



INOM

STOCKHOLM, SVERIGE 2017

Graphical elements that can invoke trust in online web shops

GUSTAV BERGMAN

FELIX NORÉN

Graphical elements that can invoke trust in online web shops

Gustav Bergman
KTH Royal Institute of Technology
gubergma@kth.se

Felix Norén
KTH Royal Institute of Technology
felixnor@kth.se

ABSTRACT

Online stores are becoming a natural part of our daily life, and more and more services and products are purchased through an online store. As e-commerce is growing, so is computer fraud, and trustworthiness is now an important topic in e-commerce. Exploring what components in an e-commerce experience, from a customer's point of view, that affect trust is therefore important. The web page can be equated to the look of a physical store, but a company needs to have other trust indicating elements in an online store since a consumer cannot touch the product or have an eye to eye dialog with the salesman. So, the question is *How do you display things in an online store to appeal trust in the first impression of the shop and what other graphical factors matters when you want to appeal trust?* Our definition of trust is taken from McKnight and Chervany and is defined as “*the extent to which one party is willing to depend on the other party in a given situation with a feeling of relative security, even though negative consequences are possible*”. We also build our study on how different colors get people to react in a certain way and the importance of the first impression. To answer the question about how to appeal trust in an online shop, we sent out a form to students at KTH Royal Institute of Technology containing 31 images of online stores and asked them to answer the question “*Does this web shop seem trustworthy to you?*” on each of these images. When creating the various images with different designs we wanted to include designs that we thought were going to be perceived as trustworthy, and designs that we thought not. We could then change some aspects in those designs to see what works or not. The result shows that online stores that are deemed professional is the most trustworthy ones and we can conclude that intense colors are something to avoid, while having a certificate and providing contact information is something to recommend.

Keywords

Graphical interface, first impression, online shops, trust

1. INTRODUCTION

Online stores are becoming a natural part of our daily life, and more and more services and products that are consumed today are purchased through an online store [7]. Many electronic companies on the Swedish market has complemented their physical stores with online stores and there are companies who have online shopping as the only service to offer, for example eBay and Amazon who turn lots of money [25,26]. According to DIBS's

report about online shopping, the Swedish sales was over a hundred billion SEK in the year 2016 [5].

As e-commerce is growing, so is computer fraud. The number of reported computer fraud attempts increased with 57 percent between 2014 and 2015 according to Brottsförebyggande Rådet [3]. The amount of payment options is also increasing, which can further increase the amount of insecurity a consumer feels when purchasing online [4].

1.1 First impression and trust of an online store

First impressions have shown to be very important in a wide range of different contexts, including art, teaching and websites [1,14,23]. Several studies show that the time it takes to make a first impression can be anything between 50 milliseconds [13] to three seconds [11] depending on what kind of first impression the consumer is exposed to.

The aesthetic response, the spontaneous feeling we get after seeing a website, is affecting our trust a lot. If a consumer perceives a website beautiful, he/she also tend to perceive it as useful [18]. A powerful way to trigger the aesthetic response is through colors. If the colors appeal to a user's taste, it affects the user's loyalty in a positive way to that web page [4,10].

To make a good first impression, the elements and the functionality on a web page shall work as a coherent unit. The design shall show the functionality from its best side. Thus, the design can never be an obstacle, it shall work as a channel between the user and the information. It shall be a coherent style all over the web page so the design is held together [2].

Therefore, it is also important that the designers learn about their target user. Technically, the web page can be visited by anyone so designers need to talk to their target users about what the goal with the visit is, and then build a website that triggers the web shop's target user group to do what they want them to do on the web page [9].

When the resale of products goes from physical stores to online stores, a few challenges occur. Consumers cannot touch the physical product, test it or have a dialog eye to eye with the retailer. This means that trust cannot be made in the same way as in a physical store, instead the retailer has to replace these trust-making factors [22]. The look of a building, like a store, combined with the contact with an employee of the company affects the trustworthiness of the company. A web page affects consumers in

the same way. To attract consumers the company wants to attract, it is important to use element and functions in the graphical interface that invokes trust [24]. Like the look of a building, the web site is where a salesman represents its company. The start page therefore needs to catch the consumers interest and invoke positive feelings, like a physical salesman would to in a physical store [8].

2. LITERATURE REVIEW

2.1 Defining trust

Our definition of trust comes from McKnight and Chervany. They have defined it as “the extent to which one party is willing to depend on the other party in a given situation with a feeling of relative security, even though negative consequences are possible” [15]. This definition means that trust cannot exist if a risk does not. Researchers agree that consumers can have a feeling of uncertainty and that there is a risk with online shopping [19].

When customers are going to make a decision in a risky situation, they are less likely to require concrete evidence such as privacy policies and third-party seals. Customers have also become less likely to think about how to judge the site for a long time. Instead, they have become more prone to judge based on the first impression [15].

2.2 Trust in relations

Several studies have shown that trust is a key factor in relations [6,17,20]. Furthermore, other studies show that trust is important when building relations between a seller and a consumer [21]. M. Mahdi Roghanizad and Derrick J. Neufeld wrote that trust and mistrust between humans is happening automatically and subconsciously [19]. Whether a person is someone to trust or someone worth talking to can be decided with something as simple as a facial expression. For example, smiling is something that affects humans trust when it comes to gambling. There are also studies that show that borrowers who are physically attractive and well-groomed gives a bigger impression of trust.

2.3 Trust Online

Since we can feel trust towards another human by quickly seeing his/her face, M. Mahdi Roghanizad and Derrick J. Neufeld consider that we can get the same kind of feeling against a company by seeing their website's graphical interface [19]. Results from another study by Hsin Hsin Chang and Su Wen Chen, confirm that the graphical interface is crucial for an online shop's trust [7]. Also, the use of appealing colors can affect the trust [4,19]. For example, using green tends to make people calmer [12].

Today, there are different kinds of certificates made and used to give the visitors of the website a stronger sense of trust, for example *Trygg e-handel*¹. The certificates are something to appeal

trust to online shoppers with more experience, because they have familiarized themselves to what the certificate means while those with less experience have not. In 2012 a little over 40 % claimed that they recognized the *Trygg e-handel* symbol. Another way to invoke trust is to show customer reviews [16]. Since a first impression happens very fast, our question is: *How do you display these things in a way to appeal trust in the first impression of the online shop and what other graphical factors matter when you want to appeal trust?*

3. METHOD

3.1 Creating the images

When creating the images, we started with a template that a company uses for demonstrations and then manipulated it with the information we acquired in the literature review in mind. We used different colors, different patterns in the background, certificates/no certificates, contact information/no contact information and combined these in different ways to see which factors that were important to notice at the very beginning to get a feeling of trust towards the shop. To know what is defined as appealing colors we used the information found in the studies by Cyr et.al and Roghanizad and Neufeld [4,19]. If the image contained a certificate, it was displayed in the header of the page and if the image contained a link to a contact page, it was placed in the menu. When creating the images of the web shops we missed that a watermark was used in one of the photos, and did not remove it.

3.2 Creating the study

An online web page was then created in order to conduct the experiment. At the start, the web page showed some brief instructions before the experiment started. When the experiment started, the website showed an image of a fictional web shop for seven seconds before removing it. The website then prompted the question “Does this web shop seem trustworthy to you?” together with a button for “yes” and a button for “no”. The answer and the time it took to decide for every image was stored. This procedure was repeated for a total of 31 different images of web shops. The order in which the images were presented were randomised for each experiment. The difference between the images consisted of a change in the graphical interface of the web shop. This change could be the color of the background or completely removing a graphical element on the website.

Several studies show that the time it takes to make a first impression varies depending on what kind of first impression the users are exposed to [11,13]. We did a pilot test on ourselves to decide how long the participants should be exposed to each image. The pilot study showed that seven seconds was enough to notice all the smaller details on the images we wanted the participants to see (such as the contact page link).

¹ <http://www.tryggehandel.se/>

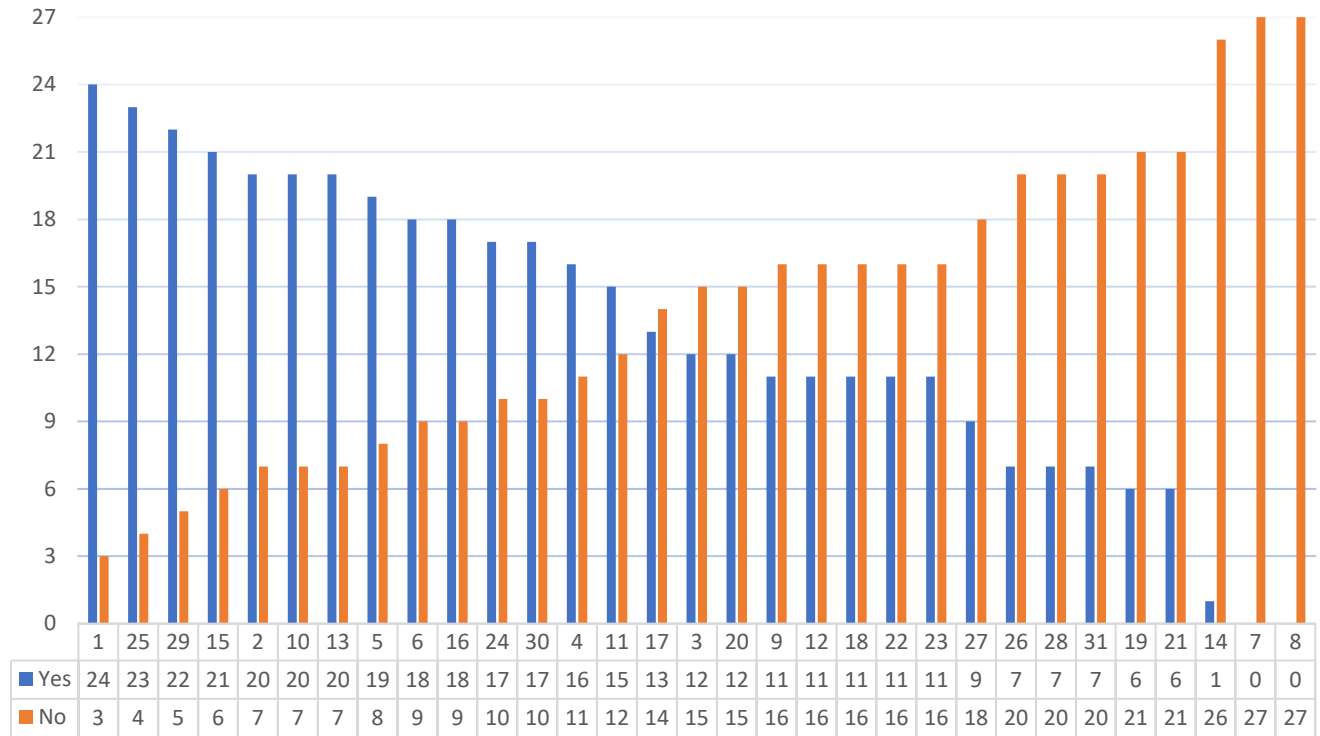


Figure 1. The amount of “yes” and “no” answers to each image

3.3 The study

An invitation was then sent to the students that were assigned to participate in the study. A total of 27 students joined the study. There was 17 men and 10 women aged between 19 and 31. The average age of our participants was 23 years old. The subjects were asked to participate in the online experiment by clicking a link that they were sent by us. The experiment took approximately 10 minutes to complete. After completing the experiment, the subjects answered a quick survey with questions about their age, gender and if they had any thoughts about the web shops and the experiment in general. Data could then be collected by analyzing the answers that the students made in the experiment and the follow-up survey. In our study, we tried to identify which parts of the graphical interface of a web shop that influence the consumer's trust. These are our dependent variables.

The students experience or inexperience regarding online shopping could impact their judgement on what they feel like a trustworthy web shop is. This is an independent variable in our study.

4. RESULTS

4.1 General results

The answer “no” occurred more than “yes” if we sum all participants’

answers from all the 31 images. The participants together answered “yes” 405 times and “no” 432 times. As we can see in figure 1, image no. 1 is the one that our participants find most trustworthy with 24 “yes” and 3 “no”. We also see that image 7, 8 and 14 are very untrustworthy since a very clear majority answered “no”. People tend to agree with each other a lot, since there is a clear winner between “yes” and “no” in many images.

In figure 2 we can see the response time for each image. The really far outliers have been removed. We see that the average also represents what was going on over all. It is not a few persons who drag up or down the average in any of the groups. The fastest image to get a perception about was image 17. This image was also the image with almost equal “yes” answers as “no” answers (13 “yes” and 14 “no”). Image 23 had the slowest average time, but here it was also tight between the “yes” and “no” answers (11 “yes” and 16 “no”). Men have longer average time to answer every image (1902 ms) than women (1827 ms). As seen in figure 3, the average mirrors the real results as well, no person has moved up or down the average in a noticeable way.

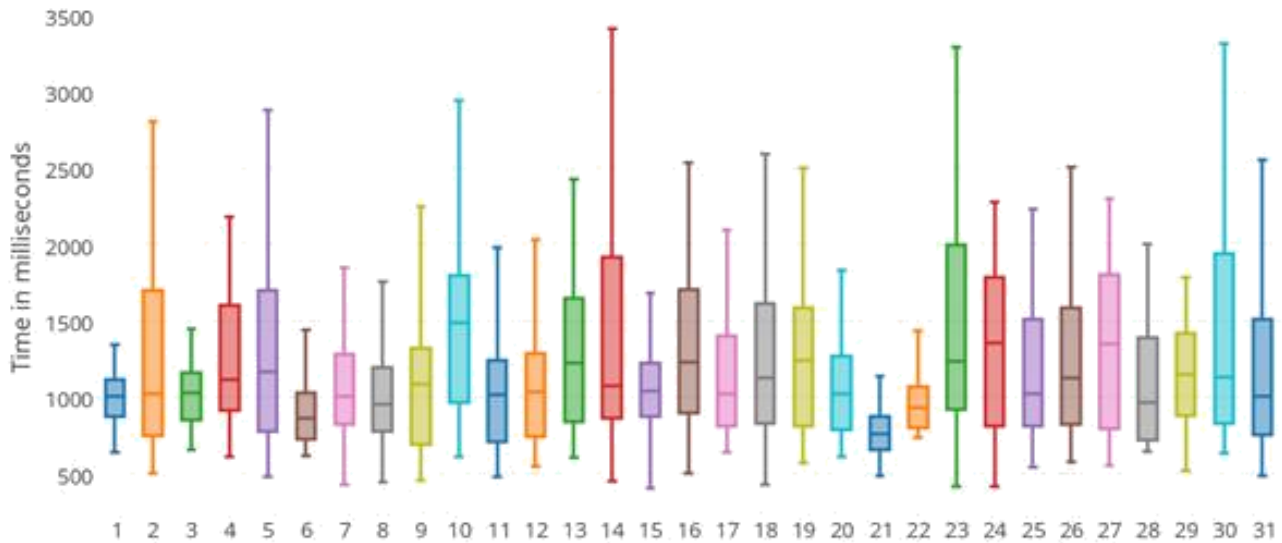


Figure 2. Box plots of the answer times to every image



Figure 3. Answer times for women and men

As seen in figure 4, participants aged between 19-21 had a slightly faster average answer time (1721 ms) than participants aged between 22-31 (2019 ms). The younger group consisted of 13 participants, and the older of 14 participants. The younger group had 17 “yes” on average, while the older group only had 13 “yes”.



Figure 4. Answer times for participants aged between 19-21 and participants aged between 22-31

4.2 Comparing different images

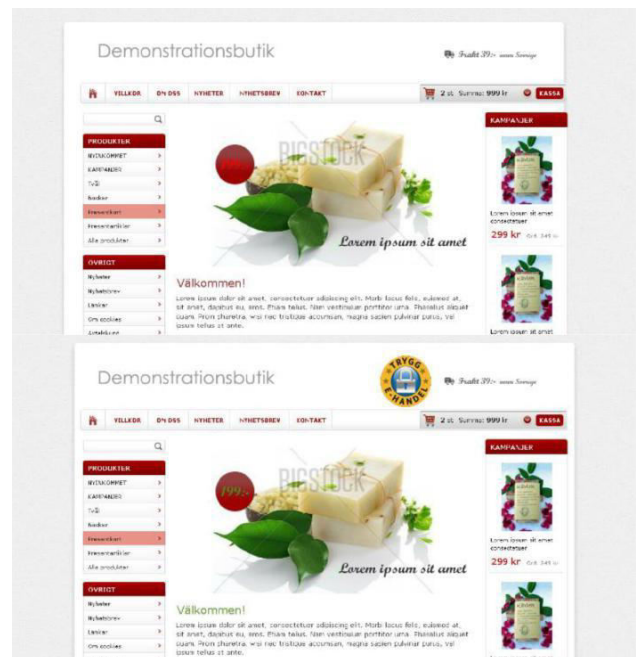


Figure 5. Image 9 (top) and 13 (bottom)

The graphical difference between image 9 and 13 was that image 13 had a certificate (trygg e-handel) logo and image 9 did not, as we can see in figure 5. Apart from that, they are completely alike, but image 13 seems to be more trustworthy than image 9. 20 people answered “yes” and 7 people “no” on image 13 while 11 people answered “yes” and 16 answered “no” on image 9.

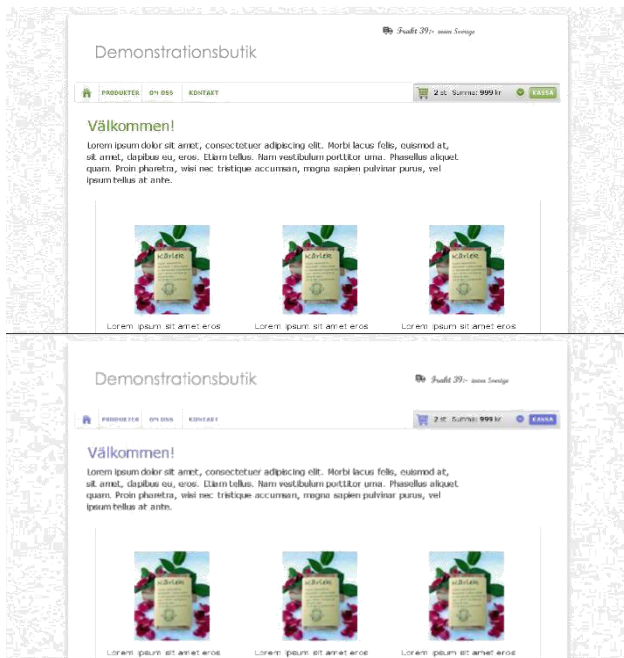


Figure 6. Image 20 (top) and 21 (bottom)

The images 20 and 21's difference was the text color as we can see in figure 6. Image 20 had green and image 21 had some kind of blue. This difference was important, because image 20 had twice the amount of “yes” answers (12) as image 21 (6).

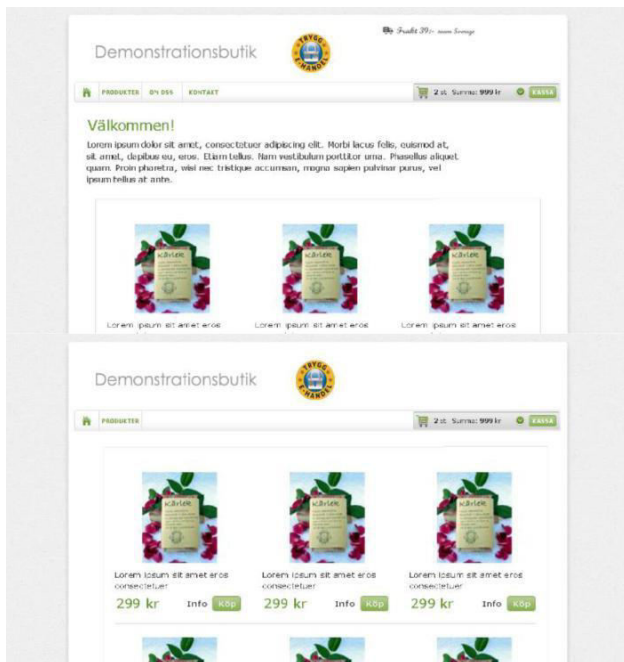


Figure 7. Image 23 (top) and 24 (bottom)

If we take a look at figure 7 containing image 23 and 24 (both with green text and buttons and a certificate but image 24 with a

link to a contact page) we see that image 24 is more trustworthy than image 23 according to our participants. 17 answered “yes” on image 24 while 11 did so on image 23.

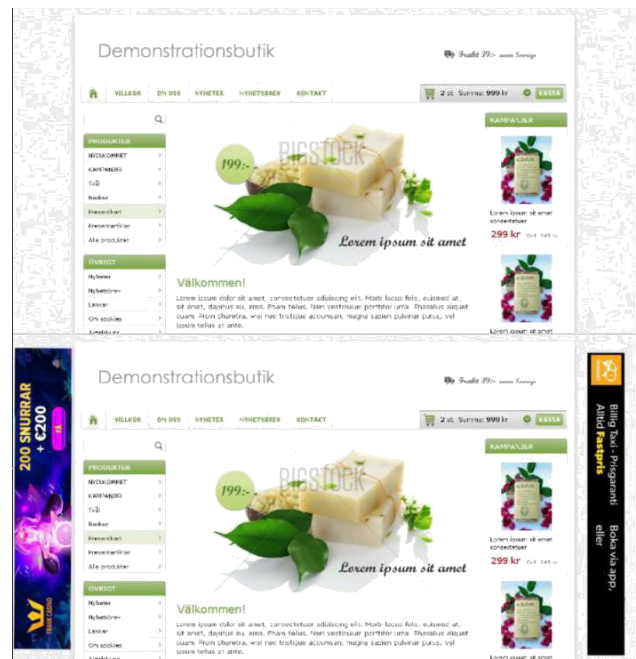


Figure 8. Image 1 (top) and 31 (bottom)

The difference between the two images in figure 8 is that image 31 has commercial banners on the sides. Image number 1 (without commercial banners) is perceived as more trustworthy than image number 31 (with commercial banners). Image number 1 had 24 “yes” and 3 “no”, while image number 31 had 7 “yes” and 20 “no”.

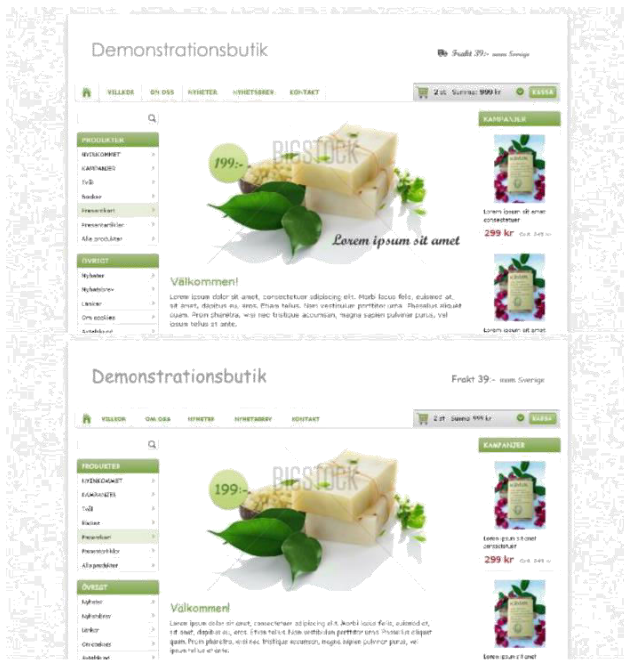


Figure 9. Image 1 (top) and 3 (bottom)

In figure 9 image 1 uses the font “Verdana” and have a little car beside the shipping information while image 3 uses the font “Comic Sans” and doesn’t have this little car beside the shipping information. Image 1 got 24 “yes” answers while image 3 only got 12 “yes”.

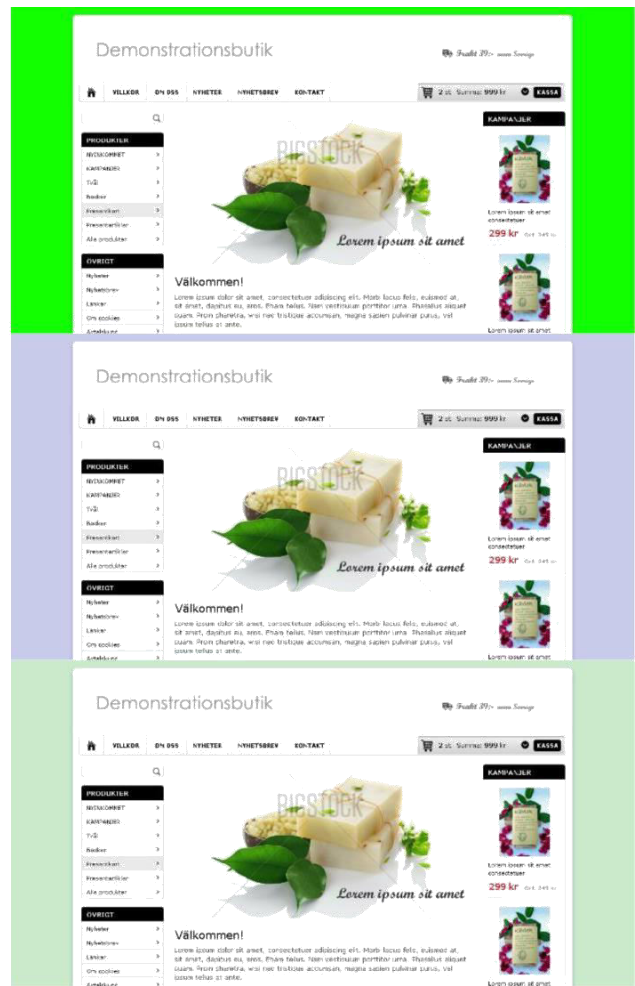


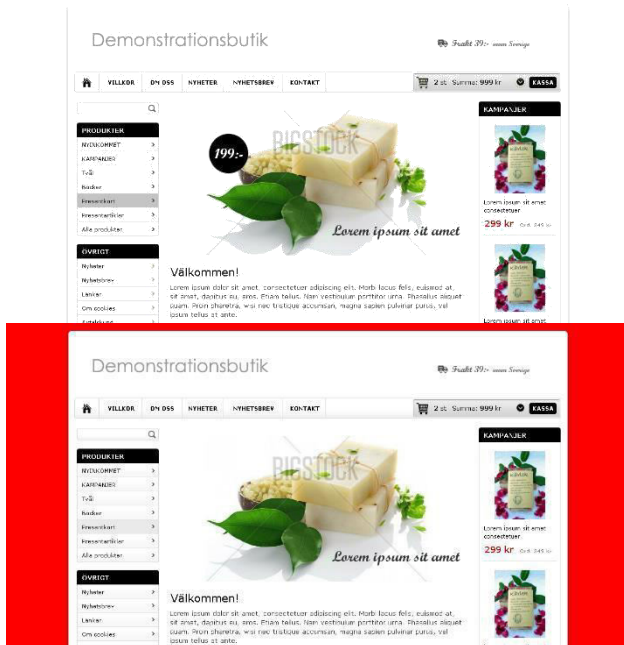
Figure 10. From the top: Images 2, 27, 28, 29 and 30

The only difference between the images in figure 10 is the color of the background. All the images use a black layout color for the other elements. As seen in figure 1, with 22 “yes” answers image 29 was the most trustworthy one out of all the images in figure 10. Image 2 was very close, with 20 “yes” answers. Out of all the images in figure 10, image 27 and 28 was the least trustworthy ones, with 7 and 9 “yes” answers respectively.

4.3 Qualitative data

Most of the participants shared the thought that high saturated colors were unappealing and affected the trustworthiness in a negative manner. A color that was mentioned a lot was red, which was deemed particularly negative. Many participants also remarked that a font that seemed unprofessional affected the trustworthiness in a negative way. Another thing that was mentioned often was that the web shops looked like blogs, which was also deemed negative.

Participant M10 declared that “when the background color was red I wanted to answer no faster”. Participant M07 was on the same line and said that with high saturated colors, the layout



became less attractive and low saturated colors made the layout more attractive. And even if not everybody mentioned it, the amount of no answers on image 7, 8 and 14 (the images with red background) speaks for itself. We can also see that images 26, 27 and 28 with high saturated background color (red and green) received many “no” answers.

The participants also seem to like the certificate. The certificate can compensate a lot to a bad design when it comes to trust.

4.4 Comparison between qualitative and quantitative data

Participants with a large quantity of “yes” answers often commented that they found the images with a more serious looking design to be more trustworthy. They also commented a lot on the distrust of high saturated colors. It was also noted that the web shop lost its trustworthiness when there was no contact information or an about-us page available. Many of these participants also said that a visible certificate in the image indicated trustworthiness.

Participants with a large quantity of “no” answers often said that they did not like the general design of the images, and therefore they seemed untrustworthy. This group also disliked high saturated colors. They also commented that a lot of the images was very similar to each other.

5. DISCUSSION

5.1 General discussion

Many participants declared that they require a “professional design” to trust a web shop, but it is very subjective what everyone perceive as professional design. From our perspective, we can see a difference in how much time we took to make one image look nice. The more time, the more “yes” it got. Image 7 and 8 for example, took approximately three minutes to complete while image 1 took considerably more time to finish. So, there is a certain connection between the expression “professional” and the amount of time we laid down on the image in question. If we look at a large web shop that exists, this time Amazon, they provide the consumer with a lot of links for information and one of the first thing the consumer notice is a button where it says, “Sign in securely”. Everyone seems to agree on the colors. High saturated colors are equal to unprofessional sites and with the exclusion method, low saturated colors are equal to professional sites.

If we take a look at the images, the reason why image 1 is the one with most “yes” answers are probably because that one is the one with the graphical elements that dominates over another when we compare images that is very similar. When comparing green text color to blue, green is the one with most “yes” answers. Comparing images with a link to contact page versus the images with no link to contact page, the contact page image is the one with most “yes” answers. The only weakness image 1 has is that it does not have a certificate. Otherwise it has all the graphical elements that people in our study seem to prefer.

5.2 Answer times

There does not seem to be any connection between slow or fast answering times and the participants answers. Neither the images with a clear majority of “yes” or “no” answers or the ones with an almost equal amount of “yes” and “no” has any outstanding

average answer times. This is further strengthened by the fact that the images with the fastest and slowest average answer times both had a fairly equal amount of “yes” and “no” answers.

This was unexpected, because we thought that the images with the most “no” or most “yes” answers would be a very clear choice, and therefore the participants would not spend much time thinking about their choice. Therefore, we thought that the images with the fastest average answer times would be the ones that was either clearly a “no” or a clear “yes”. A possible reason for this could be that the seven seconds the participants got to see the images was enough to be able to decide, and when the buttons to answer appear the participants have already made up their mind regarding the answer for that specific image. We cannot say so for sure, but since one participant said, *“when the background was red I wanted to press no faster”* and others talked about that they didn’t like the layout of the image and the layout was basically the same on every image, a logic conclusion can be that when they see the same layout in every image so have they already decided just based on the layout.

5.3 Certificate

A certificate seems to be important to use. Some participants said that if there was a visible certificate they became more forgiving towards the other design elements that would otherwise make it so that they would not trust that specific web shop but if the design itself is deemed serious and therefore trustworthy, a certificate does not seem to be mandatory. However, it seems like the participants didn’t care so much about if the certificate was real or what the certificate really means. A possible explanation is that our participants are familiar with what our specific certificate means, we cannot say that for sure, and since it is only 40 % of the Swedish population who are familiarized with the logo, it is hard to know. We can speculate in that our participants are all students on a technical university and may because of that have a higher average than the rest of the population when it comes to recognize the logo. However, even if our speculations in this case would be correct, were the participants skeptical about if the certificate was real or not? Had the result of the survey been different if there were actual and clickable web pages with links to a certain verification number on certain of them while others just had a pasted image of the certificate logo?

5.4 Comparing colors

As stated earlier, use of high saturated colors seems to be equal to leaving an unprofessional impression, and therefore an untrustworthy web shop. It does not seem to matter if the high saturated color is used in the background or in headings.

When comparing images that uses two different softer colors, as in figure 3, we got an unexpected result in that the image that uses green had double the amount of “yes” answers than the image that uses a blue color. The result was unexpected because we did not think there would be such a big difference between the two colors. A possible explanation could be that green has a more calming effect on people’s minds. Green also matches the color of the picture used, making the design more balanced. There is also the possibility that the participants had seen other green designs that they had deemed trustworthy earlier in the study, and was affected by that when answering “yes” or “no” on the images in figure 3.

When looking at figure 10, we can see that the image that uses a blue color for the background is more trustworthy than the images using green and white for the background. This is unexpected because when comparing the images that uses blue and green for the text and other elements on the actual site instead of the background, green was perceived as more trustworthy.

5.5 Professional fonts

Many of our participants remarked that the use of a “professional font” was important for them to trust an online shop. There were also some participants that directly mentioned that they did not like “Comic sans” at all. As seen in figure 1, this is also reflected in the quantitative results, where the image with “Comic sans” had a lot less “yes” answers than the image without. By this we can assume that “Comic Sans” is not seen as a professional font. However, we cannot say if “Verdana” is a professional font, we can just say that it is perceived as less unprofessional than “Comic Sans”.

5.6 Age

Dividing the participants into two different age-groups, we can see a difference in both the amount of “yes” and “no” answers as well as the average answer time. The group aged between 19-21 has more “yes” answers and a faster average answer time. This indicates that the older group is a bit more skeptical about trusting web shops compared to the younger group.

5.7 Method Discussion

The chosen method was the method that we thought was best for us. There are some things that we could have done differently. We could have done it with one person at a time in a room where we both were present and we could have done clickable websites and have eye trackers to see what the participants looked on when they first see the site.

If we should have done some details differently, we would definitely have removed the watermark on the big image. The watermark was not intended to be there, and we did not think about that it might affect the study. It was however noticed and commented on by several participants. On the other hand, we did see a side we did not expect. Now we know that the watermark on an image is something a user may look at when he/she decide whether to trust the web shop or not. The best thing to do was probably to have watermark at some images and then have the same image without the watermark.

We maybe should have tried different layouts. Now, all the images were built based on the same layout and if some people did not like that, they tended to be more negative to the content in every image. Another part is that we should ask for comments on every image instead of just one comment after the whole survey was done, then we could have more data and analyze the different images from the comments from that image. Something like “those who answered “no” on image 1 mentioned that...” could have been written in the results. On the other hand, many participants were grateful that our study wasn’t so grueling. If the study would have been much longer, the answers might not have been as correct and serious as they were now.

Since our study was centered around images with the same layout, it is possible that the participants became accustomed to a standard, and therefore reacted negatively on outstanding

elements.

5.7.1 Design choices

When creating the various images with different designs we wanted to include designs that we thought were going to be perceived as trustworthy, and designs that we thought not. We could then change some aspects in those designs in order to see what works or not. Some of these images were rather extreme cases which we believe does not exist in the real world, see image 7, 8 and 14. These images were the ones that we thought that no one would trust. Image 7, 8 and 14 also gives an indicator that no one just clicked through the answers without caring, because they had either zero or only one “yes” answer. The one “yes” answer was on image 14, which is the same as image 7 but with an added commercial banner. Because the images of web shops with commercial banners was deemed untrustworthy we strongly suspect that this was a miss- click.

When deciding the design aspects of the other images we used aspects that are used in the real world, such as a patterned background¹. Using the method of changing small aspects from image to image, we ended up with 31 different images, which we deemed was enough to get an interesting result.

5.7.2 Data significance

When analyzing the data, we did not use any statistical tests to see if the result has statistical significance. This makes our results unreliable.

5.8 Further research

For future research, it could be interesting to further investigate different layouts, to be able to see if the layout itself is important for invoking trust in a web shop. Future researchers could also research mobile designs to see if there is a difference in what elements that are perceived as trustworthy in a mobile environment rather than desktop.

6. SUMMARY

As e-commerce is growing, so is computer fraud. This makes trustworthiness an important topic in e-commerce. Studies have shown that the first feeling we get after seeing a website for the first time is affecting our trust a lot. There are several things that a web shop creator can display on a website that affect the trust of the user. We created an experiment to answer the question *How do you display these things in a way to appeal trust in the first impression of the online shop and what other graphical factors matters when you want to appeal trust?* In the experiment, each of the 27 participants got to see 31 different images of web shops for a brief amount of time, and then answer the question “Does this web shop seem trustworthy to you?”. The participants also got to fill in a questionnaire where they could share additional thoughts that they might have had on the images during the experiment.

The results of the study were that a web shop that the user thinks look professional is a trustworthy one. Participants that answered that they trusted websites that looked professional to them

¹ <https://moderjord.nu/>

answered “no” on images that had no contact information visible, and images that contained elements such as high saturated colors, commercial banners, and a font that many of our participants said was disreputable. Images using a certificate were often deemed more trustworthy than the ones that did not have one.

In conclusion, we can suggest that designers should focus on making the website look professional. To achieve this, they should use a font that is perceived as serious, provide contact information, have a visible certificate, and refrain from using highly saturated colors.

7. REFERENCES

- Atteberry Allison, Wyckoff James, and Loeb Susanna. 2013. Do First Impressions Matter? Improvement in Early Career Teacher Effectiveness. *NBER Working Papers*.
- Jason Beaird. 2007. The Principles of Beautiful Web Design. Retrieved April 27, 2017 from <http://www.sitepoint.com/print/principles-beautiful-web-design>
- Brottsförebyggande Rådet. 2015. Anmälda Brott 2015.
- Dianne Cyr, Milena Head, and Hector Larios. 2010. Colour appeal in website design within and across cultures: A multi-method evaluation. *International journal of human-computer studies* 68, 1: 1–21.
- DIBS. Svensk e-handel. <http://info.dibs.se/svenskehandel2016?gclid=CKXwuevzsNQCFUjIsgodnhUGOA>
- Gregory T. Gundlach and Patrick E. Murphy. 1993. Ethical and Legal Foundations of Relational Marketing Exchanges. *Journal of Marketing* 57, 4: 35. <https://doi.org/10.2307/1252217>
- Hsin Hsin Chang and Su Wen Chen. 2008. The impact of online store environment cues on purchase intention: Trust and perceived risk as a mediator. *Online information review* 32, 6: 818–841.
- Christine Huber. Tillit på webben – En rapport om arbetet med en webbaserad tjänst med målet att inge tillit hos användare. Retrieved April 27, 2017 from <http://www.diva-portal.org/smash/get/diva2:816701/FULLTEXT01.pdf>
- Marie Bäck Karlander and Anders Eriksson. DET FÖRSTA INTRYCKET GÖR ALLT -WEBBDESIGN PÅ ANVÄNDARENS VILLKOR. Retrieved April 27, 2017 from <http://bada.hb.se/bitstream/2320/12710/1/2013KANI10.pdf>
- Jinwoo Kim and Jae Yun Moon. 1998. Designing towards emotional usability in customer interfaces—trustworthiness of cyber-banking system interfaces. *Interacting with computers* 10, 1: 1–29.
- Camille Lavington and Stephanie Losee. 1998. *You’ve only got three seconds: How to make the right impression in your business and social life*. Main Street Books.
- Channa Leichtling. 2002. How color affects marketing. *Touro College Accounting and Business Society Journal* 2, 1: 22–31.
- Gitte Lindgaard, Gary Fernandes, Cathy Dudek, and J. Brown. 2006. Attention web designers: You have 50 milliseconds to make a good first impression! *Behaviour & Information Technology* 25, 2: 115–126. <https://doi.org/10.1080/01449290500330448>
- Audra Lukaitis and Bill Davey. 2009. Capturing the mature traveler: assessing web first impressions. *Issues in Informing Science and Information Technology* 6.
- D Harrison McKnight and Norman L Chervany. 1996. The meanings of trust.
- David Nedergård. 2014. Trygg E-handel. Retrieved March 9, 2017 from <http://www.diva-portal.org/smash/record.jsf?pid=diva2%3A726824&dswid=-122>
- B. NOOTEBOOM, H. BERGER, and N. G. NOORDERHAVEN. 1997. EFFECTS OF TRUST AND GOVERNANCE ON RELATIONAL RISK. *Academy of Management Journal* 40, 2: 308–338. <https://doi.org/10.2307/256885>
- Katharina Reinecke, Tom Yeh, Luke Miratrix, Rahmatri Mardiko, Yuechen Zhao, Jenny Liu, and Krzysztof Z Gajos. 2013. Predicting users’ first impressions of website aesthetics with a quantification of perceived visual complexity and colorfulness. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*, 2049–2058.
- M. Mahdi Roghanizad and Derrick J. Neufeld. 2015. Intuition, risk, and the formation of online trust. *Computers in Human Behavior* 50: 489–498. <https://doi.org/10.1016/j.chb.2015.04.025>
- Stephen S. Tax, Stephen W. Brown, and Murali Chandrashekar. 1998. Customer Evaluations of Service Complaint Experiences: Implications for Relationship Marketing. *Journal of Marketing* 62, 2: 60. <https://doi.org/10.2307/1252161>
- Glen L Urban, Fareena Sultan, and William J Qualls. 2000. Placing trust at the center of your Internet strategy. *MIT Sloan Management Review* 42, 1: 39.
- Daniel Vernberg. 2017. Webdesign för att skapa tillit. Retrieved April 27, 2017 from <http://www.diva-portal.org/smash/get/diva2:1085553/FULLTEXT01.pdf>
- Lois Weinthal. 2014. First Impressions. *Interiors* 5, 3: 277–295.
- Yun Yang, Yong Hu, and Juhua Chen. 2005. A web trust-inducing model for e-commerce and empirical research. In *Proceedings of the 7th international conference on Electronic commerce - ICEC '05*, 188. <https://doi.org/10.1145/1089551.1089589>

25. Financial Statements for eBay Inc - Google Finance.
Retrieved May 8, 2017 from
<https://www.google.com/finance?q=NASDAQ%3AEBA%3AY&fstype=ii&ei=H9T4UPiZFMrqkAWb5QE>

26. Financial Statements for Amazon.com, Inc - Google Finance.
Retrieved May 8, 2017 from
https://www.google.com/finance?q=NASDAQ%3AAMZN&ei=7DUQWZDLAcHDswGB3K_ICg

