

## Virtual avatars in E-commerce!?

Retail stores are struggling to keep up with online stores and the Omni-channel concept, of having multiple channels for one business, is the new reality...

What comes next? Imagine being able to try on clothes online! Or why not combine them to an outfit?

E-commerce is a rapidly growing phenomenon that constantly attracts new target audiences and finds new fields of application. The market for apparel in E-commerce today is growing steady and only in Sweden, the total revenue has reached over 50 billion SEK. Some products are popular in the E-commerce and others are considered hard to sell over the web. Even the products that are considered a hard sell over the web are getting more popular, and the E-commerce web sites are evolving to increase customer satisfaction.

The E-commerce market for clothes and accessories is already major, yet there are a lot of potential customers who won't take part because of reasons like: you don't know how the clothes will fit, or how they will translate into a bigger format, or how they will match other clothes, or your skin tone. These reasons show there is potential for improvement in the E-commerce. With the use of virtual avatars, it's possible to close the gap between E-commerce and conventional shopping.

The avatar concept was developed as a result of the original vision, studies of the market, and the feedback from various test subjects. The concept is an overall solution for testing apparel online, which brings the Omni channel vision of E-commerce closer to reality. By integrating techniques as Character modeling and garment making into the E-commerce, the avatar concept will be realized. There are endless possibilities to further this concept, by changing its flexible structure or enriching it with other techniques. This concept used Autodesk's [charactergenerator](#) to model the avatars, which is only one of many available character generators. Further on, the concept was tested by the [SUS-scale](#) (link) and passed the threshold value with good margin.

A fact that exceeded the expectations, was how well established E-commerce seems to be, and so in different target audiences. In the interest survey in this thesis, an overwhelming majority had at some point shopped online. When looking at age groups and online shopping patterns, the result suggests that target audiences in E-commerce follows the pattern for physical stores. This was most apparent for the age groups 18-29 & 30-45.

An interesting topic when researching the perception of virtual avatars, is the similarity to the user. Basically, people want the avatar to look like a better version of themselves. The measurements need to be accurate for the fit profile to work in a satisfying manner but when it comes to skin tone and facial features the users tends to prefer "good looks" to precise similarity. Therefore, this thesis presents a character generator where the user can edit the visuals of all attributes that isn't bound to a specific measurement.

Hopefully, we'll soon be able to try our favourite clothes online as well as in store. Perhaps one of the big brands will take a leap of faith? Or maybe this will manifest itself in a whole other fashion!