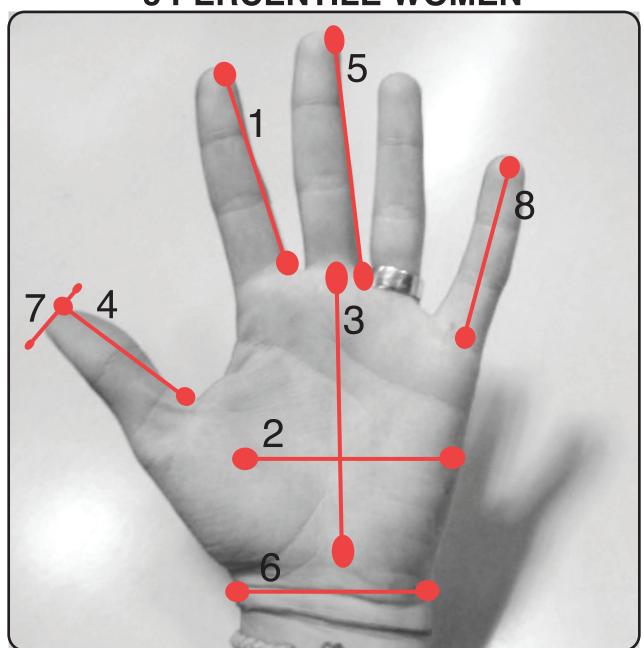
5 PERCENTILE WOMEN



HUMAN SCALE VS. THE HUMAN HAND

MEASUREMENTS	HUMAN SCALE	MY HAND
1- INDEX FINGER LG	2.4"	3.0"
2- HANDWIDTH	2.8"	3.25"
<mark>3-</mark> PALM LG	3.8"	3.5"
4- THUMB TIP TO CROTCH	1.8"	2.5"
5- MIDDLE FINGER LG	2.8"	3.0"
6- WRIST WIDTH	2.1"	2.5 "
7- HAND LENGTH	6.5"	6.75"
8- LITTLE FINGER	1.9"	2.25"

ANALYZE





PROVING GOOD DESIGN

The human scale "Hands & Feet" show that:

- Using a Pencil Grip shrinks the length of your hand to 63% of what it was originally. The Blackberry phone also is compacted in size to fit the size of the hand when it is in this position.
- The keyboard push buttons are pushed at a force from 2-5 inches away. The design of the keys on both the computer & the Blackberry have a bounce back that makes the motion of typing extremely fluid.
- Using a Lateral Grip shrinks the length of your hand to 52% of what it was originally. This position is common with one hand use. The Blackberry is designed to make the keyboard keys all within reach of the thumb in the lateral position.

ANTHROPOMETRIC & IMMERSIVE PRODUCT ANALYSIS AMANDA MCCOMBS_ PD340_ ASSN #2

ANALYZE





EXPOSING BAD DESIGN

The human scale "Hands & Feet" show that:

The average length from thumb tip to crotch at 1.8". Even with my hands being in the 5 percentile, my thumb is still longer than standard. It creates difficulty when texting, as I have to angle my thumbs at an awkward angle that becomes uncomfortable after extended use.

The average thumb width. My thumb fits the average measurement, but the Blackberry has poor design with the small buttons, making it difficult to text without focus and concentration. If I had poor control of my hands, a Blackberry would be nearly impossible to use.

Using a Pencil Grip shrinks the length of your hand to 63% of what it was originally. When typing on the keyboard, the angle at which we type puts our hand into the pencil grip. This position limits our ability to use common functions such as the "delete" or the "shift" key, without interrupting the typing process.

IMMERSIVE ANALYSIS

7 UNIVERSAL DESIGN PRINCIPLES	RATE 1-5 PHONE	RATE 1-5 MAC
Equitable Use	2	5
Flexibility in Use	2	4
Simple & Intuitive Use	3	3
Perceptible Information	Δ	3
Tolerance for Error	2	5
Low Physical Effort	3	4
Size and Space for Approach and Use	3	4

NOTES:

During the immersive testing, I was completely unable to use my Blackberry. That shows that this product can limit users. The immersive test shows strong flexibility in use with the keyboard, yet the phone is again impossible to use with the gloves.

The design language remains the same regardless of our physical ability to use the product.

The colors that the Blackberry's buttons provide an instinctive knowledge about their functions.

The keyboard design is simple & clear, minimizing error.

With the spaced out keys and raised surface, the ergonomics of the keyboard work better than the phone's typing surface.

The keyboard is more successful at accommodating variations in hand and grip size.



