2D/3D DESIGN & BODY DIVERSITY

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Objectives

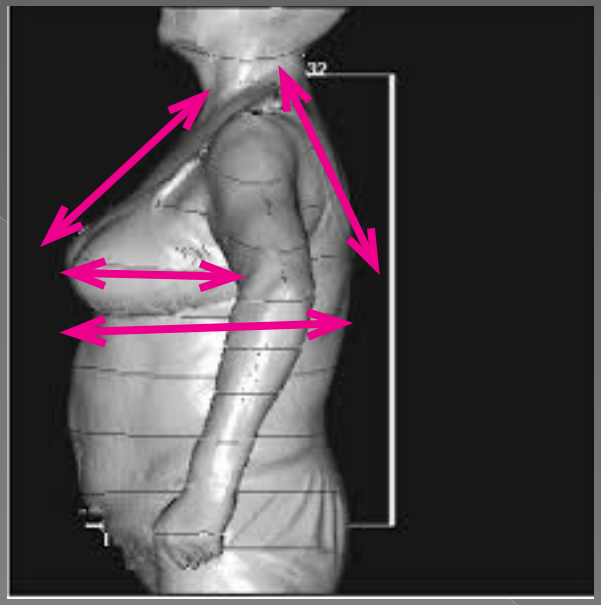
- Addressing your product selection and how this relates to 3d design & consumers
- Using 3D in your company & with consumers when you may not be using it in development.
- Work flows that impact your company time, and products for company scale.

Key Groups to avoid in 3D Development Process

- Lingerie/Men's Underwear beyond small sizes
- Swimwear beyond small sizes
- Extended Sizes– depend on the quality of platform to gauge when the sampling process doesn't match.

Breast Issues for Larger Size Ranges

Breast tissue is flowing out of foundation used in scan.



Shape of larger breasts is reliant on the foundation used during scanning. We can see this person had a poor fitting bra to begin with. About 8 key measure points are effected as result.

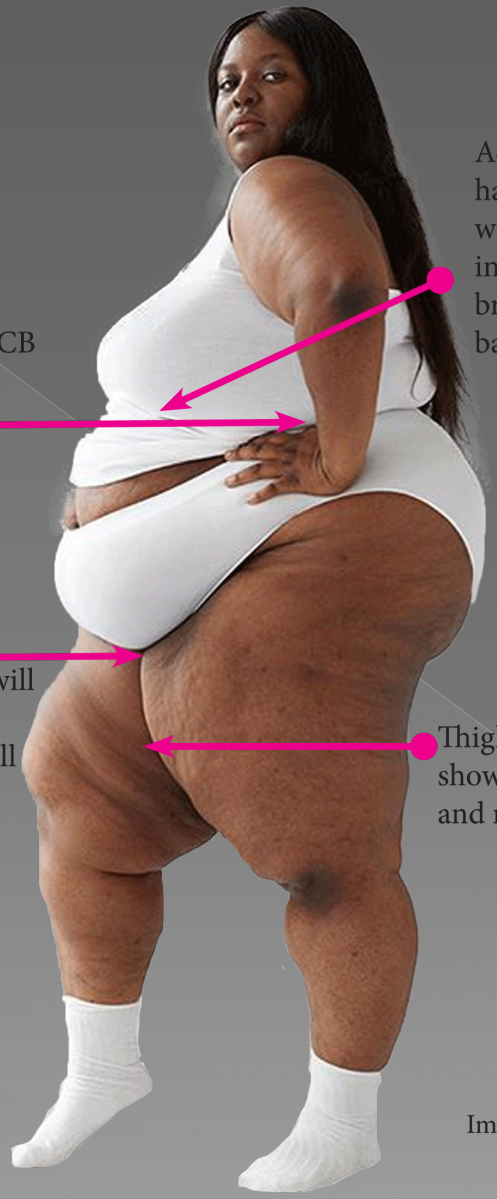
Other tools to aid in Proper breast mass Calculations are…

- Archimedes Principle
- Mammography
- Weight calculation
- 3D of body for posturing

Alvaform Extended Size Response & points to consider before investing.

- Was your figure/fit model scanned correctly? Can an accurate scan be made?
- A fit models body mass will create overlaps of points of measure that can't be fixed in the avatar geometry.
- Any large breast supports or foundations need to be created.
- What textiles are used For example 3D design in a 20 for athletics is more forgiving due to stretch of material.

Fit Considerations in 3D



If the stomach has tissue overlap it will measure the waistband to be larger. The CB Neck to waist will be much larger.

Across Underbust: Note the breast hangs over the underbust line. This will cause the breast mass to scan in as the underbust rather than the breast. This causes poor measure balance across 5 points of measure.

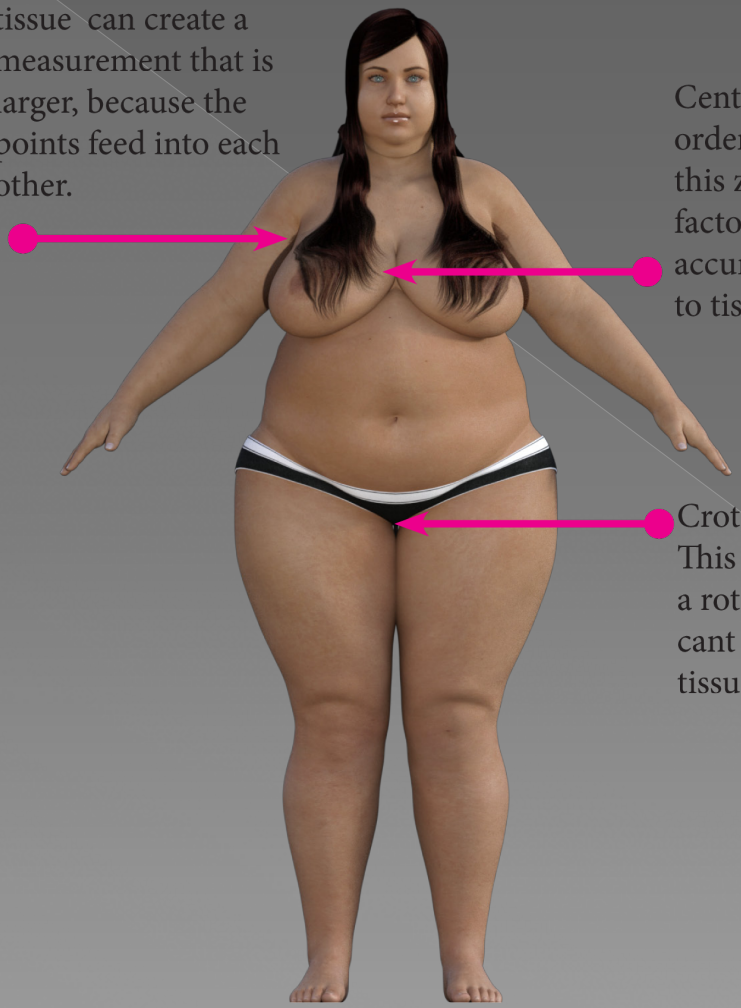
Rise measure. If the lower gut hangs over the pelvic floor, you will also result in a inaccurate body scan. CP marked inaccurately will result in poor torso mark.

Thigh area may scan showing a shorter inseam, and much longer rise.

Image Credit: Universal Standards

Fit Consideration in 3D

Arm tissue and breast tissue can create a measurement that is larger, because the points feed into each other.



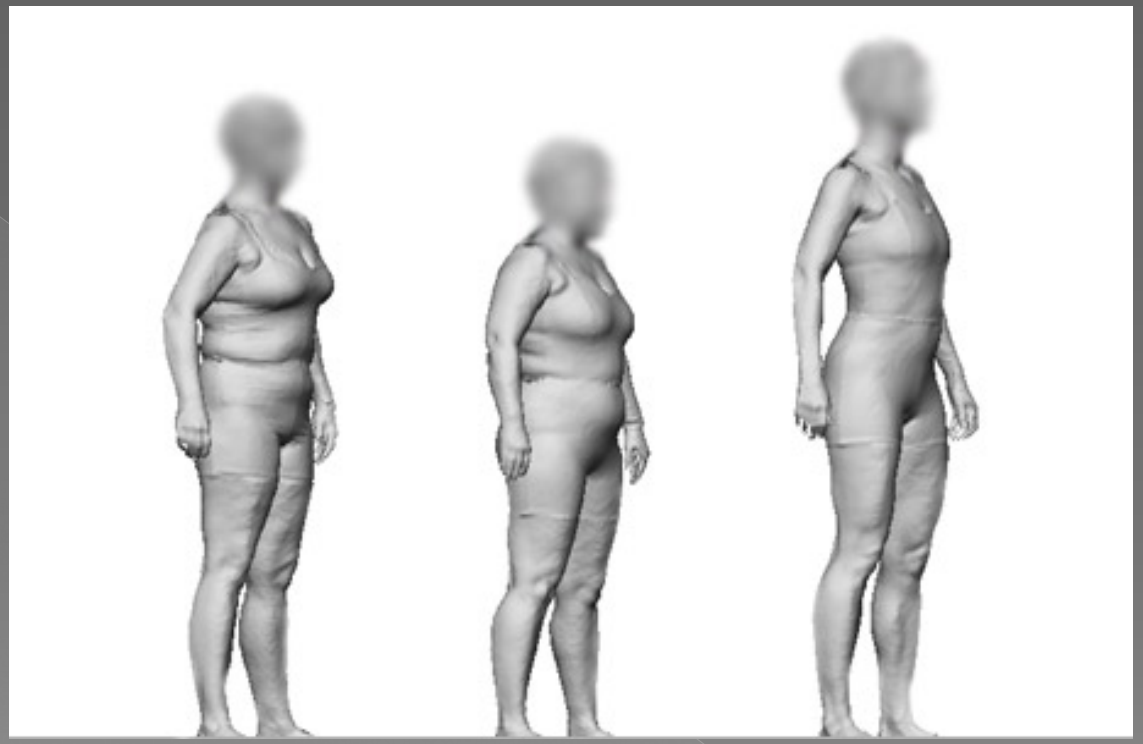
Center front Chest Gap. In order to create a bra strength this zone is also a measure factor. Body scanners cant accurately gauge the zone due to tissue overlap.

Crotch Point and inner thigh. This zone has chaffing and also a rotational shape the scanners cant pick up due to overlap of tissue.

Not all Sizes are equal

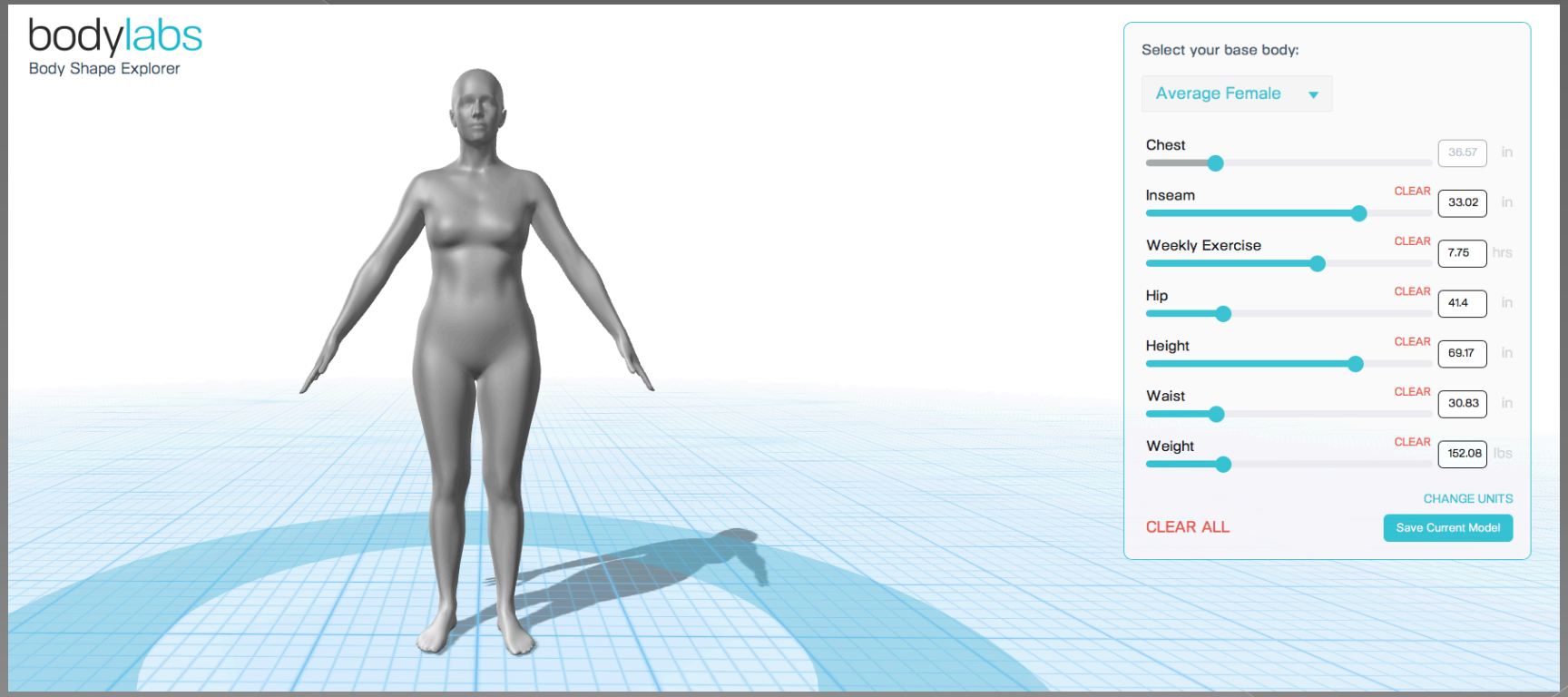
The women all wear a size 10. Due to genetics and height we see shifts and shapes are different.

Fit terms such as petite, Tall, curvy, straight, and etc. help define shape.



Using the virtual size tool in E-COMM

Body Shape Explorer



Companies like TC2, Body Block, Tuka Tech, Browzewear, and etc, provide E-commerce solutions for VR/AR fitting.

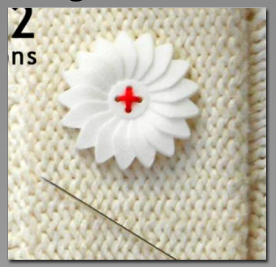
3D PRINT YOUR TRIMS

Perfect for brand logos, typical metal molds are $5,000, then production cost. This can save $$$$ on low MOQ!

Gotham Smith

North Star

Jinga Buttons

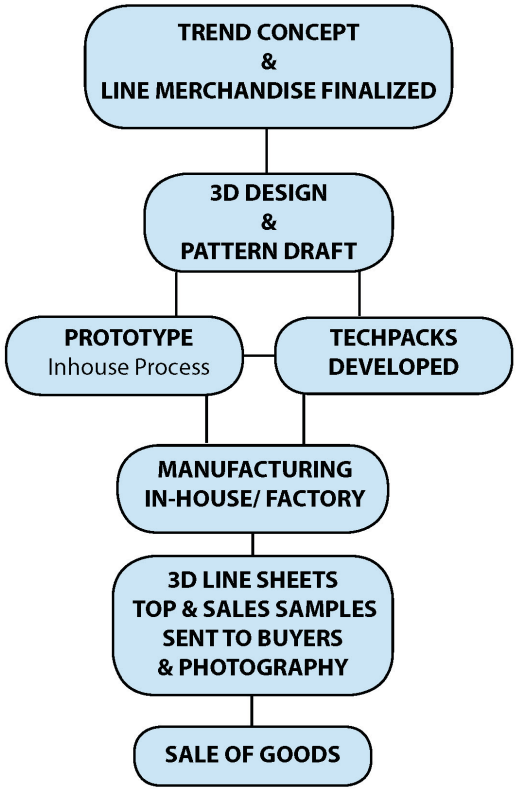


Thia's Orbit

Workflow for Company Size

SMALL COMPANY
&
MICRO MANUFACTURING

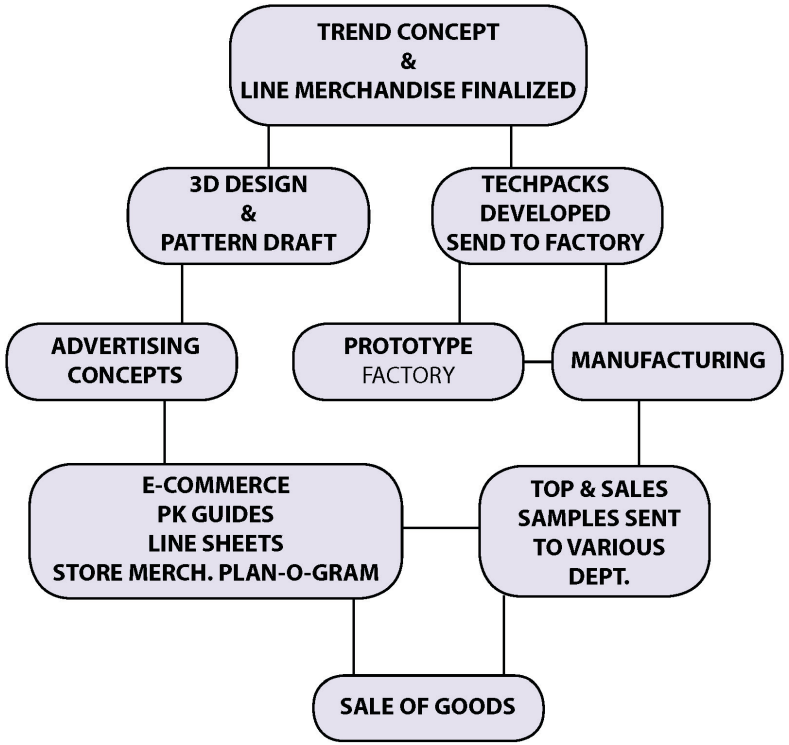
1-4 Person Team



Time is more efficient in pattern drafting, techpack development, and prototype if Avatar matches fit model measurements. Less photographic based processes.

MIDSIZE COMPANIES
&
LARGE CORPORATIONS

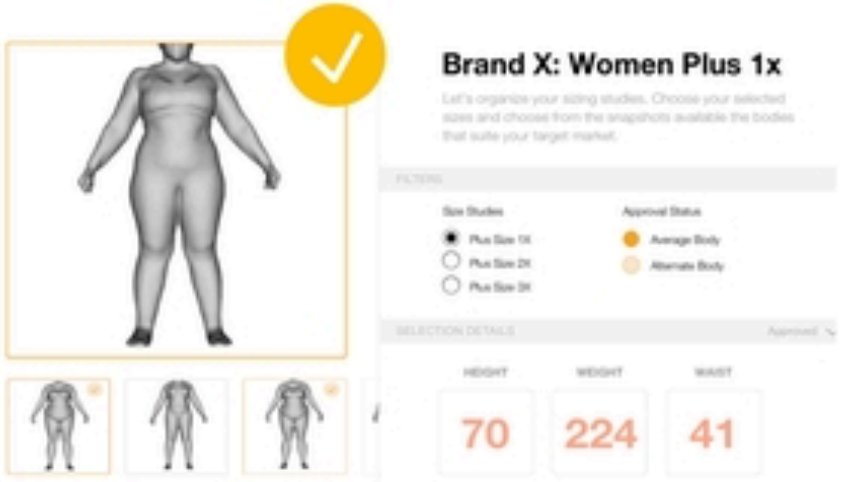
MULTIPLE DEPARTMENTS



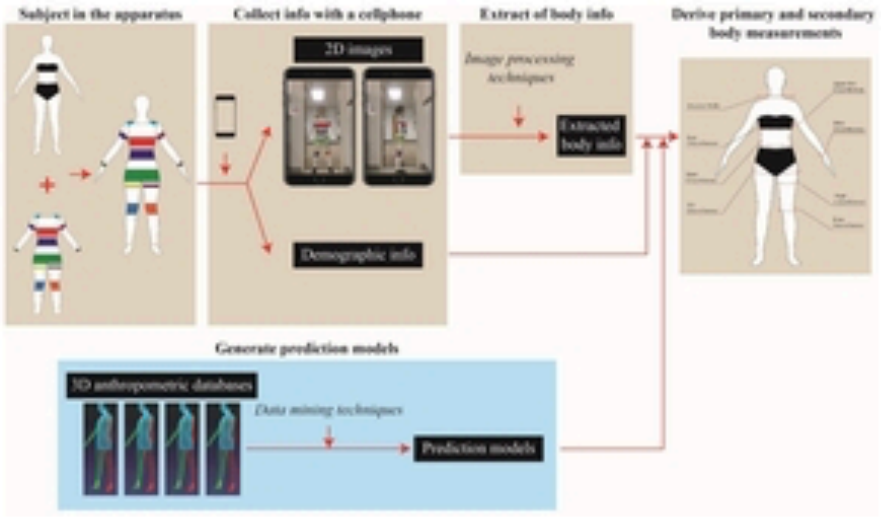
Time is more efficient in pattern drafting, techpack development, and prototype if Avatar matches fit model measurements. Less photographic based processes that effect the merchandising division.

Mobile Scanners for Brand Apps.

FIT3D

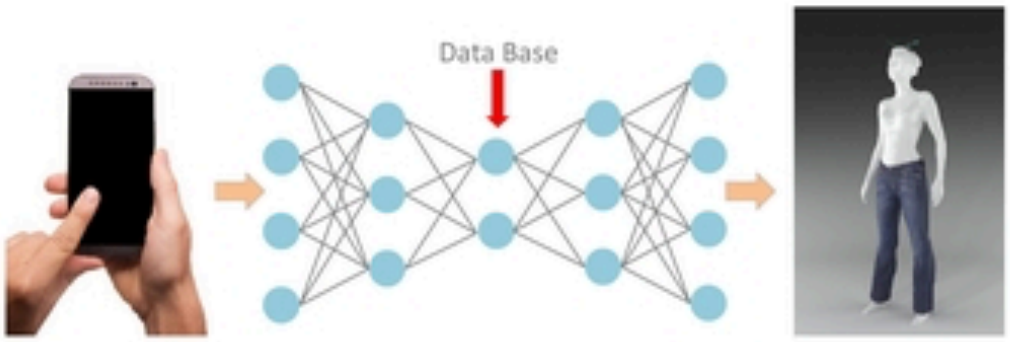


NC STATE UNIVERSITY



UCL

Bodymetrics



3D LOOK

Companies selling 3D scanners

Points to Remember

- Knowing what works and why will help inform your own teams and your consumers.
- Communicate part of the construction and form of body to the consumer. Inviting them to learn and understand limits.
- Use other methods to begin bringing your team into the future.

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