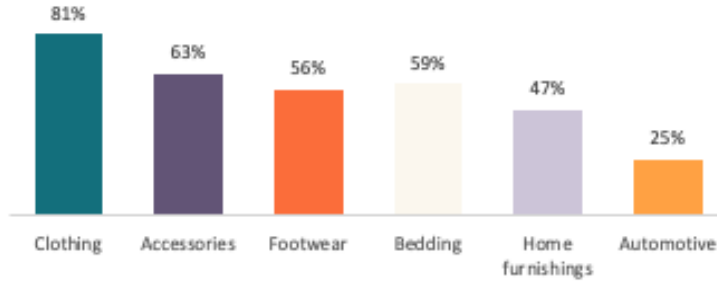
Likelihood of purchasing types of next-gen products

Segmentation

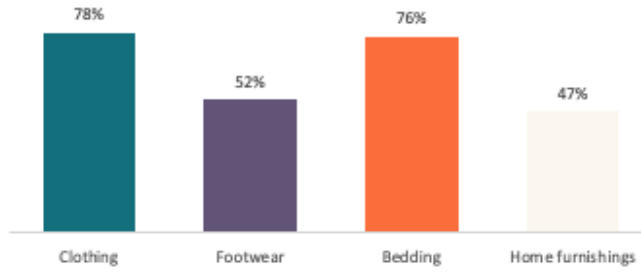
For each material type, participants selected the types of next-gen products they would purchase in the next five years. For context, they were asked to assume a future in which next-gen materials were widely available options for fashion accessories and apparel, home furnishings, and automotive interiors. Early adopters expressed broad interest in purchasing a variety of next-gen product categories and material types.



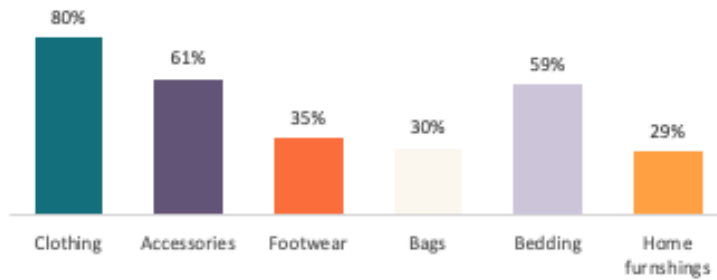
Wool: types of next-gen products early adopters would purchase in the next 5 years



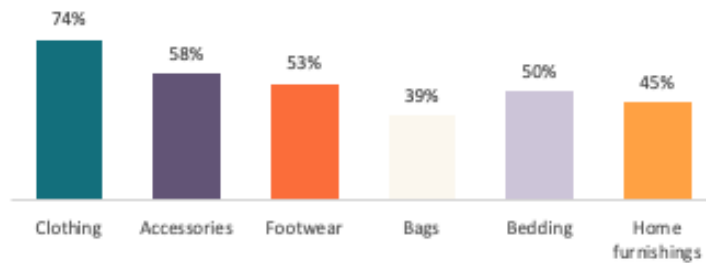
Down: types of next-gen products early adopters would purchase in the next 5 years



Silk: types of next-gen products early adopters would purchase in the next 5 years



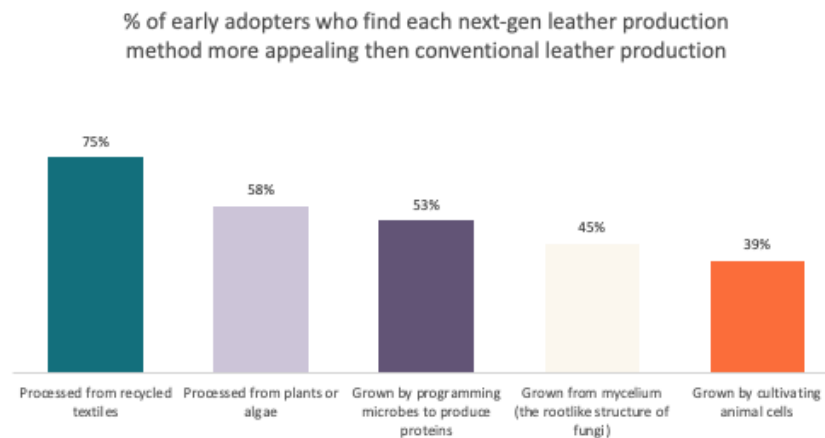
Fur: types of next-gen products early adopters would purchase in the next 5 years



Preferences for next-gen leather production methods

Segmentation

We assessed the appeal of several next-gen leather production methods, relative to conventional leather production. We asked participants to sort these production methods into categories — either more appealing than conventional leather production, about the same appeal, or less appealing. Generally, early adopters reported a higher relative appeal for more familiar production methods. Most early adopters (75%) found *processed from recycled textiles* more appealing than conventional leather, followed by *processed from plants or algae* (58%), *grown by programming microbes to produce proteins* (53%), *grown from mycelium, the rootlike structure of fungi* (45%), and *grown by cultivating animal cells* (39%).



Potential market shares of next-gen materials

Full sample

For each subcategory of material (leather, wool, silk, down, or fur), we asked participants to indicate whether they would purchase conventional products or next-gen products within the next five years. Then, we asked the participants who reported that they would purchase within each respective material subcategory to estimate the percentage of both material types (conventional leather and next-gen) they would likely purchase over the course of a year. For context, participants were asked to assume a future in which next-gen materials were widely available options for fashion accessories and apparel, home furnishings, and automotive interiors.

Leather

Of the full sample, 86% indicated they would purchase leather (conventional, next-gen, or both types) in the next five years. Among those consumers who would purchase a leather product, the average yearly estimate of next-gen purchasing was 57%.

Wool

Of the full sample, 73% indicated they would purchase wool (conventional, next-gen, or both types) in the next five years. Among those consumers who would purchase a wool product, the average yearly estimate of next-gen purchasing was 55%.

Silk

Of the full sample, 71% indicated they would purchase silk (conventional, next-gen, or both types) in the next five years. Among those consumers who would purchase a silk product, the average yearly estimate of next-gen purchasing was 57%.

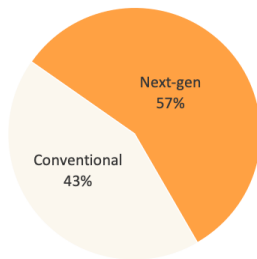
Down

Of the full sample, 75% indicated they would purchase down (conventional, next-gen, or both types) in the next five years. Among those consumers who would purchase a down product, the average yearly estimate of next-gen purchasing was 58%.

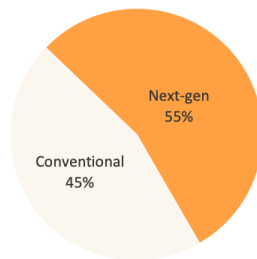
Fur

Of the full sample, 54% indicated they would purchase fur (conventional, next-gen, or both types) in the next five years. Among those consumers who would purchase a fur product, the average yearly estimate of next-gen purchasing was 62%.

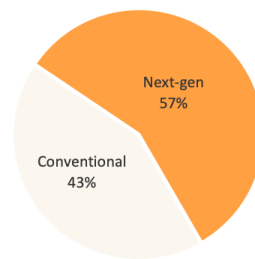
Leather: Potential Market Share



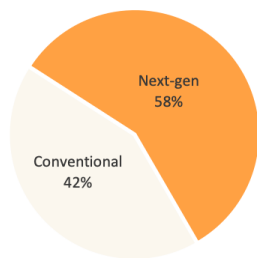
Wool: Potential Market Share



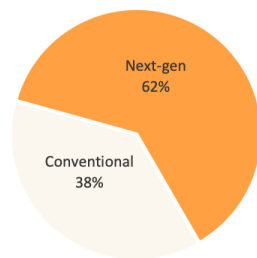
Silk: Potential Market Share



Down: Potential Market Share



Fur: Potential Market Share



Conclusion

This study outlines the landscape of potential consumer adoption among the U.S. population. We found a high likelihood of purchasing next-gen materials. Across diverse segments of U.S. society, consumers were interested in purchasing fashion accessories and apparel, home furnishings, and automotive interiors made with next-gen materials. The sample included a large segment of potential early adopters, the majority of whom were willing to pay a premium for next-gen products. Targeting early adopters is a key step in long-term societal adoption, as subsequent population segments watch and later adopt after the innovation begins to normalize in society and become widely available and affordable.

About North Mountain Consulting Group

[North Mountain Consulting Group](#) is a research and communication consulting firm that helps organizations develop evidence-based strategies for a sustainable future. Our team of researchers combines the integrity and rigor of social science research methods with communication expertise to develop effective communication strategies. We specialize in understanding and influencing the consumer landscapes of emerging technologies in the food and material sectors.

Funding

The study was funded by the Material Innovation Initiative, a nonprofit think tank focused on research, knowledge-sharing, and fostering connections to fast-track the development of environmentally preferable and animal-free materials. The Material Innovation Initiative provided input on the study design and did not participate in data collection, analysis, or reporting.

Appendices

Appendix A: Demographic tables

Gender

	Study sample	Early adopters
Man	48%	50%
Woman	51%	48%
Non-binary	1%	1%
Other	0%	0%

Age

Age	Study sample	Early adopters
18-24	13%	14%
25-34	17%	19%
35-44	17%	18%
45-54	19%	19%
55-64	16%	13%
65+	17%	17%

Region

Region	Full sample	Early adopters
Midwest	22%	20%
Northeast	18%	17%
South	37%	39%
West	23%	23%

Race/ethnicity (multiple category selection)

	Full sample	Early adopters
American Indian or Alaska Native	5%	5%
Asian or Asian American	6%	6%
Black or African American	15%	17%
Hispanic, Chicano, Latino, or Spanish	20%	21%
Middle Eastern or North African	1%	1%
Native Hawaiian or other Pacific Islander	1%	0%
White or Caucasian	63%	63%
Other	3%	2%

Education

	Full sample	Early adopters
Primary school	0%	0%
Some high school	2%	1%
Completed high school	30%	27%
Technical qualification or trade certificate	13%	13%
College/Undergraduate degree	39%	41%
Postgraduate degree	15%	17%

Annual household income

	Full sample	Early adopters
Under \$15,000	10%	11%
\$15,000 to \$24,999	11%	10%
\$25,000 to \$49,999	25%	25%
\$50,000 to \$74,999	20%	18%
\$75,000 to \$99,999	12%	14%
\$100,00 to \$149,999	11%	10%
\$150,00 to \$199,999	4%	6%
\$200,000 or more	3%	5%

Political orientation

	Full sample	Early adopters
Very conservative	9%	6%
Conservative	21%	17%
Moderate	40%	40%
Liberal	16%	20%
Very liberal	9%	13%

Appendix B: Current shopping habits

Importance of product attributes

We asked participants to rank product attributes in terms of their importance when purchasing fashion, automobile, or home goods products. Both the full sample and the early adopters ranked quality, price, and value ranked highest in importance. The average ranks are shown in the table below.

Attribute	Full sample	Early adopters
Quality	2.40	2.46
Price	2.53	2.70
Value	3.21	3.46
Sustainability	4.84	4.55
Brand	4.50	4.59
Animal welfare	5.32	4.98
Innovation	5.19	5.27

Note: Lower numbers indicate attributes with higher relative importance.

Brands purchased in the last five years

For both the full sample and also the early adopter segment, the most commonly purchased brands in the last five years were Target, Nike, Adidas, and Under Armour.

	Full sample	Early adopters
Target	57%	64%
Nike	53%	61%
Adidas	42%	49%
Under Armour	37%	44%
North Face	23%	30%
Calvin Klein	24%	30%
H & M	19%	26%
Ralph Lauren	18%	23%
PUMA	17%	21%
Gap	17%	20%
Shein	15%	18%
Disney Store	15%	17%
Lululemon	11%	15%
Patagonia	9%	14%
Zara	7%	11%
Louis Vuitton	7%	11%
Prada	5%	8%
Toms	6%	7%
ALDO	4%	6%
ASOS	3%	5%
Allbirds	3%	5%
Marmot	2%	4%
Stella McCartney	1%	3%
Esprit	1%	2%
Alternative Apparel	2%	2%
Everlane	1%	2%
Eileen Fisher	1%	2%
Reformation	1%	1%