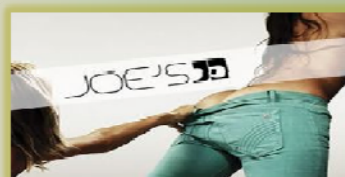


## **Sustainability is the New Premium Jeans:**

*An Analysis of the Denim Supply Chain and How That Relates to Customer Demand Both Present and Expected*

Tyler Michael Cole  
Manager at Olah Inc.

## History of "Premium" Denim



- Average price of "Premium" Jean \$200 USD
- Premium Denim reached its peak in 2005/06 by offering "Premium" product at multiple price points.
- 96% of U.S. Consumers own 7 pairs of Denim Jeans

### Premium Denim & Manufacturing Origin



- Jeans were manufactured using Japanese & Italian fabric at first and then Turkish.
- Denim Jeans represents an estimated \$60 Billion global market for retailers
- Premium Market \$2 Billion

### “Premium Jeans” were predominately Manufactured in California



### Marketing Influence on Premium Industry



Heavy Marketing of Garment Manufacturing & Fabric origin resulted in a new meaning of high end jeans market

### Global Recessions impact on “Premium Denim”



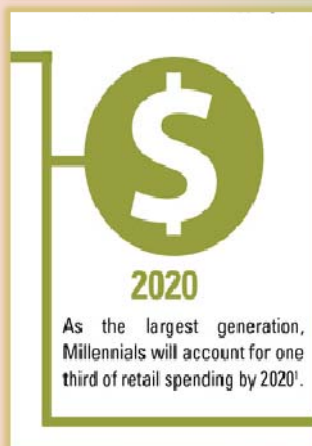
- 2008 Financial Collapse & Recession was demise of Top Tier Denim Market
- Rapid changes in the economy forced Denim Companies to reconsider product offering which ultimately meant developing based on cost of goods and services.

### Current Industry Sentiment

- Mass consumption indicates that price is the major component in the customers decision making process. What once drove premium sales has now been removed by cost.
- The Denim industry is improving as suppliers offer differentiated products:
  - Performance
  - Price
  - Diversity of Product
- Millennials are changing the landscape and demanding a valid story of transparency in the procurement of denim
- Millennials are forcing companies to promote the components of the manufacturing process that support health environmental practices

### Who are the Millennials?

- Generation of individuals born between 1980-2000
- Fastest Growing Generation in Business Sector



## Youth & Environmental Influence



- “Generation Y” are not necessarily environmentalist
- The Demographic of Millennial consumers (2011 Pew Survey) are more supportive of stricter environmental laws.
- Millennials attribute global warming to human activity, and more likely to favor environmental policies such as green energy development and governmental tax incentivized programs.

## Millennial employment current vs. future



- As of 2016 Millennials make up 1/3 of the global workforce
- By 2020 this same generation will represent 1/2 of the global workforce
- Survey after survey shows that Millennials want to work for companies that place a premium on employee welfare, offer flexible scheduling and, above all, bestow a sense of purpose

### Millennial Consumers

- Average Income per College Graduate - \$34,500 (Lowest starting pay since 1998)
- Average Debt Post College Graduation - \$30,000
- Millennials are a tech savvy demographic which is creating new selling challenges for many traditional brick and mortar denim companies.
- $\frac{3}{4}$  of Millennials do online research before buying product.

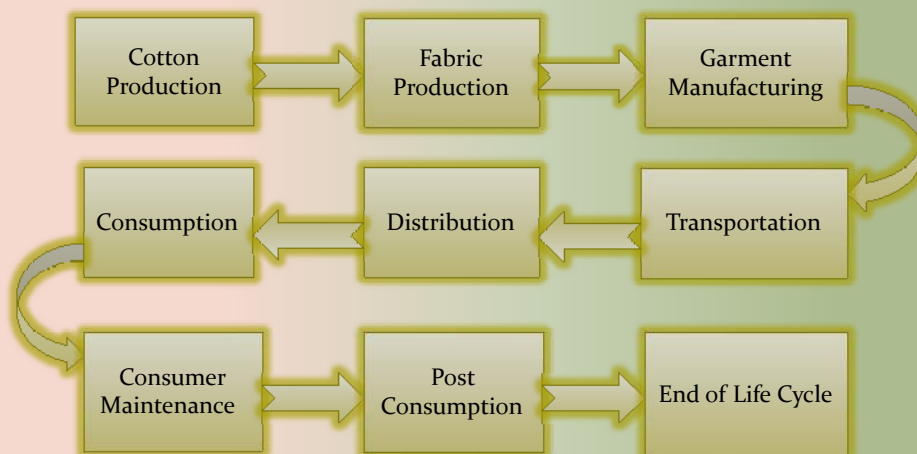
### Millennial Buying Habits & Demands

- Buy Online
- Social Media Influence
- Online Customer Interaction & Reviews
- “Kick-Starter” Brands – I.e. Gustin
- Shop In-Store, Ship To Home
- Resale Market
- Virtual Fitting Room
- Necessity for fit

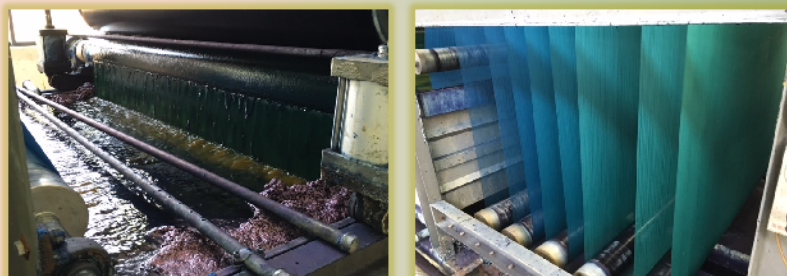
### How does the textile industry impact the global landscape?



### LCA & Manufacturing Process



### Denim Manufacturing Today



- Dyeing, Finishing, Extrusion, Spinning, Weaving - Textile Production
- Harsh Chemicals Used in The Manufacturing Process
- Second Quality in Manufacturing

### Highest Environmental Impact in Manufacturing

#### SEVERAL IMPACT CATEGORIES RELEVANT TO APPAREL WERE ANALYZED

CATEGORY	DESCRIPTION	UNITS
CLIMATE CHANGE	Global warming potential of greenhouse gases released to the environment	kg CO <sub>2</sub> -e
WATER INTAKE	Freshwater taken from the environment	liters
WATER CONSUMPTION	Net freshwater taken from the environment minus water returned to the same watershed at the same quality or better	liters
EUTROPHICATION	Oxygen depletion as a result of nitrogen and phosphorous deposit into freshwater or marine environments	g PO <sub>4</sub> -e
LAND OCCUPATION	Total land occupied to support the product system assessed	m <sup>2</sup> -yr
ABIOTIC DEPLETION	A measure of the depletion of non-renewable resources that includes fossil energy, metals and minerals	mg Sb-e

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## Cotton and its impact on Water and Energy Use

### COTTON AND CONSUMER HABITS HAVE A BIG IMPACT ON WATER AND ENERGY USE

#### General Findings:

- **Water Consumption:** Fiber production, predominantly cotton, contributes by a wide margin to water consumption.
- **Climate Change:** Consumer care and fabric production are the most significant phases for climate change impact and energy.
- **Expanded Scope:** By expanding our scope to include the leading cotton-producing countries, we've seen the water consumption from cotton cultivation increase to 68% of the total impact.

#### Consumer Use Findings:

- **Washing every 10 times** a product is worn instead of every 2 times reduces energy use, climate change impact, and water intake by up to 80%.
- **Significant differences between regions:**
  - Consumers in China are leading the pack: when it comes to laundering their jeans, they mostly wash in cold water and air dry
  - American consumers had the highest water intake and use of non-renewable energy. The good news is that Americans more prevalently use cold water
  - Consumers in the UK and France mostly air dry their jeans but they use more hot water than American or Chinese consumers
  - Consumers in the USA, UK and France wash their jeans more frequently than in China

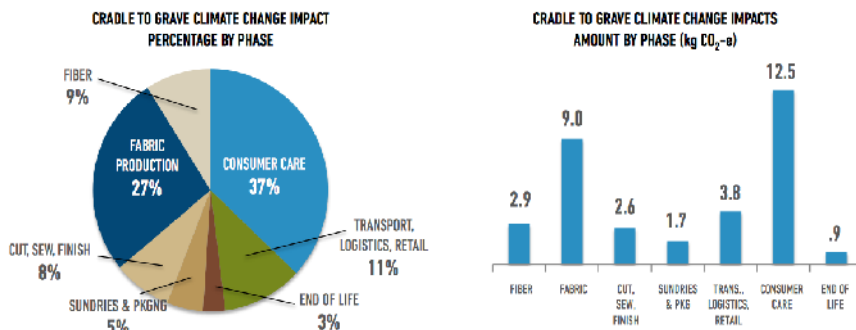
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## Consumer maintenance and its impact on the environment

### LEVI'S® 501® JEANS: CLIMATE CHANGE IMPACT

Consumer Care phase dominates the climate change impact area (driven by high use of non-renewable energy).

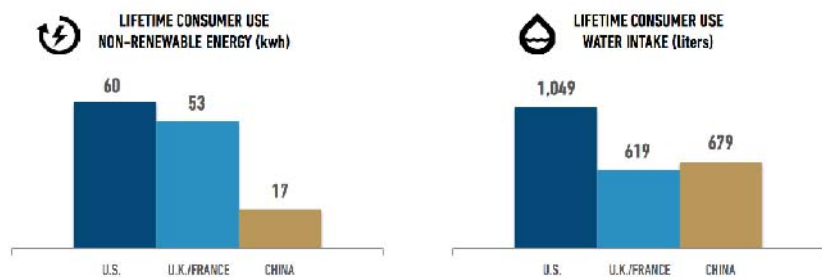


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### Consumer Maintenance Continued.....

#### ON AVERAGE, AMERICANS USE MORE WATER AND ENERGY TO WASH THEIR JEANS



For sources and additional consumer use data, please see the Appendix.

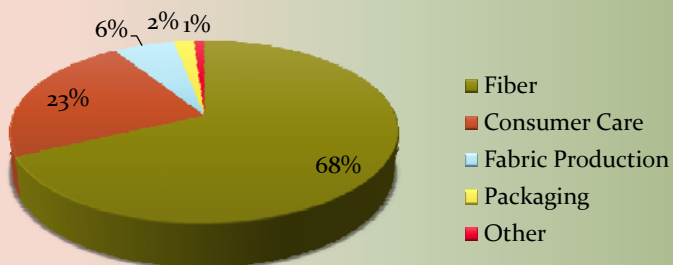
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### Processes With Most Significance on Environment

Cotton production has the most significant impact on denim manufacturing in comparison to the other major components as listed below

Water Consumption By Manufacturing Process

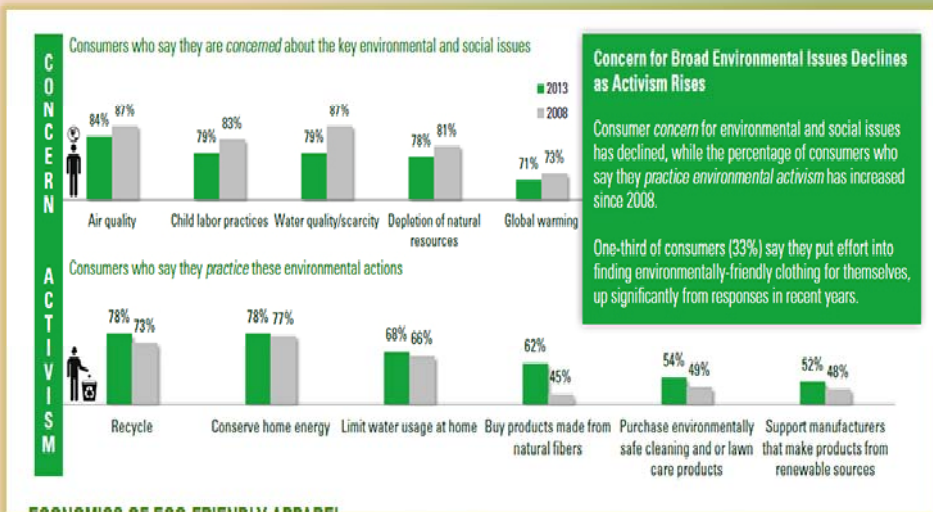


### Sustainability = Ambiguity



- 51% of shoppers say sustainable refers to the durability or longevity of apparel
- 14% are unclear of sustainability's meaning
- 50% of consumers think clothing imported from other countries is less eco-friendly than clothing made in the USA

### Consumer Concern VS. Consumer Activism



## Future of Premium Denim?



## Premium Redefined

- Marketing created the perceived value that manufacturing origin meant “premium” in the denim industry – NEVER AGAIN
- Millennials exposure to and abundance of product information will create demand for rapid, accurate and accountable information
- Millennials demand valid & transparent information in order to fully support companies practicing “sustainability” within product manufacturing or a products life cycle

### Sustainable Components of “Premium” Denim

Supply Chain Transparency  
 Laser Washing  
 Reduction In Water Consumption  
 Sustainable Dye Methods  
 Recycling of Fibers  
 Supporting Local Economies

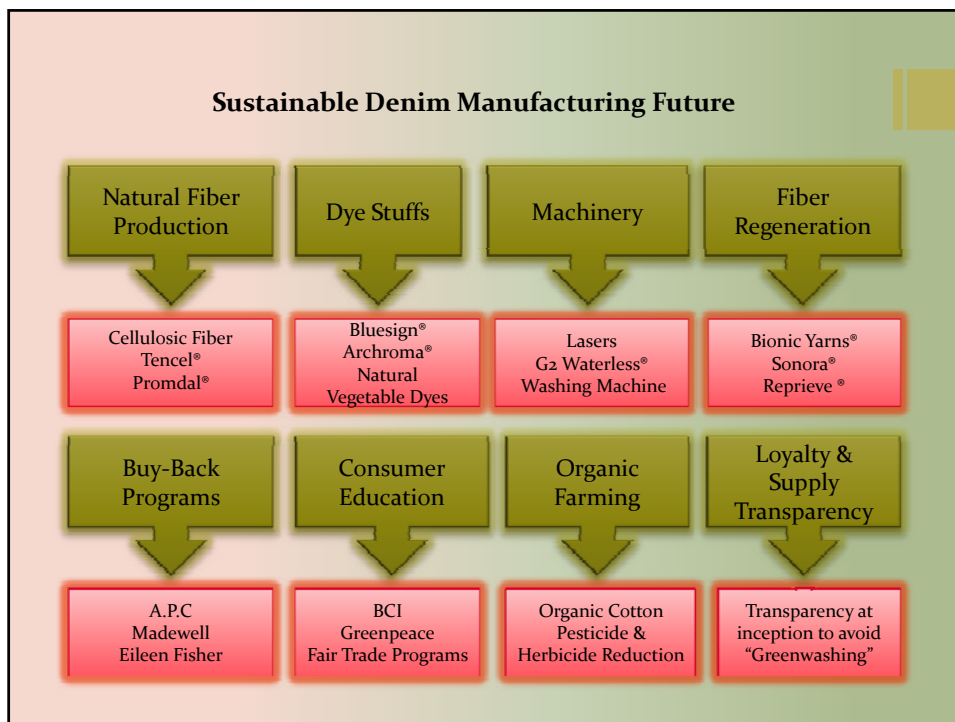
## Sustainability, Fiber Demands & Cotton Alternatives



- 2010 – Market share of Cotton to Polyester was 50/50
- 2020 – Market share estimates 35% Cotton and 65% Polyester
- Manmade Cellulosic Fibers – Approx. 7%
- Consumers are demanding softer denim with more stretch
- Tencel®, Modal®, ProModal ® are becoming increasingly more relevant
- T400®, Celliant®, Sorona®, Dyneema® are trending in performance denims

## Marketing For a New Generation





### How will “Fast Fashion” compete with an educated consumer?

- Consumer perceptions that sustainability relates to the lifespan of their clothing points to concerns that they have about apparel quality and a possible diminishing attraction to disposable inexpensive clothing. Embracing sustainability in terms of clothing longevity from a consumers’ perspective and environmental responsibility from an industry standpoint could be gaining headway
- The long-term financial costs of fast fashion for consumers, coupled with the potential detrimental environmental impacts, could accelerate the expansion of sustainable apparel offerings. Connecting with consumers to help reduce the environmental footprint of apparel can be aided by communicating and demonstrating clear financial savings and sustainability advantages

Who is doing the right thing?

