

GRA 19703

Master Thesis

Thesis Master of Science

The Effect of Hostile Bidding on Consumers

Navn: Martin Skraastad, Tim Viskjer

Start: 15.01.2020 09.00

Finish: 01.09.2020 12.00

"THE EFFECT OF HOSTILE BIDDING ON CONSUMERS"



Master Thesis 2020

Study Programme: Strategic Marketing Management

Supervisor: Auke Hunneman



Table of Content

Table of Tables	iii
Table of Figures	iv
Acknowledgments	V
Abstract	vi
1.0 Introduction	1
1.1 Research Question	4
2.0 Conceptual Background	7
2.1 Online Advertising Strategies	7
2.2 Online Consumer Behavior	10
3.0 Research Model and Statement for Hypotheses	14
3.1 Hypotheses	14
3.2 Research Framework	16
4.0 Methodology	18
4.1 Pre-study	18
4.1.1 Structure and Methodology in the Pre-study	18
4.1.2 Results from Pre-test	19
4.2 Design for the Main Experiment	20
4.3 Sampling and Distribution Technique	20
4.4 Sample and Population	21
4.5 Manipulation of Stimuli	21
4.6 Scales in Survey	24
4.7 Reliability and Validity	25
4.7.1 Reliability Check	25

4.7.2 Validity Check	25
4.8 Procedure & Generalizability	26
5.0 Findings	27
5.1 Data Cleaning	27
5.2 Word-cloud of Consumer Opinion on Hostile Bidding	28
5.3 Comparing Means between Groups	29
5.3.1 Preliminary Questions: Brand Loyalty and Category Involvement.	29
5.3.2 Main Concepts: Ad Attitude, Perception of Brand and Fairness	30
5.4 Statistical Analysis	31
5.4.1 - Internal Consistency Reliability Check	31
5.4.2 - Test of the Main Effect - ANOVA	33
5.4.3 - Test of Interaction Effect - Two-way ANOVA	34
5.4.4 - Test of Interaction Effect on Hostile Advertisement	35
5.4.5 - Testing the Concept of Hostile Bidding Effect on the Fairness	37
5.4 Summary of Hypotheses and Key Findings	38
6.0 Discussion	40
6.1 Consumer Perception of Firms Executing Hostile Bidding	40
6.2 Consumers Attitude towards The Hostile Advertisement	41
6.3 Consumers Opinion about The Fairness of Hostile Bidding	43
6.4 Answer to our Research Question - Conclusion	43
7.0 Managerial and Theoretical Implications	45
8.0 Limitations and further research	46
8.1 Limitations	46
8.2 Further Research	47
Reference list	48
Appendix	56

Appendix 1 - Pre-Survey Output	56
Appendix 2 - Main Survey output	68
Appendix 3 – Word Cloud Data Transcription	94
Appendix 4 - Internal Consistency Reliability for all the Three Concepts	95
Appendix 5 – Test of Homogeneity of Variances	95
Appendix 6 - Levene's Test of Equality of Error Variances	95
Appendix 7 - Levene's Test of Equality of Error Variances	96
Appendix 7 - Preliminary Thesis Report	97
Table of Tables	
Table 1: Grouping and stimuli of pre-study	19
Table 2: Grouping and stimuli of main experiment	23
Table 3: Mean score for preliminary questions regarding brand loyalty and cate	gory
involvement	30
Table 4: Overall mean and St Dev between groups	31
Table 5: Test of internal consistency reliability for brand perception	32
Table 6: Test of internal consistency reliability of attitude towards ads	32
Table 7: Test of internal consistency reliability for fairness	32
Table 8: ANOVA testing the main effect	33
Table 9: Two-way ANOVA test of between-subjects effect	35

Table 10: Two-way ANOVA test for attitude towards the advertisement
Table 11: Two-way ANOVA test of fairness
Table 12: Summary of hypotheses
Table of Figures
Figure 1: Google search results for a credit card from Komplett Bank2
Figure 2: Advertising revenue of Google websites from 2001 to 20193
Figure 3: Research framework for experiment
Figure 4: Word cloud of the participants - one-worded opinion about hostile bidding
Figure 5: Plot of the interaction effect brand recognition of searched brand * brand
recognition of hostile advertisement

Acknowledgments

First, we would like to thank our thesis supervisor, associate professor Auke Hunneman at the department of marketing of Norwegian Business School BI. His belief in our research from initial planning to final touches has been highly appreciated, and it is exciting to listen to his knowledge. We are grateful for your time and we have enjoyed the cooperation during our writing.

Furthermore, we must also extend a big thank you to Ph.D. Candidate Ivan Korsak in the same department. His knowledge in marketing research and SPSS has been helpful and educational for us both. We appreciate your critical questions and that you challenged us to think outside the box when getting stuck.

We also must express our gratitude to everyone who have contributed for us to finish our thesis, especially all the participants taking our survey.

Abstract

The purpose of this master thesis is to investigate if consumers change their perception of a firm after being exposed to a hostile bidding advertisement in Google. Hostile bidding is a strategy in search engines where firms buy their competitor's brand names in order to be displayed over them in the search results.

Previous literature on hostile bidding has mainly focused on implications for the firm and has missed a significant part of the equation, the consumer. Based on this information, we created four hypotheses that focused on brand perception, attitude towards advertisement, and how fair the consumer believes the hostile bidding marketing strategy to be.

Results from over 350 participants show that if a firm decides that they want to buy their competitor's brand name, then it would **not** affect their brand perception. The results also show that if a firm with low brand awareness goes after and buys keywords connected to the brand name of a firm with high awareness, then the hostile advertisement is affected negatively. Showing that even though the firm's with low brand recognition does not get hurt in terms of brand perception, if they use a hostile bidding strategy, their advertisements might get negatively affected.

Managers could efficiently apply this insight when making online marketing decisions, by using our findings as guidance for when to execute a hostile bidding strategy and when to not.

1.0 Introduction

In today's globalized and digitalized world, online marketing has become crucial for brands' success. The use of keyword advertising on major search engine platforms like Google or Yahoo!, has opened new ways to interact with and convert customers to brands worldwide. With an average of 40,000 searches per second on any given day and the fact that 35 percent of all product searches begin online (Skrba, 2020), Google as the leading search engine has become an important interaction platform for both firms and consumers. Consumers can with the use of search engines, find information on products and services, and they can search for a specific product online. However, this process can be both confusing and frustrating for consumers, as simple search queries on Google show that firms have started to use a hostile tactic in their online marketing strategy, piggybacking on their competitors' brand name in order to leverage their brand equity. The concept of piggybacking of competitors' brand names as keywords in the sponsored search was introduced in the academic literature by Rosso & Jansen in 2010. They studied the spread of this phenomenon, specifically the activity when a firm bid and buys branded search terms of its competitors, such as their brand names or other trademarks on Google's advertisement service, AdWords, or other search engines. The desired outcome of this activity is to leverage on competitors' brand awareness and divert consumers to choose the firm using a hostile strategy instead. Even though Rosso & Jansen (2010) have classified this strategy as piggybacking, for the purpose of this thesis we will address it as "hostile bidding".

One recent example of firms using hostile bidding as their current online strategy is Bank Norwegian, one of Norway's largest consumer credit banks. With the use of Google AdWords, they bought the branded keywords of their competitors and diverted customers to rather choose them as their desired credit card firm. When consumers searched for credit cards from Ikano, Monobank, and Komplett Bank, paid results from Bank Norwegian were displayed as the first result, see Figure 1. Bank Norwegian's competitors, Ikano, Monobank, and Komplett Bank took this matter to the Norwegian Competition Authority and the Norwegian court, because

they claimed it broke the law regarding misuse of trademark rights. Despite the Norwegian Competition Authority concluding that Bank Norwegian exploited competitors and acted unfairly, Bank Norwegian was exonerated in the Norwegian court in 2019, the conclusion was that they had not broken the Norwegian marketing act and misused trademark rights (Næringslivets Konkurranseutvalg, 2019; Johannessen & Klevstrand, 2019).

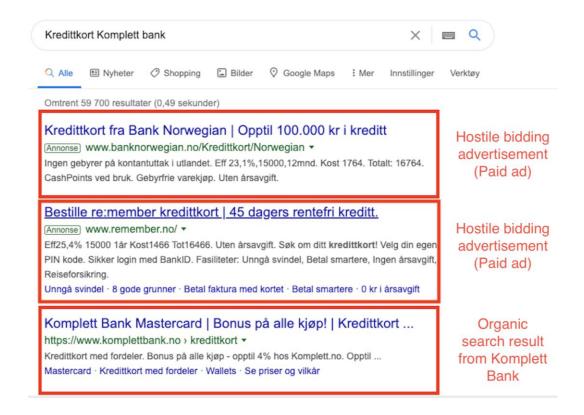


Figure 1: Google search results for a credit card from Komplett Bank

The story of hostile bidding on search engines is not a new phenomenon. The strategy has been available for marketers since the introduction of keyword advertising on search engine platforms, but lately, the strategy has increased in popularity. When firms adopt hostile bidding in their online marketing strategy, they have the impression that it will enhance their click-through-rate, which is the ratio of clicks an ad have and how many who have seen it. However, the tactic can create both confusion and frustration for consumers, as they are displayed advertisements for firms they did not search for, this is illustrated in Figure 1, which

shows that paid ads from Bank Norwegian and re:member were displayed first, despite that the search was for Komplett Bank. In this case, consumers might be confused about which firm to choose or if they entered the right search query. Following, consumers might experience frustration as they see these ads as irrelevant for their specific search. At the same time, it is important to take into consideration that firms might also suffer from the more widespread use of hostile bidding as they must allocate more of their marketing budgets to keyword advertisement when competitors adopt the tactic. This may lead to a situation called *the prisoner's dilemma*; firms are forced to employ hostile bidding to stay in the game. Hence, firms not using the tactic will suffer from competitors taking over their branded keywords. In the end, it is search engines like Google who will benefit from the tactic of hostile bidding. Paid ads are the essence of the search engines business model, and Google's revenue from this is estimated to be 113.26 billion dollars in 2019, an 620 percent increase during the last ten years as shown in Figure 2 (Alphabet, 2020).

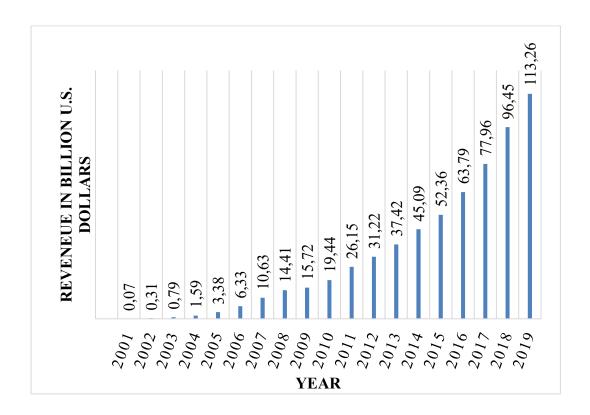


Figure 2: Advertising revenue of Google websites from 2001 to 2019

Therefore, a further understanding of the implications of a hostile bidding strategy is needed, especially in order to understand how consumers react to, and how it might affect their perceptions of firms using the strategy. Consumers react differently to marketing, but in terms of hostile bidding, marketers are somehow "manipulating" consumers input on search engines and display ads for competing firms. This might affect consumers negatively and lead to confusion and frustration, and marketers' desired outcome of increased click-through-rate could vanish due to consumers negative experiences with hostile bidding. Current literature on hostile bidding are limited, especially on how it affects consumers and it is therefore necessary to fil this gap.

In this paper, we aim to examine how this hostile bidding strategy where firms piggyback on competitors will affect consumers' perception of the brands involved. This is because consumers have the most important role, being the targets of firms' online advertising campaigns. An understanding of consumers' reaction to firms piggybacking on competitors, is crucial for firms worldwide, as this can affect their online marketing strategy. It is also important because digital advertisement for the first time in history, will stand for around half of the global advertising market (Enberg, 2019).

1.1 Research Question

Most literature on online marketing activities has focused on search engine marketing and search engine optimization. The focus has been in terms of how, when, and to which firms it should apply to. Available literature on piggybacking, in terms of both a hostile bidding strategy and how this marketing strategy affects consumers, is scarce. As all online advertisement actions are aimed to attract and convert consumers, it is important to understand how consumers react to different tactics. Literature on hostile bidding focuses on the strategic benefits when executing the strategy, the difference of low-quality vs. high-quality firms, and which types of firms that succeed after applying the strategy. Common for research up to this date, is that it focuses on the executing firm and its competitors, as it does

not cover the consumers, not the consumers and their reactions. Thus, we need research on consumers behavior in this context.

When consumers enter a query on their preferred search engine, they are presented with two different kinds of results on the search engine results page (SERP), paid, and organic results. The organic search result is non-paid results, only based upon the algorithms of the search engine and how the referring site of the search results content and website have been optimized (Yalçın & Köse, 2010). This process is referred to as search engine optimization (SEO). Paid results, however, are advertisement results based on keyword advertising. Here, consumers' chosen keywords generate one or more results to a specific website that has bought these keywords. These search results are labeled as ads (Chen & He, 2011) and the practice is termed search engine marketing (SEM). More traffic on a website increases the possibility of higher profit for a brand or a service, and with a highly competitive marketplace, firms need to put up a fight to capture value online, either with SEO or SEM activities.

Consumers often conduct open searches for a product to explore alternatives, and from there they click on results that seem interesting for their needs. In the cases where consumers type in keywords for a specific brand but are displayed advertisements from other competitors, will their perception of the two different brands change, and to what extent will it be positive or negative? SERPs could be a goldmine for companies if their online strategy is optimized, but they must conduct business in a way that does not harm their brand equity. Therefore, it is quite interesting to investigate the effect of hostile bidding in terms of consumers' perception. This leads to our research question:

"How will a firm's use of a hostile bidding strategy in Google affect consumers' perception of the brands that are involved?"

We believe that hostile bidding influences consumers' perception of both the firm executing a hostile bidding strategy and for the firm being piggybacked on. Especially the firm who uses hostile bidding, as they are trying to convert customers by manipulating their output from search queries. We have an assumption that consumers might find this both confusing and frustrating, and it can even be experienced as unfair and unethical.

2.0 Conceptual Background

Since the commercialization of the internet around the beginning of the 2000s, there has been produced extensive amounts of literature regarding online marketing activities focusing on engine optimization (SEO) and search engine marketing (SEM), the aim being to increase both conversions- and click-through-rate (Ghose & Yang, 2009). Currently, available research on the phenomena of piggybacking as a hostile bidding strategy, deals with keyword advertisements as a strategy, when to use it – only seen from the perspective of firms. However, there is no literature on hostile bidding strategy when it comes to how it affects consumers' perception of the different brands involved, namely firms who buy a keyword of a competing firm and the firm who gets their keyword bought. In the end, it is the actions of the consumers which determines if a firm's online advertising strategy succeeds, and it is, therefore, necessary to understand consumers' reactions and perceptions regarding different online marketing tactics.

As current research only covers hostile bidding as a tactic without taking into consideration how consumers react, there is a gap in the research literature which needs to be filled. Thus, the aim of this research paper is an effort to fill this gap. Doing so, we will build further on two different types of academic literature in order to answer our research question, specifically how hostile bidding affects consumers in their search and purchase stage online, focusing on their experience of frustration. The first set of literature is research covering search engine marketing, the target being on the firms, followed by literature emphasizing the consumer.

2.1 Online Advertising Strategies

Most academic research within online marketing strategies has been focusing on SEM strategies and the use of keywords advertisement (Sen, 2005; Chen & He, 2011; Yao & Mela, 2011; Li, Kannan, Viswanathan & Pani, 2016). Some academic research states that companies prefer to invest in paid placements instead of prioritizing SEO (Sen, 2005), justifying it by saying that the result of SEO work

does not defend its cost and that there is a lack of consistency when it comes to ranking in the search engine result pages (SERP), namely the list of results the user is shown after entering their query. Paradoxically, consumers prefer to ignore the paid placements and follow the links in the organic section of the results. This makes the marketing decision in search engines hard to justify (Sen, 2005). The latter is supported by Yang & Ghose (2010), who state that companies can expect the consumer to value the editorial integrity that the organic listings have more highly, which in turn leads to a higher click-through-rate. Hotchkiss, Garrison & Jensen (2005) support this in their study, concluding that 77 percent of their participants preferred organic links over paid placements. Marketers work more on their search engine optimization compared to paid advertising because it has greater benefit in the long run and since a good SEO strategy leads to more consistent results - it is perceived more authoritative (Kim, 2018). Despite organic advertisement being recommended, marketers still use a lot of paid advertisements because it leads to quick results as it puts a firm higher up in the SERP. Google advertisement is also a major source for traffic; a Google research report from 2011 estimated that 89 percent of the traffic coming from search advertisements is not recouped by organic clicks when ads are paused (Chan & Van Alstine, 2020).

In terms of piggybacking as a hostile bidding strategy, this has previously been studied by Rosso & Jansen (2010), their target being prevalence and different types of piggybacking in various US markets. The authors concluded with three different types of piggybacking; competitive, promotional, and orthogonal piggybacking; where competitive is piggybacking on a direct competitor with the same type of product and/or service, the same type we are investigating in our research. Promotional piggybacking is when a firm promotes a product and/or a service of a brand as for example a reseller, and orthogonal piggybacking is when a firm provides different products and/or services that is offered by a brand, for example courses in the use of Microsoft products. Their study concluded with a presence of only four percent promotional piggybacking in contrast to 62.8 percent promotional and 33.2 percent orthogonal piggybacking. Furthermore, there were no significant differences in competitive piggybacking across various market sectors (Rosso &

Jansen, 2010). However, much has changed in online marketing for the last ten years; Google's advertising revenue has increased from 15.72 billion to 113.26 billion in the period of 2010 to 2019 (Alphabet, 2020). With an increase of 620 percent in advertisement revenue only on Google, one can assume that the strategic use of piggybacking has increased since the study of Rosso & Jansen in 2010.

On the other hand, Desai, Shin & Staelin (2014) studied piggybacking in terms of understanding the strategic implications for firms adopting the tactic, and when a firm should take advantage of the tactic. The authors conclude that firms always should buy their own keywords when the exposure effect is significantly large, where the exposure effect is «the typical effect of advertising that captures the change in consumers' perceptions of brand quality after being exposed to the brand's advertisement.» (Desai, Shin & Staelin, 2014, p. 488). The authors explained this concept by using one low-quality and one high-quality company. If a low-quality company decides to buy a high-quality brand name as a keyword, then the consumer will also be exposed to the low-quality company advertisement and this will lead to an increased quality perception of their products. On the other hand, firms do not buy their own brand name when there is little preference, but both companies can buy their competitors' brand name. Furthermore, firms only buy their own brand names as a defensive strategy, that is when they have a lower preference by consumers compared with competing brands. The authors also imply that the use of piggybacking among firms within a certain category might create a prisoner's dilemma, as it is only the search engines who will benefit in the long run (Densai, Shin & Staelin, 2014).

The two latter articles on piggybacking cover hostile bidding as a strategy seen from the firm's perspective and are important contributions in the field, but they do not include research on consumers' perception of the hostile advertisement or the brand executing the strategy. To get a further understanding of the underlying mechanisms influencing consumers' perception, it is necessary to study literature emphasizing consumers, as this is an important element to consider when executing this online marketing strategy.

2.2 Online Consumer Behavior

Consumers' behavior and interaction with companies online differ in many ways, especially when it comes to how consumers select among results after searching for a brand or a service on a search engine. In order to understand how consumers, react to marketing tactics, it is important to understand how they act online. An online experiment conducted by Lewandowski, Sünkler & Kerkmann (2017) investigated if paid ads (SEM) were labeled clearly enough for consumers. The research concludes with evidence that consumers who did not manage to tell if the search result was a paid ad, selected them more often compared to those who could tell if it was a paid ad. This study supports previous research by Hotchkiss, Garrison & Jensen (2005) and Yang and Ghose (2010), stating that consumers tend to choose organic over paid results.

Consumers' use of search engines also depends on their decision process. Joachims et al (2005) conducted an experiment using eye-tracking to measure the click-through-rate on SERP and found evidence that the first result on the page gained higher attention and was clicked substantially more times compared to results placed further down on the result list. This tendency of preferring the top results is also supported by research conducted by Petrescu (2014), where the author found evidence that the five first organic results accounted for 67.6 percent of all the clicks and that the first result on SERP accounted for 31.4 percent of all clicks.

Differences in consumers' use of SERPs, whether if it is on a mobile device or on a personal computer and the window size of the device used, influences which of the results consumers click on. Jansen & Spink (2007) investigated this during their research on sponsored searches (SEM) and found that consumers tend to click on SERP results which are visible without scrolling down to see more results. Another study by Dean (2019), where over 5 million search queries and click-through-rate of close to 850 000 pages were analyzed, showed the strong positive effect of being among the first organic results on Google. The results were quite like the research by Petrescu (2014) and showed an average CTR of 31.7 percent for the first organic

result. This result was also ten times more likely to be clicked on compared to the 10th result on Google, illustrating the effect in the research of Jansen & Spink (2007).

Prior research shows that consumers tend to choose the top results when using search engine platforms like Google. This correlates with research that recommends using SEM strategies like piggybacking/hostile bidding to enhance click-throughrate. However, the relevance of the top results might not match consumers' expectations when searching, and might, therefore, lead to frustration. Sun & Spears (2011) contributed to an increased understanding of consumers' frustration on keyword search effectiveness based on the frustration framework originally presented by Rosenzweig (1944), stating that frustration occurs when consumers experience a poor match between their search query and the results displayed. The authors distinguish broadly between two different types of objectives consumers have when entering their keyword search, based upon respondents' feedback in their survey: relevancy and timesaving. Relevancy is the objective when consumers want to find the most relevant website regarding what they are looking for, and timesaving is a list with a variety of websites relevant to what consumers are looking for. Their results show that if the consumer's goal for the search is relevancy and they experience a poor match, they tend to put the blame on themselves, being frustrated by their own actions. On the other hand, if the goal was timesaving and they experience a poor match, consumers blame the search engine for not displaying relevant results and get frustrated on the business model (Sun & Spears, 2011). Frustration during consumers' online search process, is likely to occur if the results presented do not meet their expectations. However, research on how frustration affects consumers' perceptions of firms using hostile bidding in paid advertisements online, is still scarce.

Trust between consumers and brands is an important element in marketing, and something firms must consider when deciding to use paid advertisements, especially when they leverage from competitors by buying their branded keywords. Studies conducted on sponsored and non-sponsored links have shown that lack of

trust could become an issue when firms use a hostile bidding strategy and potentially mislead consumers (Jansen & Resnick, 2006; Rosso & Jansen, 2010). When firms execute this strategy, marketers might also find themselves in a situation where they face an ethical dilemma. Laczniak & Murphy (1991) explored this situation in their article on ethical marketing decisions and defined ethical dilemmas as "confronting a decision that involves the trade-off between lowering one's personal values in exchange for increased organizational or personal profits» (Laczniak & Murphy, 1991 p. 261). When consumers experience a situation where firms do not follow ethical practices, the trustworthiness of the firms might be weakened. A firm using hostile bidding might be seen as unethical in their business practices as they leverage their competitors' effects by buying their branded keywords. Consumers might experience this to be unfair.

Thus, when applying a hostile bidding strategy, the construct of fairness might play an important role in consumer behavior. Fairness has been widely discussed in academic research as a result of consumers' lack of trust in firms executing marketing tactics which can be questionable and unethical. Nguyen & Klaus (2013) explore the concept of fairness in their article, looking at fairness as an outcome of retailers marketing tactics. Through in-depth interviews, they find "honesty, integrity, ethical, and moral behavior as drivers of fairness perceptions" (Nguyen & Klaus, 2013 p. 317) among consumers. In addition to research on fairness in retail, fairness has previously been studied with regards to price, that is consumers reaction to differences in price and which situation they find fair or unfair (Bolton, Warlop & Alba, 2003; Xia, Monroe & Cox, 2004; Bertsimas, Farias & Trichakis, 2011).

Research on fairness is mainly constructed upon equity theory, proposed by Adams (1963, 1965). The theory focuses on social exchange relationships between individuals and how they compare each other's inputs and outputs in each situation. In situations where a person's output is lower than those, she/he compared her/his inputs with, inequity occurs. Equity, on the other hand, occurs only when a person's outcome is like others based on the same input from both parties (Pritchard,

1969). Regarding previous research on price fairness, inequity occurs when one customer must pay a higher price compared to others, despite that all parties have the same input in the situation. As a result, the person will find the situation unfair. Nguyen & Klaus (2013) explain the relationship between fairness and equity theory where inequity may lead consumers to perceive a certain situation as unfair, opposite to equality, which may lead them to perceive a situation as fair.

Current literature has dealt with hostile bidding as a strategy and provided important insights in the strategy considering firms. However, the research is scarce regarding one of the most important elements in the equation, namely the consumers. As discussed in the part regarding research on online consumer behavior, misleading and unethical marketing tactics may lead to negative attitudes among consumers when exposed to such. Consumers may get frustrated, firms' credibility may decrease as consumers experience lack of trustworthiness, and eventually issues concerning inequality and fairness may arise. As of writing this, no research is conducted on the phenomena of hostile bidding in terms of how the strategy affects consumers' perception and attitude towards the firms using it - despite that potential negative attitudes may occur for consumers. Therefore, as consumers are a central part of this strategy, it is important to address this gap in literature, something we are aiming at with this master thesis. Without a further understanding of the implementations of hostile bidding, the potential negative attitudes towards the firm may drive consumers to switch firms and damage the firm's brand equity.

3.0 Research Model and Statement for Hypotheses

To clarify the interactions and relationships between the constructs of our study, the following section will aim to summarize the research question and hypotheses from the literature into a research framework. Despite evidence from the literature showing that consumers tend to choose organic search results on search engines, firms still use paid/sponsored links as a part of their online marketing strategy to increase the conversion- and click-through rates, and thereby profit (Ghose & Yang, 2009). Thus, in order to address this gap in literature, our paper gives the consumers' attitudes to a firm's hostile advertisement, in addition to if consumers' change their perception of a firm that is using this tactic. Our research also includes consumer behavior theories from frustration and fairness. The study aims to figure out how consumers get affected when firms decide to execute hostile bidding as a marketing strategy in Google, how consumers rate these types of hostile advertisements and how fair consumers believe this strategy is. In order to answer our research question, we present our hypotheses in the next section.

3.1 Hypotheses

We found several reasons for the following hypotheses in previous literature. In general, consumers prefer organic results, not sponsored. For example, Yang and Ghose (2010) have stated that firms can expect the consumer to value the organic listings' editorial integrity more highly. Therefore, when firms execute a hostile bidding strategy, displaying that their advertisement is paid, they will diminish their editorial integrity. Like we hypothesize; not displaying what the consumer has searched for, will lead to a negative perception of firms executing hostile bidding. In addition, several studies conducted on sponsored and non-sponsored links, have shown that mistrust could become an issue when firms use a hostile bidding strategy and thereby potentially mislead consumers (Jansen & Resnick, 2006; Rosso & Jansen, 2010), giving them another reason to dislike firms that are executing hostile bidding. That is why we have included the following hypothesis:

H1:	Consumers	will	evaluate	brands	that	are	participating	in	hostile	bidding
strat	egies less fa	voral	bly.							

Our assumption is that people tend to root for the underdog and that consumers will recognize what Laczniak & Murphy (1991) discovered in their research, namely that in order to close in on the major players in the market, they are "allowed" to use more questionable marketing strategies. Desai, Shin & Staelin (2014, p. 488) especially emphasized in their article about hostile bidding that firms should always buy their own keywords when the exposure effect is significantly large. Furthermore, if a low-quality firm decides to buy a high-quality brand name as a keyword, the consumer will also be exposed to the low-quality firm advertisement, resulting in an increased quality perception of their products. Thus, based on our literature review, we chose to include the following hypothesis:

H2: Consumers will evaluate brands with low recognition that are participating in hostile bidding strategies against a brand with high recognition, more favorably.

We also hypothesize that the participants will have a reaction when being exposed to a hostile bidding advertisement. We base this assumption on several studies, one of them explaining how the relevance of the top results might not match consumers' expectations when searching: leading to frustration. Sun & Spears (2011) contributed to an increased understanding of consumers' frustration on keyword search effectiveness based on the frustration framework presented originally by Rosenzweig (1944). Based on this we made the following assumption:

H3: We hypothesize that the combination of the level of recognition between the brand searched for and the brand using hostile advertisement will have a negative effect for participants towards the hostile advertisement.

The difference between the following hypothesis and H1, is that we hypothesize that consumers can like a firm using hostile bidding, but at the same the time, perceive the tactic as unfair. The firms who use hostile bidding might be perceived as unethical in their business practices, as they leverage on their competitors by buying the branded keywords, the result being that consumers experience this to be unfair. Nguyen & Klaus (2013, p. 317) found out that "honesty, integrity, ethical, and moral behavior as drivers of fairness perceptions" were important among consumers. Also, in situations where a person's output is lower than those, she/he compared her/his inputs with, inequity occurs. Equity occurs only when a person's outcome is like others, based on the same input from both parties (Pritchard, 1969). This leads to the following hypothesis:

H4: Consumers will evaluate the action of firms executing a hostile bidding strategy as unfair.

We strongly believe that the four hypotheses stated above, will support us with the knowledge we need to answer our research question; Specifically, how a firm's use of a hostile bidding strategy in Google will affect consumers' perception of the brands that are involved.

3.2 Research Framework

From the hypotheses in the last section, we made a research framework that shows the different relationships in our research shown in Figure 3. From our pre-study, we were able to establish that participants notice hostile bidding advertisements. That is why the first step in the model is when a firm executes a hostile bidding strategy. Secondly, we see the independent variables in the right part of the figure; The level of brand recognition for firms executing hostile bidding, and the firm participant searches for. Furthermore, participants will evaluate the hostile advertisement, and the result of their evaluation will color their perception of both

the brand executing the strategy, and whether this type of marketing strategy is fair or not.

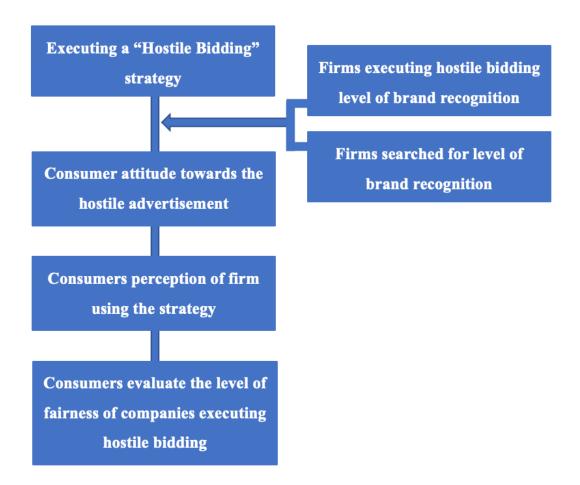


Figure 3: Research framework for experiment

4.0 Methodology

In this part of the paper, we will describe the applied methodology, the intention being to give a deeper understanding of the empirical groundwork and the data collected.

4.1 Pre-study

In order to proceed with our main study, there was a need to test if the average consumer was aware of hostile bidding advertising in Google by conducting a prestudy. Presser et al. (2004) addresses the importance of running a pre-study advance to the main survey in order to evaluate if the intended questions in the survey could harm the experiment, as there is no effect when testing on a smaller population.

4.1.1 Structure and Methodology in the Pre-study

We created a web-based survey through Qualtrics; we applied a 2 by 2 between-subjects design, where the participants got assigned to one out of four different conditions. Every participant was exposed to a scenario where they had to search for a new credit card by Bank Norwegian, and their first step was to use Google to search for the credit card. The groups had different stimuli, in order to reduce the likelihood of participants knowing what the purpose of the survey was, and we included a control group to increase the validity of the study (Allen, 2017). Details about the different group's stimuli and conditions are shown in Table 1, and the full pre-study experiment survey, which was distributed to participants, can be seen in appendix 1. To gather participants, we used a non-probability sampling technique, referred to as snowball sampling. This is a cost- and time-effective technique which is suitable for a pre-study (Showkat & Parveen, 2017). The sample size of the entire pre-study was N= 28, a satisfactory number of participants since we only wanted to see if they noticed hostile bidding advertisements. The respondents were aged from 25 to 34 years.

Group	Description of Hostile Bidding?	Stimuli of Hostile Bidding?
#1 - Control Group	No description of hostile bidding	Stimuli included hostile bidding
#2 - Treatment Group	Included description of hostile bidding	Stimuli without hostile bidding
#3 - Treatment Group	Included description of hostile bidding	Stimuli without hostile bidding
#4 - Treatment Group	No description of hostile bidding	Stimuli without hostile bidding

Table 1: Grouping and stimuli of pre-study

4.1.2 Results from Pre-test

The result of our pre-study was in favor of our research question, where the main finding was that 96 percent of the participants stated that they at some point had experienced a hostile bidding advertisement in a search engine like Google. In addition, 50 percent of the participants who were assigned to group one (no description of hostile bidding, but stimuli of hostile bidding) were able to recognize the advertisement. For participants assigned to group three (description of hostile bidding, but no stimuli of hostile bidding), only 75 percent only found Bank Norwegian content among the search results. This group might have been confused by the other results in the search engine result page, explaining the lower rate. However, the overall results of this pre-study confirm that most consumers noticed an advertisement with a hostile bidding strategy. We can, therefore, move further on with our hypotheses and examine how consumers are affected with our main experiment.

4.2 Design for the Main Experiment

To test our different hypotheses, we used a between-group design, consisting of one control group that gave us a baseline value that can be compared with the other four treatment groups. We used this design in order to check for causality, which is cause and effect relationships and not only correlation effects (Malhotra, 2010, p. 218). In order to test the research framework illustrated in Figure 3, we conducted an online experiment in Qualtrics where the participants were exposed to one of the five manipulated Google search result pages as shown later in Table 2. The full survey, distributed to all participants, is available in appendix 2. By applying this design, we were able to test several groups of participants by a different testing factor at the same time. Another advantage of this design is that it is timesaving, which is optimal for a project with limited time and resources (Malhorta, 2010, p. 235)

The use of experimental vs. non-experimental design makes it possible to measure causality. A key consideration when using an experimental design like between-groups is to control for the effects of the different confounds origins which are personal, procedural, or operational (Malhorta, 2010, pp. 236-237). The issue with confound variables is that they can contaminate the internal validity of the results. We eliminated person confusion by assigning participants to a random group by changing the survey flow in Qualtrics to randomization. By applying this technique, we were able to increase the internal validity (Malhorta, 2010, pp. 222-223). To tackle the issue of procedural confounds we kept situational characteristics similar across the different groups in the study. Lastly, to avoid operational confounds, we tried to make sure not measure factors irrelevant to the study such as measuring consumer habits online.

4.3 Sampling and Distribution Technique

Our goal with the sample in the study was to enhance external validity and make it as generalizable as possible (Malhorta, 2010, p. 223). That is why we wanted to collect as many participants as possible for each of the five groups. The ideal

sampling method would be a probability sampling, where every element in the population has an equal chance to join (Singh, 2018). Ideally, we would have used simple random sampling for the survey since we did not have any prior information regarding the target population (Singh, 2018). We could, for instance, randomly pick 20 of our 50 student colleagues to take the survey. However, the more feasible and realistic solution for us was to sample participants using a non-probability sampling technique, convenience sampling. This technique is great to use in order to get rapid and accessible results (Malhorta, 2010, p. 345). We used social media platforms like Facebook and LinkedIn to distribute the survey, in addition to directly encourage family and friends to participate and share it further on their social media platforms.

4.4 Sample and Population

Today, 91 percent of Norwegians between the age of 16 and 79 use the internet daily (Statistisk Sentralbyrå, 2019), and there are approximately 50 million Google searches per day. This means that the average Norwegian is using Google around 10 times per day (Fredriksen, 2019). This give us a broad population to sample from and that is why, based on this information, we have characterized a sample of 150 Norwegians between 16 and 79 years old that uses Google every day. The sample consisted of 56 percent males and 42 percent females, where 2 percent declined to answer.

4.5 Manipulation of Stimuli

Every participant was presented the same scenario where they had to pretend that they were searching on Google to find a new TV. We chose TV as the product to use as stimuli in the experiment, because we wanted a product that consumers usually do research on before buying, compared to buying a piece of clothing, for instance, which is too much of an impulse purchase, in addition to being a product most of the participants have bought at some point. Participants would further be randomly divided into the five different groups, where four of the groups were to have manipulated search results with stimuli of hostile bidding advertisements,

(group 2-5, see table 2). We created four different SERPS and made fake Google advertisements, since we were unable to find original ones, and made them look as real as possible. Depending on which group participants were assigned to, they were presented search results for either Funai TV's or Samsung TV's with fake advertisements from firms with either low brand recognition (Funai TV or Akura TV) or/and firms with high brand recognition (Samsung TV or Bang & Olufsen TV).

The reason for choosing these brands is based on consumers' knowledge of TV brands, Samsung and Bang & Olufsen being highly widely known compared to Funai and Akura. Samsung is currently among the top-selling TV brands in Norway. Currently, seven of their models are the most popular TVs in one of Norway's biggest distributors of TVs, Elkjøp (Elkjøp.no, 2020). Bang & Olufsen is not at the top lists, much due to their models' high price. However, the brand should be expected to have high brand awareness due to much advertisement of their latest TV model, Beovision Harmony (Olsen, 2019). Funai and Akura are not available to buy at any of the most known electronic stores in Norway, like for example Elkjøp and Power, or at the biggest re-selling platform, Finn.no. We chose those brands as they do not have any resellers in Norway, only being available for consumers in Asian countries. Therefore, we believe that Funai and Akura are brands with extremely low awareness and as such suitable to be used in our experiment.

Group	"Action" by Consumer	Hostile Bidding Present	Level of Brand Recognition for TV Products.	Manipulation of Search Engine Result Page
#1 - Control Group	Googled "Samsung Tv"	No	Not present	Only ads by Samsung
#2 - Treatment Group	Googled "Funai Tv"	Yes	Low for searched product and low for ads	Hostile ads by Akura.
#3 - Treatment Group	Googled "Samsung Tv"	Yes	High for searched product and low for ads	Hostile ads by Akura
#4 - Treatment Group	Googled "Funai Tv"	Yes	Low for searched products and high for ads.	Hostile ads by Samsung.
#5 - Treatment Group	Googled "Samsung Tv"	Yes	High for searched products and high for ads.	Hostile ads by Bang & Olufsen.

Table 2: Grouping and stimuli of main experiment

To minimize participants' suspicions about the goal of the study, they were not given any information about the concept of hostile bidding. The reason being to avoid bias in the answers of the participants. Priming respondents to act or think in a specific way, will ruin survey results and lead to wrong conclusions when analyzing the data. Lavrakas (2018) explains priming as a psychological process where too much stimuli either in form of information or guiding in a survey, will

affect how respondents answer. If our survey were to explain a firm's hostile bidding as a negative action, responders would likely listen to our negative information and give answers where hostile bidding is seen as negative (Lavrakas, 2018). The negative effects priming could have on the data, is the reason why we initially only explain that the survey is about consumers' behavior and attitude towards brands using Google advertisement. Only at the end of the survey, the participants were explained the concept of hostile bidding, but even then, we kept the information neutral. Therefore, we believe that we avoided the issue of priming our participants. Accounting for priming may, however, also lead to participants dropping out of the survey, as measuring the concept without explaining it could be hard to understand. Our survey output showed that around half of the total participants dropped out and did not finish the survey, and one can assume that a portion of these did not finish due to finding it hard to understand the survey. We will discuss the implications of avoiding priming further in the limitations.

4.6 Scales in Survey

It is critical for the value of our data that we establish reliability and validity of our scales. That is why the survey included well-established scales, and it contains questions on a seven-point *Likert scale* with alternatives from "strongly disagree" to "strongly agree.". This is often used for questionnaires that make the participants choose the level of agreement from a series of statements, and the scale has been shown to have good reliability and validity. Applying this scale has several advantages, it is for example, easy to construct and carry out. One potential issue with this scale is that the participants had to read each statement, taking them longer time to finish in comparison with other rating scales (Malhorta, 2010, p. 277)

We also used well-developed scales to measure all the constructs of our study, in order to give the study as much validity as possible. To make sure that the participants were not biased, in terms of favoring the TV brand that they searched for, they were asked questions regarding *brand loyalty* and *product involvement*. The brand loyalty questions were based on a scale from Yoo & Donthu (2001), and

the scale for product involvement questions was originally developed by McQuarrie and Munson (1987). For attitude towards advertisement, we used the scale from Biel & Bridgewater's (1990) to develop statements about the hostile advertisement. To measure the perception of the brand executing the hostile bidding strategy, we used the handbook of marketing scales to develop statements (Kahle, 1994).

4.7 Reliability and Validity

4.7.1 Reliability Check

The reliability check is to test if the study can produce consistent results if the study was repeated (Malhorta, 2010, p. 699). To check the concept of internal consistency reliability, we calculated the coefficient alpha. Here, the value of 0.6 or less basically states that the internal consistency reliability is unsatisfactory. That is, if this value is below 0.6, the results might not be valid, as the consistency of the participants' scores would get would change if they took the test a second time.

4.7.2 Validity Check

The external validity refers to if our results can be generalized from the specific situation the experiment took place in, and if our survey measured what it was supposed to measure (Malhorta, 2010, pp. 288-289). The questionnaire was shared on social media to efficiently hold of the population we defined earlier. We managed to strengthen the internal validity by manipulating the stimuli and observe the effect of it, and at the same time we tried to keep everything as constant as possible throughout the survey. For example, we presented each participant the same scenario, in order to avoid confounding variables affecting their answers. By trying to obtain a diverse sample size we also aimed to keep external validity as strong as possible. In addition, our scenario included an industry that most people have knowledge of, as explained in section 4.4 Manipulation of Stimuli. The scenario reminded a lot of the process of "googling" for a product, which enhanced the ecological validity of the test.

4.8 Procedure & Generalizability

Our main study was constructed in English for our participants, even though we distributed the survey in Norway. Research from Education First (EF), an international education firm, shows that Norwegians score high in English language skills. Their latest report, English Proficiency Index 2019, which currently is the largest ranking of English skills across the globe, rates Norwegian students as number 3 of 100 European countries when it comes to English skills (EF Education First Ltd, 2019). Therefore, we regard the fact that we conducted the survey in English as adequate, because our reach with distributing the survey was limited to fellow students and professional connections on platforms like for instance LinkedIn. Furthermore, conducting the survey in English was an advantage when seeking guidance from English speaking academic resources. Participants were informed in the beginning, that the survey aimed to increase our understanding of consumers' behavior and attitudes towards brands that use Google advertising. They also got the information that all their answers would be kept confidential, since we as researchers are responsible for not unveiling participants (Malhorta, 2010, p. 170).

5.0 Findings

In this section, we will analyze the main findings from the dataset.

5.1 Data Cleaning

In order to proceed with the analysis, we first checked and removed for missing values, in addition to looking for respondents that failed the attention check we included in the survey. This was done to improve the overall data quality to ensure statistically valid results. Overall, the dataset contained 357 respondents, of which only 150 of them were valid respondents able to use for further analysis. A large proportion of the 357 respondents did not finish the survey and had to be removed from it. Of the 150 respondents we decided to use, each of the five different groups had a range of 24-28 participants, which was lower than our desired amount. All the questions in the questionnaire had forced responses, meaning that the participants did not have the option to skip any questions, leading to them either completing the entire survey or to dropout. However, we do not have data on the reason why so many participants chose to drop out of our survey. In retrospect, we could have made the survey shorter, even though the average time to complete the survey was around 5 minutes, precisely to ensure fewer dropouts.

In the questions at the end of the survey all participants, regardless of which group they were assigned to, had to answer questions regarding attitude towards the advertisement, and therefore we added an attention check (see appendix 2, question 72). Here, participants had to choose "agree" for their answers to be included in the final dataset. Researchers have discussed the effectiveness of attention checks to enhance validity through different experiments. Kung, Kwok & Brown (2018) tested if the use of attention checks questions would be a threat to scale validity throughout two studies. The results of these studies concluded that the use of attention check questions did not harm the scale validity (Kung et al., 2018). On the other hand, market research from Qualtrics Methodology Lab with a review of research, concludes differently, advocating not to use attention checks (Vannette,

2017). Considering the review, Qualtrics Methodology Lab conducted a global survey experiment where they concluded that if data from participants with failed attention check questions were removed, one could experience a demographic bias for age (Vannette, 2016). However, we do not see this as an issue for our experiment as our mean age was 30 years. Also, the youngest participant was 16 and the oldest was 55 years old.

5.2 Word-cloud of Consumer Opinion on Hostile Bidding

As future marketeers, we wanted a creative way to show consumers' real opinions regarding the concept of hostile bidding. Thus, at the very end of the survey, we explained the concept the participants had been tested in. The participants were told the following: "The concept we are conducting research on is something called Hostile Bidding. This is when a firm buys another firm's brand name in Google. For example, if you google "Brand A", you will get advertisements from "Brand B" and "Brand C" as the first results, despite that you search for "Brand A". Describe your opinion about this concept in ONE WORD". We managed to get 127 written answers to make a word cloud (see appendix 3 for transcription of data). Even though this is not a valid statistical analysis, Heimerl, Lohmann, Lange & Ertl (2014) explain how word clouds have emerged as a straightforward and visually appealing method for text.

As figure 4 displays; *smart* is the word that was mostly repeated by the participants, indicating that the concept of hostile bidding might be a smart marketing tactic. However, the most interesting observation was to see how diverse the opinions were, and words like *annoying*, *unethical* and *unfair* followed closely. Analyzing all the words as one group, indicates that most consumers see hostile bidding as a negative action.



Figure 4: A Word cloud of the participants - one-worded opinion about hostile bidding

5.3 Comparing Means between Groups

5.3.1 Preliminary Questions: Brand Loyalty and Category Involvement

We wanted to avoid biased opinions from the participants that had too much loyalty to brands involved in the manipulation, or too much involvement in the specific category. If the participants favored a specific brand or the TV-category, their answers could be biased, and it would affect the validity of their answers. To avoid this, each group was asked some preliminary questions about their loyalty to the brand they searched for (Samsung or Akura) and later their interest for the TV category, based on the seven-point Likert scale. All the group's answers were satisfactory, as none of their mean scores was higher than the neutral answer, "neither agree nor disagree". As we can see from Table 3, the mean score for brand loyalty ranges from 3.11 - 4.19, indicating that the participants were not too loyal to the brands involved in the experiment. Also, the mean scores from category involvement ranges from 3.80 - 4.12, implying that the participants were not heavily involved in the TV category.

Group Number	#1	#2	#3	# 4	#5
Brand Loyalty for searched brand - Mean score	4.14	3.11	3.54	3.39	4.19
Category Involvement - Mean score	4.12	4.07	4.12	3.88	3.80

Table 3: Mean score for preliminary questions regarding brand loyalty and category involvement

5.3.2 Main Concepts: Ad Attitude, Perception of Brand and Fairness

One advantage by comparing means, is that we can get a sense of the overall opinion of the participants. Overall, there are mainly three factors we are interested in finding out. Consumers' attitudes towards the hostile advertisement itself, their perception of the brand that is executing this marketing strategy, and finally how fair the participants believe this type of strategy is. All these items had the same type of scale, a seven-point Likert scale as described earlier, making it easier to compare means between the groups based upon previously developed scales.

In Table 4, we have highlighted the key means between the groups. At first glance it may look like there are little to no differences between the groups. When it comes to the first concept we are testing, attitude towards advertisement, the lowest score comes from group three with 3.75 vs. the highest score of 4.32 in group five. The second concept, perception of a brand using hostile bidding, the lowest score is 3.05 in group four vs. group two with a score of 4.04. In the final concept regarding fairness, the lowest score comes from group four, with 3.90. and the highest score is a marginal higher of 4.17, indicating that there are almost no differences among groups. We also test for standard deviation in order to see how much the participant's answers vary from the mean value (Triola, 2010). The participants' answers do not really deviate much from the mean, as almost all are below 1.00.

Deviation	all Mean o n - Attitud dvertisem	e Towards	Overall Mean and St. Deviation- Perception of Brand Using Hostile Bidding		St. De	Mean and viation - cept of irness
Group	Mean	Std Dev	Mean	Std Dev	Mean	Std Dev
1	4.15	0.83	4.03	0.73	3.90	0.53
2	4.22	1.05	4.04	0.93	4.17	0.98
3	3.75	1.12	3.58	0.96	4.05	0.76
4	4.16	0.81	3.05	0.58	3.89	0.49
5	4.32	0.77	3.91	0.89	3.91	0.72

Table 4: Overall mean and St Dev between groups

5.4 Statistical Analysis

All the answers were obtained in the research software program Qualtrics, and then we extracted the data to Microsoft Excel and cleansed the dataset. Since we had five different conditions, we had to separate them into the five groups. After this process, we opened the file in IBM SPSS Statistics Version 26, and controlled that the variables had the right measures.

5.4.1 - Internal Consistency Reliability Check

To start off our statistical analysis, we wanted to test the internal consistency reliability by calculating Cronbach's alpha. By applying this analysis to our dataset, we can determine if the scale we made can measure what we wanted to measure (Malhotra, 2011, p. 287) From the output in the reliability statistics, shown in appendix 4, our Cronbach's alpha is .669. This coefficient varies from 0 to 1, and according to Malhotra (2011, p. 699) if the value is 0.6 or less, this basically indicates that there is unsatisfactory internal consistency reliability.

We also calculated Cronbach's alpha for the three dependent variables. Starting with the scale for measuring brand perception, which had five items. As highlighted in Table 5, this score was at 0.6 (.603), which implies the internal consistency reliability was not satisfactory. If we had deleted the question regarding "I dislike the brand", then the Cronbach's Alpha would have been .744. The second dependent variable we tested was attitude towards the advertisement, which had a Cronbach's alpha score of .821. The score in Table 6 shows how this dependent variable has high internal consistency reliability, and it was also the dependent variable that produced a significant result. The final dependent variable we tested was fairness, which had six items and a Cronbach's Alpha of .607 shown in Table 7, giving it a not so satisfactory internal consistency reliability. By deleting the "the brand is fair" question, the Cronbach's Alpha would have been .703.

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.603	.590	5

Table 5: Test of internal consistency reliability for brand perception

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.821	.822	5

Table 6: Test of internal consistency reliability of attitude towards advertisement

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.607	.601	6

Table 7: Test of internal consistency reliability for fairness

5.4.2 - Test of the Main Effect - ANOVA

The statistical analysis we wanted to highlight was the test of the main effect, which is to find out if the use of hostile bidding changes consumers' perception of the brands involved. In order to test this hypothesis, we used analysis of variance (ANOVA). When using this statistical model, we can test if the means are significantly different between the groups in our survey, and if the null hypothesis is the same as equal means (Malhorta, 2010, p. 434). Therefore, used ANOVA to test the following hypothesis:

H1: Consumers will evaluate brands that are participating in hostile bidding strategies, less favorably.

We started off by looking at the homogeneity of variance test since the ANOVA needs to have an equal variance of each comparison group (Stangroom, 2020). To test this, we looked at the statistics from running a Levene's test, and since the p-value of the Levene's test was greater than .05 (.286), we can conclude that the conditions of the homogeneity of variance have been fulfilled, see appendix 5. Since the test was not significant, we can go further with the ANOVA. Unfortunately, we cannot say that there is a statistically significant difference between groups in consumers' perception of the brand whilst the ANOVA analysis calculated a p-value of .193, which is larger than .05, see Table 8.

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	3.396	3	1.132	1.602	.193
Within Groups	79.137	112	.707		
Total	82.532	115			

Table 8: ANOVA testing the main effect

Based on this analysis we can say that there is no difference on average evaluation between the groups and the main effect for hostile bidding on brand perception is not present, meaning that hostile bidding does not affect the overall perception of a brand. This means that we do not have the evidence to support H1, and the hypothesis was rejected. Despite the expectation we had after reading the participants' one-word feeling about hostile bidding as a marketing strategy, the hypothesis was not statistically significant. We can interpret from this that by executing a hostile bidding strategy, the firm's reputation does not get hurt. However, it is still an interesting finding.

5.4.3 - Test of Interaction Effect - Two-way ANOVA

We wanted to test further if the level of brand recognition influenced consumers' perception of the brand. Doing so, we removed the treatment group from the dataset as there was no use for it anymore since we established that there was no main effect. We, therefore, used two-way ANOVA to test the following hypothesis:

H2: Consumers will evaluate brands with low recognition that are participating in hostile bidding" strategies against a brand with high recognition, more favorably.

We used a two-way ANOVA since it is a way to examine if the dependent variable is affected by the interaction from our two independent variables, respectively brand recognition of the brand which is searched for, and brand recognition of the brand that is using the hostile advertisement. From the output in Table 9, we can see that the model is not statical significant (P-value .193 > .05), not either is our interaction effect (brand recognition for a searched brand; brand recognition for hostile ads) (.182 > 0.5). This implies that we do not have the evidence to support H2, stating that being a well-known brand or a less known brand doesn't matter when it comes to consumers' perception of the brand. Based on this we reject the hypothesis.

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	3.396ª	3	1.132	1.602	.193	.041
Intercept	1721.994	1	1721.994	2437.094	.000	.956
Brand recognition searched (BRS)	1.887	1	1.887	2.670	.105	.021
Brand recognition hostile ads (BRHA)	.406	1	.406	.575	.450	.005
BRS * BRHA	1.272	1	1.272	1.801	.182	.016
Error	79.137	112	.707			
Total	1825.120	116				
Corrected Total	82.532	115	a. R Squ	uared = .041 (Adju	sted R Sq	uared = .015)

Table 9: Two-way ANOVA test of between-subjects effect

5.4.4 - Test of Interaction Effect on Hostile Advertisement

We can conclude that consumers' perception of a brand using hostile bidding, does not change. As a result, we can look at other factors that might affect this strategy. Our assumption, which was partly based on previous literature, was that consumers would not like the hostile advertisement they were presented. To test the following hypothesis, we used a two-way ANOVA; using the factors of the dependent variable for the mean scores from the perception of the brand, and the two independent variables, level of brand recognition for the brand searched for and the brand that is in the hostile advertisement.

H3: The combination of the level of recognition between the brand searched for and the brand using hostile advertisement, will have a negative effect on the hostile advertisement.

By looking at the Levene's test in appendix 6, we see that the p-value was greater than .05 (.175). This illustrates that we can go further with interpreting the two-way ANOVA results.

The most interesting finding is the interaction effect between level of recognition between brand searched for and brand using hostile bidding, which is marginally significant at a 90 percent confidence level (.065), see Table 10. This indicates that if a firm with low brand awareness goes after a firm with a well-known awareness, the advertisement is affected negatively.

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	5.400 ^a	3	1.800	2.029	.114	.050
Intercept	2013.879	1	2013.879	2270.297	.000	.951
Brand recognition searched (BRS)	.674	1	.674	.760	.385	.007
Brand recognition hostile ads (BRHA)	1.984	1	1.984	2.237	.137	.019
BRS * BRHA	3.078	1	3.078	3.469	.065	.029
Error	102.898	116	.887			
Total	2149.073	120				
Corrected Total	108.298	119	a. R Squ	uared = .050 (Adju	sted R Sq	uared = .025)

Table 10: Two-way ANOVA test for attitude towards the advertisement

This is highlighted in the plot generated from the SPSS output in Figure 5, displaying how the interaction effect changes the consumers' attitude towards the hostile advertisement.

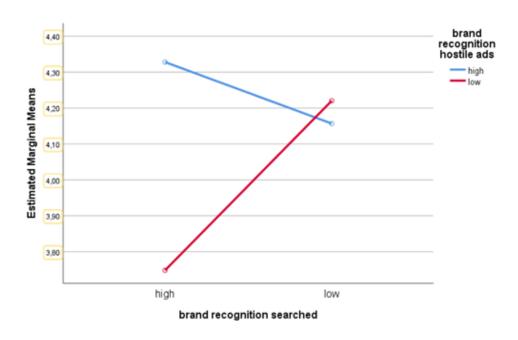


Figure 5: Plot of the interaction effect brand recognition of searched brand * brand recognition of hostile advertisement

5.4.5 - Testing the Concept of Hostile Bidding Effect on the Fairness

The final concept we wanted to test, was if consumers consider hostile bidding to be a fair strategy, our hypothesis being:

H4: Consumers will evaluate the action of firms executing a hostile bidding strategy, as unfair.

To test the hypothesis, we used the same approach as we did with H3, running a univariate/two-way ANOVA. We changed the dependent variable, the mean score from the attitude towards advertisement, and set the fixed factors to the two independent variables.

By looking at the Levene's test, see appendix 7, we saw that the p-value was greater than .05 (.367), indicating that we can go further with interpreting the two-way ANOVA results. As we can see from the output in Table 11, with a p-value of .445 > .05, hostile bidding does not have any effect on fairness. There is either any interaction effect with p-value .610 > .05.

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	1.439ª	3	.480	.897	.445	.025
Intercept	1728.712	1	1728.712	3231.656	.000	.969
Brand recognition searched (BRS)	.068	1	.068	.127	.722	.001
Brand recognition hostile ads (BRHA)	1.258	1	1.258	2.351	.128	.022
BRS * BRHA	.140	1	.140	.262	.610	.002
Error	56.168	105	.535			
Total	1796.728	109				
Corrected Total	57.607	108	a. R Squ	uared = .025 (Adju	sted R Sq	uared = .003)

Table 11: Two-way ANOVA test of fairness

5.4 Summary of Hypotheses and Key Findings

Table 12 provides a better overview of our hypotheses and the results. Three of the four hypotheses were rejected, something we predicted would happen after comparing the means between the groups. A key finding from our analysis, is that firms with high brand recognition are protected against smaller firms trying to execute the marketing strategy of hostile bidding. Another key finding is that hostile bidding does not affect the consumers' perception of the brand executing the strategy. Nevertheless, if a firm with low brand awareness goes after and buys keywords of a firm with high brand awareness, then the participants are more likely to get frustrated by the specific ad instead of the brand involved.

Hypothesis	Results
H1: Consumers will evaluate brands that are participating in hostile bidding strategies less favorably.	Rejected
H2: Consumers will evaluate brands with low recognition that are participating in hostile bidding strategies against a brand with high recognition more favorably.	Rejected
H3: The combination of level of recognition between the brand searched for and the brand using hostile advertisement, will have a negative effect on the hostile advertisement.	Supported with 90% confidence level.
H4: Consumers will evaluate the action of firms that execute a hostile bidding strategy as unfair.	Rejected

Table 12: Summary of hypotheses

6.0 Discussion

In the following section, we will discuss further each concept we have tested in our experiment and interpret the findings from the different analyses considering our research question.

6.1 Consumer Perception of Firms Executing Hostile Bidding

We know that in today's globalized and digitalized world, online marketing has become crucial for brands' success. Being present in the right channels could help to boost the perception of a brand. Consequently, we started to look at Google as a marketing platform and noticed a much-debated marketing strategy, namely hostile bidding. This made us wonder if and in that case to what extent, this kind of strategy impinge upon how consumers value firms using this strategy. As pointed out earlier, Densai, Shin & Staelin (2014) concluded that the use of hostile bidding among firms within a specific category, might create what is referred to as a prisoner's dilemma; in the long run, it is merely the search engines who will benefit financially from the strategy, That is why we ended up with our first hypothesis, H1: *Consumers will evaluate brands that are participating in hostile bidding strategies less favorably*.

Our results were surprising, as the hypothesis was rejected with a p-value of.193, being larger than .05 in our ANOVA analysis. So, we cannot state that there is a main effect. Consumers do not change their perception of a brand after having seen the hostile advertisement. Even though the hypothesis was rejected, the results are still interesting, since it indicates that firms can do as they please in terms of buying their competitors' brand names. This also confirms that previous authors are correct when stating that the sole benefit of this strategy is that the search engines will increase economic value. We found it strange that hostile bidding did not have any negative effect on consumers' opinions of a brand since in real life, the strategy would be equal to standing outside your competitors' store, dragging them into yours. One possible explanation could be that advertisements are rarely studied in

detail. Hence, the average consumer goes directly to the first organic link, and therefore, do not rate the brand executing the hostile bidding strategy negatively.

We also made a second hypothesis evolving around the change in perception of a firm using hostile bidding. We presumed, supported by previous literature, that the level of brand recognition had a significant effect on the perception of a brand executing a hostile bidding strategy. We started off with the assumption that if a smaller firm buys the keyword of a well-known firm, then they would be associated with the well-known firm, leading the customers to value their firm significantly more highly. Based on Desai, Shin & Staelin (2014), we made the following hypothesis, H2: Consumers will evaluate brands with low recognition that are participating in hostile bidding strategies against a brand with high recognition, more favorably.

Again, we were surprised by the result, the model was not statically significant (.193 > .05), nor was our interaction effect (brand recognition for the searched brand; brand recognition for hostile ads) (.182 > 0.5). We did not have the evidence to support H2, and whether a well-known brand or a less known brand that uses hostile bidding, it does not affect the consumers' perception of the brand. This was highlighted in the mean scores, where firms with both low and high brand awareness had a mean score around four, which equals the answer "Neither agree nor disagree".

6.2 Consumers Attitude towards The Hostile Advertisement

Another concept we were interested in was the consumers' attitude towards the hostile advertisement. We knew that this type of ads was much-debated among marketeers (Sperre & Valen-Utvik, 2019), and we also knew from previous literature that 77 percent of participants in a study preferred organic links over paid placements (Hotchkiss, Garrison & Jensen, 2005), pointing us in the direction that this marketing strategy is something the average consumer not thinks highly of. This was also tested by Joachims et al (2005). They found evidence that the first

result on the result page gained higher attention and was clicked on substantially more times. Likewise, an article builds on the framework of Rosenzweig (1944), showed that consumers get frustrated when they experience a poor match between their search query and the results displayed. Since we knew that level of brand recognition does not matter when it comes to consumers' perception of the brand, we thought it might have an effect on the specific hostile advertisement, leading to the following hypothesis: H3: The combination of the level of recognition between the brand searched for and the brand using hostile advertisement, will have a negative effect on the hostile advertisement.

The interaction effect between the level of recognition between brand searched for and brand using hostile bidding, turned out to be statistically significant with a 90 percent confidence interval (.065 > .10). This signifies that if a firm with low brand awareness buys keywords connected to the brand name of a firm with a well-known awareness, then the advertisement is affected negatively. The effect is interesting, since this gives firms with high brand awareness protection from being attacked by hostile bidding, and that low recognized firms should be careful with executing this type of marketing strategy as it can lower their perception among consumers. At the same time, firms with high brand recognition can attack smaller firms and get away with it. This was also the opposite of our presumption, that the hostile bidding strategy would benefit the firm with low brand awareness. Our theory for this result is that consumers do not get annoyed when they see hostile advertisements from a well-known brand. This is because they recognize the firm behind the ad and spend little time caring about the ad, but when a little well-known brand does the same something happens within the consumers' mind. They notice the ad since they never have seen the firm or seen ads from them before and this leads to the rating of the ad negatively. This could be explained by Sun & Spears (2011) based on the frustration framework presented originally by Rosenzweig (1944), that consumer frustration occurs when they experience a poor match between their search query and the result displayed.

6.3 Consumers Opinion about The Fairness of Hostile Bidding

The final concept we wanted to test was if the consumers considered hostile bidding to be a fair marketing strategy, which led to the following hypothesis, H4: Consumers will evaluate the action of firms executing a hostile bidding strategy, as unfair. When asked to describe the concept of hostile bidding with one word at the end of the survey, 16 percent of all participants answered that they regarded the strategy to be unfair. Reviewing the literature, we discovered that consumers assessed hostile bidding as an unethical business practice, as the firms leverage on their competitors by buying the branded keywords. Nguyen & Klaus (2013) supports this in their article. Pritchard's article also gives strength to this hypothesis, emphasizing that in situations where a person's output is lower than her/his inputs, inequity will occur. Equity occurs only when a person's outcome is similar to that of others, provided the same input from both parties.

The hypothesis regarding fairness was not supported by the two-way ANOVA test. Hostile bidding did not have any effect on fairness with a p-value of .445 > .05 and was therefore rejected. In addition, there was no interaction effect from the independent variables, which had a p-value of .610 > .05. The mean scores from fairness had a range from 3.89 - 4.17 which equals to somewhere between "Somewhat disagree" and "Neither agree nor disagree". Seen in combination with the mixed feedback the participants gave describing the marketing strategy with one word, it was no surprise that the results were not statistically significant.

6.4 Answer to our Research Question - Conclusion

Our research question for the paper was: "How will a firm's use of a hostile bidding strategy in Google affect consumers' perception of the brands that are involved?". We also examined if high or low brand recognition would have any effect on costumer's brand perception, their attitude towards the hostile advertisement and if they assess a hostile bidding strategy to be unfair. We know from the literature that hostile bidding is a much-debated marketing strategy, and from Google's increasing

ad revenue combined with a more crowded marketplace, firms could consider executing this type of strategy more often.

Our results do not support our research question. On the contrary, our results state that if a firm decides to buy their competitor's brand name, it will not affect their costumers' brand perception. The results provide marketers with more substantial theory to lean on, before deciding whether they should buy their competitor's brand name or not. The results also show that the hostile advertisement is affected negatively if a firm with low brand awareness buys keywords connected to the brand name of a firm with a well-known awareness. Even though firms with low brand recognition do not get hurt in terms of brand perception, their advertisements might get negatively affected if they use a hostile bidding strategy. This is an issue for firms with low brand recognition, because a negatively rated advertisement could lead to lower return on their marketing campaign investment. It can be decisive for a firm that has low awareness in the market to get the most out of their marketing budget, and they should consider not to buy keywords from firms with high recognition in the market.

7.0 Managerial and Theoretical Implications

This thesis identifies several valuable implications for managers, and especially for people working within digital marketing and e-commerce. To succeed in online marketing channels, managers need to make the right decisions, and these need to be supported by either experience or research. In today's world of marketing, there is an increasing focus on marketing activities that produce the highest possible return on investment. In order to obtain this, marketers need knowledge on how their decisions affect the consumers. That is why our aim was to examine how this hostile bidding strategy, that is firms piggybacking on competitors, will affect consumers' perception of the brands involved. An understanding of all parts of the online marketing strategy is crucial for firms to succeed, especially when digital advertising accounts for around half of the global advertising market.

Primarily, our research will support managers to gain a better understanding of how consumers react to hostile advertising; specifically by displaying that if a firm decides to buy another firm's brand name in Google, it will not affect the consumers' opinion about the firm executing the strategy, negatively. But, if managers from a firm with low brand awareness in a market, decide to buy their competitors high brand recognition in Google, then it could harm the low-awareness firm negatively. Having this in mind, managers from firms with low awareness should not execute this strategy, and rather focus on other marketing activities like SEO.

Managers could efficiently apply this insight when making online marketing decisions, using our findings as a guidance for when to execute a hostile bidding strategy and when not to.

8.0 Limitations and further research

The following section will consider our thesis' limitations and present possibilities for further research.

8.1 Limitations

In order to test how the use of hostile bidding affects consumers' perception of the brands involved, our study was concentrated and limited to TV brands. The results may vary across different industries and in different settings, for example low vs. high involvement of purchase - as mentioned with TV and clothes. Therefore, further research should consider involving more industries to measure effects across different industries and markets and include consumers' low/high involvement in search.

Our survey has a limited number of participants, and data from many participants had to be removed due to reasons discussed in the methodology section. Gathering participants turned out to be hard, despite pushing our survey on several platforms, both directly and indirectly. We acknowledge that it would have been more advantageous to have a higher number of participants in the main dataset for analysis and recommend further research to gather more respondents in order to generalize the results with greater certainty.

To avoid the participants finding out the goal of the study and thereby avoid bias, no information about hostile bidding was given until the end of the survey. We previously discussed that accounting for priming may have led to participants dropping out, although we do not have data to support this statement, besides our observation of many dropouts. When conducting a survey, asking participants to closely look at a picture, in order to answer questions about it later, it can be hard for them to remember what they saw. We will therefore state that too much focus on avoiding priming may lead to lost data as a result of dropouts, and further research should try to cope with this to collect more reliable data.

Our experiment was conducted through an online survey, and as mentioned, participants had to look at a picture and remember what they saw. Ideally, our experiment could have been conducted as a lab experiment with eye tracking, to measure which search results participants focused on when looking at the SERP. However, due to restriction of people getting together, and a somewhat closed society due to the recent COVID-19 outbreak, this was hard for us to carry out.

8.2 Further Research

This is a field in marketing research that there has been written very little about, leaving several future potential research questions to test. For further research, we recommend that the interaction effect between the level of recognition between brand searched for and brand using hostile bidding, is looked further into, to see how big the effect is on hostile advertisement.

Going further, it would also be interesting to replicate our study - using eye tracking as a measure - to see how much attention hostile bidding is given by the consumers. By using this technique, we would be able to see their actual online behavior, and it would remove the limitation that participants had to look at a picture and remember what they saw.

For further research, it would also be interesting to look deeper into different categories. In our study we tried to choose the most general consumer category we could think of in TV's. We cannot say with certainty that there would be no main effect in other consumer categories. Since a lot of the hostile bidding today comes from firms in the business to business area like banking, airlines, recruitment agencies etc.

Reference list

- Adams, J. S. (1963) Toward an understanding of inequity. Journal of Abnormal and Social Psychology, 67, 422-436.
- Adams, J. S. (1965). Inequity in social exchange. In L. Berkowitz (Ed.) Advances in experimental social psychology, Vol. 2. New York: Academic Press. Pp. 267-299
- Allen, M. (2017). Between-Subjects Design. *The SAGE Encyclopedia Of Communication Research Methods*. doi: 10.4135/9781483381411.n36
- Alphabet. (February 5, 2020). Advertising revenue of Google websites from 2001 to 2019 (in billion U.S. dollars) [Graph]. In Statista. Retrieved March 25, 2020, from https://www-statista-com.ezproxy.library.bi.no/statistics/266242/advertising-revenue-of-google-sites/
- Bertsimas, D., Farias, V., & Trichakis, N. (2011). The Price of Fairness. *Operations Research*, 59(1), 17-31. doi: 10.1287/opre.1100.0865
- Biel, A.L. & Bridgewater, C.A. (1990), Attributes of likable television commercials, "Journal of Advertising Research", 30, pp. 38-44.
- Bolton, L., Warlop, L., & Alba, J. (2003). Consumer Perceptions of Price (Un)Fairness. *Journal Of Consumer Research*, 29(4), 474-491. doi: 10.1086/346244
- Chan, D., & Van Alstine, L. (2020). Studies Show Search Ads Drive 89%

 Incremental Traffic. Retrieved 26 March 2020, from

 https://ai.googleblog.com/2011/07/studies-show-search-ads-drive-89.html

- Chen, Y., & He, C. (2011). Paid Placement: Advertising and Search on The Internet. *The Economic Journal*, *121*(556), F309-F328. Retrieved January 13, 2020, from www.jstor.org/stable/41301345
- Dean, B. (2019). We Analyzed 5 Million Google Search Results. Here's What We Learned About Organic CTR. Retrieved 13 January 2020, from https://backlinko.com/google-ctr-stats
- Desai, P., Shin, W., & Staelin, R. (2014). The Company That You Keep: When to Buy a Competitor's Keyword. *Marketing Science*, *33*(4), 485-508. doi: 10.1287/mksc.2013.0834
- EF Education First Ltd. (2019). *EF English Proficiency Index*. Retrieved from https://www.ef.no/__/~/media/centralefcom/epi/downloads/full-reports/v9/ef-epi-2019-english.pdf
- Elkjøp.no. (2020). Toppliste TV. Retrieved 1 May 2020, from https://www.elkjop.no/cms/toppliste-TV/lob-toppliste-tv/
- Enberg, J. (2019). Global Digital Ad Spending 2019. Retrieved 3 March 2020, from https://www.emarketer.com/content/global-digital-ad-spending-2019
- Fredriksen, S. (2019). 50 millioner Google-søk i døgnet. Retrieved 11 May 2020, from https://blogg.sorentio.no/markedsforing/50-millioner-google-sok-i-dognet/7153/
- Ghose, A., & Yang, S. (2009). An Empirical Analysis of Search Engine Advertising: Sponsored Search in Electronic Markets. Management Science, 55(10), 1605-1622. doi: 10.1287/mnsc.1090.1054
- Heimerl, F., Lohmann, S., Lange, S., & Ertl, T. (2014). Word Cloud Explorer:

 Text Analytics Based on Word Clouds. 2014 47Th Hawaii International

 Conference On System Sciences, 1833-1842. doi: 10.1109/hicss.2014.231

- Hotchkiss, G., Garrison, M., & Jensen, S. (2014). Search Engine Usage In North America [Ebook] (1st ed., p. 5 and p. 14). Kelowna, BC Canada: Enquiro Search Solutions. Retrieved from https://www.richswebdesign.com/SearchEngineUsageinNorthAmerica.pdf
- Jansen, B., & Resnick, M. (2006). An examination of searcher's perceptions of nonsponsored and sponsored links during ecommerce Web searching. *Journal Of The American Society For Information Science And Technology*, 57(14), 1949-1961. doi: 10.1002/asi.20425
- Jansen, B., & Spink, A. (2007). Sponsored Search: Is Money a Motivator for Providing Relevant Results?. *Computer*, 40(8), 52-57. doi: 10.1109/mc.2007.290
- Joachims, T., Granka, L., Pan, B., Hembrooke, H., & Gay, G. (2017). Accurately Interpreting Clickthrough Data as Implicit Feedback. ACM SIGIR Forum, 51(1), 4-11. doi: 10.1145/3130332.3130334
- Johannessen, S., & Klevstrand, A. (2019). Bank Norwegian vant Google-rettssak mot konkurrentene. Retrieved from https://www.dn.no/jus/bank-norwegian-vantgoogle-rettssak-mot-konkurrentene/2-1-512635
- Kahle, L. R. (1994). Handbook of marketing scales: Multi-item measures for marketing and consumer behavior research. P. 97. The Journal of Consumer Affairs, 28(2), 426. Retrieved from https://ezproxy.library.bi.no/login?url=https://search-proquestcom.ezproxy.library.bi.no/docview/195890710?accountid=142923
- Kim, L. (2018). SEO vs. PPC: When to Use Which Search Marketing Method for Maximum Profit. Retrieved 23 March 2020, from https://www.wordstream.com/blog/ws/2010/08/19/seo-vs-ppc

- Kung, F., Kwok, N., & Brown, D. (2017). Are Attention Check Questions a Threat to Scale Validity?. Applied Psychology, 67(2), 264-283. doi: 10.1111/apps.12108
- Laczniak, G., & Murphy, P. (1991). Fostering ethical marketing decisions. *Journal Of Business Ethics*, 10(4), 259-271. doi: 10.1007/bf00382965
- Lavrakas, P. (2018). Priming. *Encyclopedia Of Survey Research Methods*. doi: 10.4135/9781412963947.n399
- Lewandowski, D., Sünkler, S., & Kerkmann, F. (2017). Are Ads on Google Search Engine Results Pages Labeled Clearly Enough? In M. Gäde, V. Trkulja, & V. Petras (Hrsg.), Everything Changes, Everything Stays the Same? Understanding Information Spaces. Proceedings of the 15th International Symposium of Information Science (ISI 2017), Berlin, 13th—15th March 2017 (S. 62–74). Glückstadt: Verlag Werner Hülsbusch.
- Li, H., Kannan, P., Viswanathan, S., & Pani, A. (2016). Attribution Strategies and Return on Keyword Investment in Paid Search Advertising. *Marketing Science*, *35*(6), 831-848. doi: 10.1287/mksc.2016.0987
- Malhotra, N. (2010). *Marketing research : An applied orientation* (6th ed.). Boston: Pearson.
- McQuarrie, E.F. & Munson, J.M. (1987). "The Zaichkowsky Personal Involvement Inventory: Modification and Extension", in NA Advances in Consumer Research Volume 14, eds. Melanie Wallendorf and Paul Anderson, Provo, UT: Association for Consumer Research, Pages: 36-40.

- Næringslivets Konkurranseutvalg. (2019). Sak 6/2017 Næringslivets konkurranseutvalg. Retrieved from http://konkurranseutvalget.no/2017/sak-6-2017-article1337-668.html
- Nguyen, B., & Klaus, P. (2013). Retail fairness: Exploring consumer perceptions of fairness towards retailers' marketing tactics. Journal Of Retailing And Consumer Services, 20(3), 311-324. doi: 10.1016/j.jretconser.2013.02.001
- Olsen, S. (2019). Bang & Olufsens nye TV har «vinger» som bretter seg ut når du skrur den på. Retrieved 1 May 2020, from https://www.tek.no/nyheter/nyhet/i/g7RXrA/bang-olufsens-nye-tv-har-vinger-som-bretter-seg-ut-nar-du-skrur-de
- Petrescu, P. (2014). Google Organic Click-Through Rates in 2014. Retrieved 13 January 2020, from https://moz.com/blog/google-organic-click-through-rates-in-2014
- Presser, S., Couper, M., Lessler, J., Martin, E., Martin, J., Rothgeb, J., & Singer, E. (2004). Methods for Testing and Evaluating Survey Questions. Public Opinion Quarterly, 68(1), 109-130. doi: 10.1093/poq/nfh008
- Pritchard, R. (1969). Equity theory: A review and critique. Organizational Behavior And Human Performance, 4(2), 176-211. doi: 10.1016/0030-5073(69)90005-1
- Rosenzweig, S. (1944). An outline of frustration theory. In J. M. Hunt, *Personality and the behavior disorders* (p. 379–388). Ronald Press.
- Rosso, M., & Jansen, B. (2010). Brand Names as Keywords in Sponsored Search Advertising. *Communications Of The Association For Information Systems*, 27(1). doi: 10.17705/1cais.02706

- Sen, R. (2005). Optimal Search Engine Marketing Strategy. *International Journal Of Electronic Commerce*, 10(1), 9-25. doi: 10.1080/10864415.2005.11043964
- Showkat, N & Parveen, H. (2017). Non-Probability and Probability Sampling.

 Retrieved March 12, 2020, from

 https://www.researchgate.net/publication/319066480_Non
 Probability_and_Probability_Sampling
- Singh, S. (2018). Sampling Techniques. Retrieved 13 January 2020, from https://towardsdatascience.com/sampling-techniques-a4e34111d808
- Skrba, A. (2020). 30+ Google Search Engine Statistics 2020 (with Graphs).

 Retrieved 18 March 2020, from https://firstsiteguide.com/google-search-stats/
- Sperre, H. & Valen-Utvik, A. (2019, January 31.). #133 Dårlig oppførsel m/

 domenekjøp og hostile bidding i Google [Audio podcast]. Retrieved from:

 http://podcasts.apple.com/no/podcast/133-d%C3%A5rligoppf%C3%B8rsel-m-domenkj%C3%B8p-og-hostilebidding/id1092222638?i=1000427553068&l=nb
- Stangroom, J. (2020). One Way ANOVA in SPSS Including Interpretation.

 Retrieved 5 May 2020, from https://ezspss.com/one-way-anova-in-spss-including-interpretation/
- Statisticshowto.com. (2016). Internal Consistency Reliability: Definition,
 Examples. Retrieved 28 April 2020, from
 https://www.statisticshowto.com/internal-consistency/
- Statistisk sentralbyrå. (2019). Norsk mediebarometer. Retrieved 31 March 2020, from https://www.ssb.no/kultur-og-fritid/statistikker/medie/aar

- Sun, Q., & Spears, N. (2011). Frustration Theory: toward an understanding of keyword search effectiveness and consumer responses. *Journal Of Customer Behaviour*, 10(1), 35-48. doi: 10.1362/147539211x570500
- Triola, M.F. (2010). Elementary statistics. 11th edition. Pearson.
- Vannette, D. (2016). "Testing the Effects of Different Types of Attention Interventions on Data Quality in Web Surveys. Experimental Evidence From a 14 Country Study." Paper presented at the 71st Annual Conference of the American Association for Public Opinion Research in Austin, TX.
- Vannette, D. (2017). Using Attention Checks in Your Surveys May Harm Data
 Quality. Retrieved 28 April 2020, from
 https://www.qualtrics.com/blog/using-attention-checks-in-your-surveysmay-harm-data-quality/
- Xia, L., Monroe, K., & Cox, J. (2004). The Price is Unfair! A Conceptual Framework of Price Fairness Perceptions. *Journal Of Marketing*, 68(4), 1-15. doi: 10.1509/jmkg.68.4.1.42733
- Yalçın, N., & Köse, U. (2010). What is search engine optimization: SEO?. *Procedia - Social And Behavioral Sciences*, 9, 487-493. doi: 10.1016/j.sbspro.2010.12.185
- Yang, S., & Ghose, A. (2010). Analyzing the Relationship Between Organic and Sponsored Search Advertising: Positive, Negative, or Zero Interdependence? Marketing Science, 29(4), 602-623. Retrieved January 14, 2020, from www.jstor.org/stable/40864637
- Yao, S., & Mela, C. F. (2011). A dynamic model of sponsored search advertising.

 Marketing Science, 30(3), 447-468.

 https://doi.org/10.1287/mksc.1100.0626

Yoo, B. & Donthu, N. (2001). Developing and Validating a Multidimensional Consumer-Based Brand Equity Scale. Journal of Business Research. 52. 1-14. 10.1016/S0148-2963(99)00098-3.

Appendix

Appendix 1 - Pre-Survey Output Survey Flow

Block: Introduction (2 Questions)

BlockRandomizer: 1 - Evenly Present Elements

Block: Group 1 - No description of HB - Stimuli with HB (2 Questions)

Standard: Group 2 - Description of "Hostile Bidding" - Stimuli without Hostile Bidding (3 Questions)

Standard: Group 3 - Description of "Hostile Bidding" - Stimuli without Hostile Bidding (3 Questions)

Standard: Group 4 - Without description of "Hostile Bidding" - Stimuli without Hostile Bid (2 Questions)

Standard: Follow-up question regarding Hostile Bidding (1 Question)

Standard: Demographics (4 Questions)

Start of Block: Introduction

Q6 This survey is conducted as a part of our master thesis in Strategic Marketing Management at BI Norwegian Business School. The survey aims to build our

understanding of consumers' behaviour and attitudes towards Google advertising.

All of your answers will be held anonymous and will be held confidential. We want

to thank you for participating in our survey, it will be very beneficial for our master

thesis.

The survey will only take around 3 minutes to complete, and we appreciate if you

answer all questions in the survey for us to get satisfying results.

Any questions regarding the survey can be sent to:

-> Martin Skraastad: Martin.skraastad@gmail.com

-> Tim Viskjer: t.viskjer@gmail.com

Page Break

Q21 Let's picture the following scenario: You are looking to apply for a new credit

card. You first discuss with your friends and they recommend applying for a credit

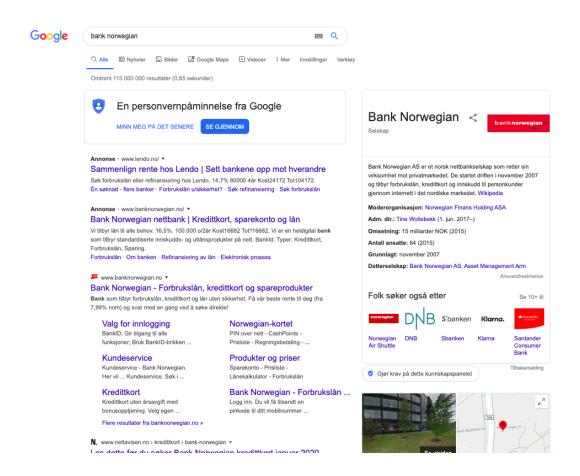
card by Bank Norwegian. First step in the process is to Google for it. Keep this

scenario in mind for the following question(s).

End of Block: Introduction

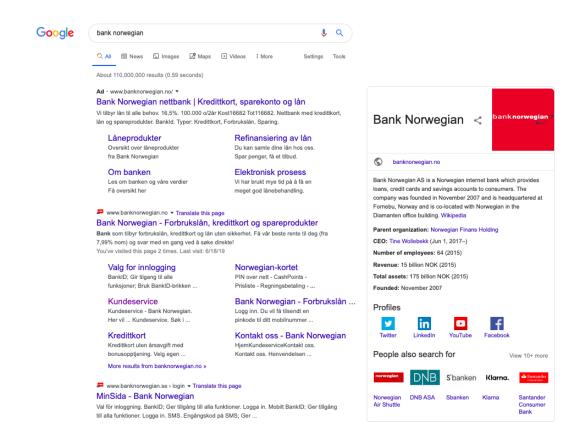
Start of Block: Group 1 - No description of HB - Stimuli with HB

Q8 Take a moment and study the results of your search for a Bank Norwegian credit card before continuing the survey...



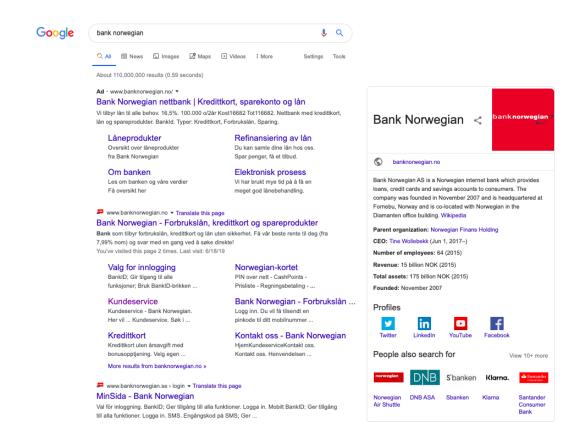
Q5 Was there a competing advertisement present in the Google Search Results?
O No, I only saw Bank Norwegian content (1)
O Yes, I saw an ad for another credit card company (2)
End of Block: Group 1 - No description of HB - Stimuli with HB
Start of Block: Group 2 - Description of "Hostile Bidding" - Stimuli without Hostile Bidding
is when companies buy each other's brand name in Google. For example, if you Google "Brand A", you would get advertisement from "Brand B" and "Brand C" as the first results despite that you search for "Brand A".
Page Break
Page Break
Page Break

Q10 Take a moment and study the results of your search for a Bank Norwegian credit card before continuing the survey...



Q11 Was there a competing advertisement present in the Google Search Results?
O No, I only saw Bank Norwegian content (1)
O Yes, I saw an ad for another credit card company (2)
End of Block: Group 2 - Description of "Hostile Bidding" - Stimuli without Hostile Bidding
Start of Block: Group 3 - Description of "Hostile Bidding" - Stimuli without Hostile Bidding
Q14 The concept we are doing research on is something called Hostile Bidding. This is when companies buy each other's brand name in Google. For example, if you Google "Brand A", you would get advertisement from "Brand B" and "Brand C" as the first results despite that you search for "Brand A".
Page Break

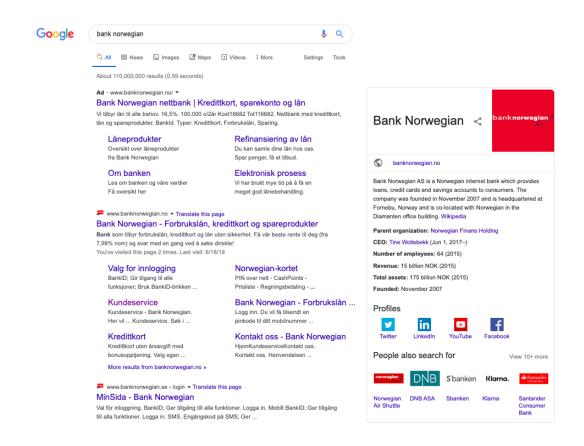
Q23 Take a moment and study the results of your search for a Bank Norwegian credit card before continuing the survey...



End of Block: Group 3 - Description of "Hostile Bidding" - Stimuli without Hostile Bidding

Start of Block: Group 4 - Without description of "Hostile Bidding" - Stimuli without Hostile Bid

Q17 Take a moment and study the results of your search for a Bank Norwegian credit card before continuing the survey...



Q15 How would you describe your overall satisfaction of this result?
C Extremely satisfied (1)
O Moderately satisfied (2)
O Slightly satisfied (3)
O Neither satisfied nor dissatisfied (4)
O Slightly dissatisfied (5)
O Moderately dissatisfied (6)
O Extremely dissatisfied (7)
Page Break
End of Block: Group 4 - Without description of "Hostile Bidding" - Stimuli without Hostile Bid
Start of Block: Follow-up question regarding Hostile Bidding

Q26 Have you ever searched for specific brands/services/products on a search engine like Google/Yahoo/Bing and experiences that competing brands/services/products have been displayed higher among the search results as paid advertisement?

Example: You search for "NIKE SHOES", but the two first search results are advertisements for other brands like "ADIDAS", "REEBOOK"
Yes, I have experienced this (1)
O Unsure if I have experienced this (2)
O No, I have never experienced this (3)
End of Block: Follow-up question regarding Hostile Bidding
Start of Block: Demographics
Q16 What is your age?
O Under 18 (1)
O 18 - 24 (2)
O 25 - 34 (3)
O 35 - 44 (4)
O 45 - 54 (5)
O 55 - 64 (6)
○ 65 or older (7)

Q17 What is your gender?
O Male (1)
O Female (2)
O I decline to answer (3)
Q18 What is your current employment status?
O Full-time student (1)
O Full-time student and working (2)
O Part-time student and working (3)
O Working professional (4)
O Unemployed (5)
Retired (6)
Other (7)

Q19 What is the highest degree or level of school you have completed? Less than high school (1) O High school graduate (2) O Some college/university (3) Bachelor degree (4) Master degree (5) O Doctorate (6) **End of Block: Demographics** Appendix 2 - Main Survey output **Survey Flow Block: Introduction (1 Question) BlockRandomizer: 1 - Evenly Present Elements** Block: Group 1 - No "Hostile Bidding" present (4 Questions) Standard: Group 2 - "Hostile bidding present" - BR = Low/Low (6 Questions) Standard: Group 3 - "Hostile Bidding" present - BR = High/Low (6 Questions) Standard: Group 4 - "Hostile Bidding" present - BR = Low/High (6 Questions) Standard: Group 5 - "Hostile Bidding is present" - BR = High/high (6 Questions) Standard: Questions regarding attitude towards the advertisement (1 Question) Standard: Questions regarding perception of brand using hostile bidding (1 Question) Standard: Questions regarding the concept of fairness (1 Question) Standard: Wordcloud - participants are asked to describe "HB" with one word (1 Question) **Standard: Demographics (2 Questions)** Page Break

Start of Block: Introduction

Page Break

Q6 This survey is conducted as a part of our master thesis in **Strategic Marketing Management** at **BI Norwegian Business School.** The survey aims to build our understanding of consumers' behavior and attitudes towards brands that use Google advertising.

All of your answers will be held anonymous and will be held confidential. We want to thank you for participating in our survey, it will be very beneficial for our master thesis.

The survey will only take around 6-8 minutes to complete, and we appreciate if you answer all questions in the survey for us to get satisfying results. We encourage you to read the questions carefully.

Any	questions	regarding	the	survey	can	be	sent	to:
->	Martin	Skra	aastad:	Λ	Aartin.sk	raasta	d@gmai	il.com
-> Tim	ı Viskjer: T.visi	kjer@gmail.co	om.					

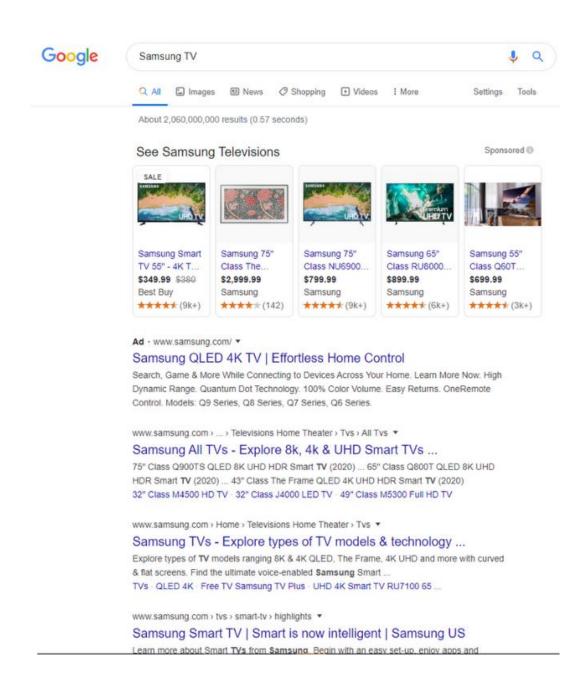
End of Block: Introduction

Start of Block: Group 1 - No "Hostile Bidding" present

Q37 Let's picture the following scenario: You are wondering about buying a new TV. You first discuss with your friends, then you look at social media and blogs to evaluate which brand is best for you. In this scenario, you decide that you want to buy a new TV from Samsung, so the first step in this scenario is that you Google for this brand. Keep this scenario in mind for the following question(s).

Page Break

Q36 Please use some time to study the following Google search result (picture below) you got when you searched for a Samsung TV. The following questions will be associated with the picture of the search result, so take a close look at everything from how many results you generated, advertisements below the search field and the result list etc.



Page Brea											
Q22 With	the scena	rio in min	d, please a	nswer the	following s	tatement	s about the				
Samsung brand using your personal opinion											
	he scenario ng your pers				statements ab	out the Sa	msung				
	Strongly disagree (8)	Disagree (9)	Somewhat disagree (10)	Neither agree nor disagree (11)	Somewhat agree (12)	Agree (13)	Strongly agree (14)				
I consider myself to be loyal to the Samsung brand (1)	0	0	0	0	0	0	0				
Samsung would be my first choice of TV brands (4)	0	0	0	0	0	0	0				
I will not buy other brands if Samsung is available at the store (5)	0	0	0	0	0	0	0				

Q28 With your scenario in mind, please answer the following statements about the TV category in general

-	Strongly disagree (8)	Disagree (9)	Somewhat disagree (10)	Neither agree nor disagree (11)	Somewhat agree (12)	Agree (13)	Strongly agree (14)
It is something that interests me. (1)	0	0	0	0	0	0	0
I get bored when people talk to me about it. (4)	0	0	0	0	0	0	0
I do not pay attention to information about it in magazines, on TV, or in stores (5)	0	0	0	0	0	0	0
When I am with a friend, we occasionally talk about it. (6)	0	0	0	0	0	0	0

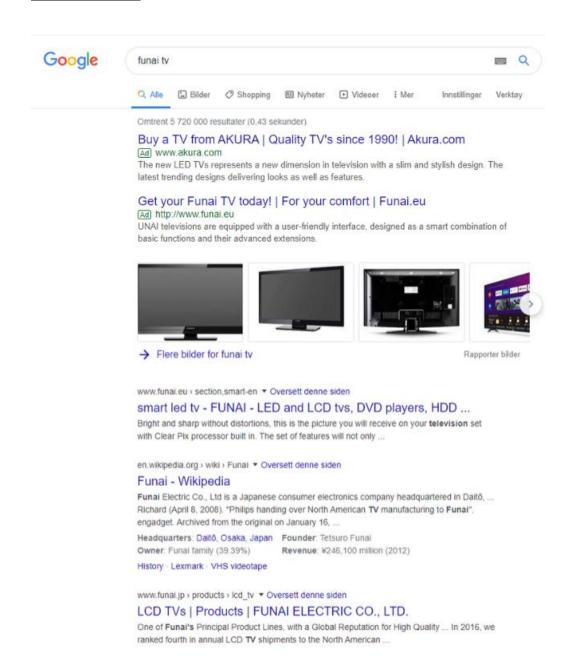
End of Block: Group 1 - No "Hostile Bidding" present

Start of Block: Group 2 - "Hostile bidding present" - BR = Low/Low

Q38 Let's picture the following scenario: You are wondering about buying a new TV. You first discuss with your friends, then you look at social media and blogs to evaluate which brand is best for you. In this scenario, you decide that you want to buy a new TV from Funai, so the first step in this scenario is that you Google for this brand. Keep this scenario in mind for the following question(s).

Page Break			

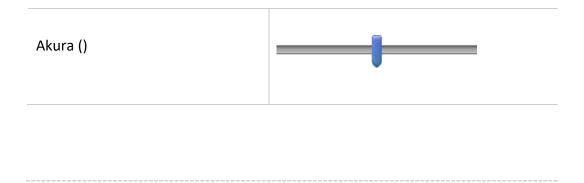
Q65 Please use some time to study the following Google search result (picture below) you got when you searched for a Funai TV. The following questions will be associated with the picture of the search result, so <u>take a close look at everything</u> from how many results you generated, advertisements below the search field and the result list etc.



	Strongly disagree (8)	Disagree (9)	Somewhat disagree (10)	Neither agree nor disagree (11)	Somewhat agree (12)	Agree (13)	Strongl agree (14)
l consider myself to be loyal to the Funai brand (1)	0	0	0	0	0	0	0
Funai would be my first choice of TV brands (4)	0	0	0	0	0	0	0
I will not buy other brands if Funai is available at the store (5)	0	0	0	0	0	0	0

Q28 In your own opinion, how would you rate the following TV brand? (1 = very bad) (7= very good)

1 2 3 4 4 5 6 7



Q29 With your scenario in mind, please answer the following statements about the TV category in general

	Strongly disagree (8)	Disagree (9)	Somewhat disagree (10)	Neither agree nor disagree (11)	Somewhat agree (12)	Agree (13)	Strongly agree (14)
It is something that interests me. (1)	0	0	0	0	0	0	0
I get bored when people talk to me about it. (4)	0	0	0	0	0	0	0
I do not pay attention to information about it in magazines, on TV, or in stores (5)	0	0	0	0	0	0	0
When I am with a friend, we occasionally talk about it. (6)	0	0	0	0	0	0	0

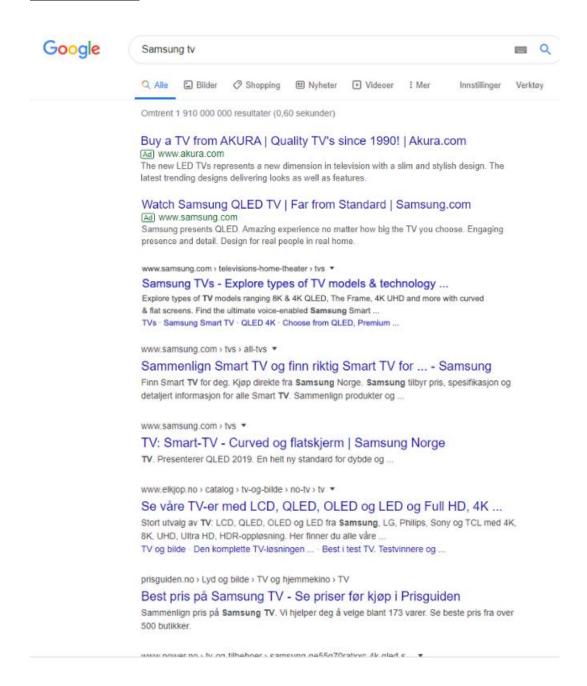
End of Block: Group 2 - "Hostile bidding present" - BR = Low/Low

Start of Block: Group 3 - "Hostile Bidding" present - BR = High/Low

Q39 Let's picture the following scenario: You are wondering about buying a new TV. You first discuss with your friends, then you look at social media and blogs to evaluate which brand is best for you. In this scenario, you decide that you want to buy a new TV from Samsung, so the first step in this scenario is that you Google for this brand. Keep this scenario in mind for the following question(s).

Page Break			

Q57 Please use some time to study the following Google search result (picture below) you got when you searched for a Samsung TV. The following questions will be associated with the picture of the search result, so take a close look at everything from how many results you generated, advertisements below the search field and the result list etc.



amsung	brand us	ing your p	personal op	inion			
	Strongly disagree (8)	Disagree (9)	Somewhat disagree (10)	Neither agree nor disagree (11)	Somewhat agree (12)	Agree (13)	Strongly agree (14)
consider myself to be loyal to the Samsung brand (1)	0	0	0	0	0	0	0
Samsung would be my first choice of TV brands (4)	0	0	0	0	0	0	0
I will not buy other brands if Samsung is available at the store (5)	0	0	0	0	0	0	0

Q33 Have you heard about the following TV Brand: Akura									
O No (1)									
○ Yes (2)									
Skip To: Q30 If Q33 = No									
Q29 In your own opinion, how wou bad) (7= very good)	ıld you	rate tl	he fol	lowin	ıg TV	bran	d? (1	= very	
	1	2	3	4	4	5	6	7	
Akura ()	-	_		 	_	_			

Q30 With your scenario in mind, please answer the following statements about the TV category in general

	Strongly disagree (8)	Disagree (9)	Somewhat disagree (10)	Neither agree nor disagree (11)	Somewhat agree (12)	Agree (13)	Strongly agree (14)
It is something that interests me. (1)	0	0	0	0	0	0	0
I get bored when people talk to me about it. (4)	0	0	0	0	0	0	0
I do not pay attention to information about it in magazines, on TV, or in stores (5)	0	0	0	0	0	0	0
When I am with a friend, we occasionally talk about it. (6)	0	0	0	0	0	0	0

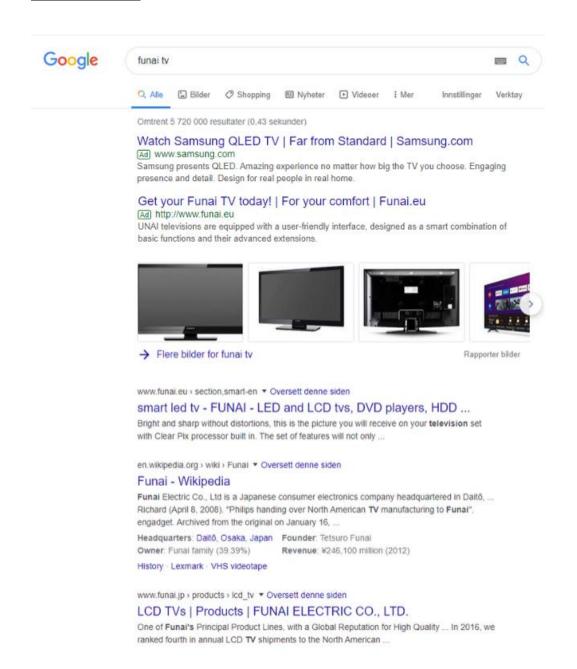
End of Block: Group 3 - "Hostile Bidding" present - BR = High/Low

Start of Block: Group 4 - "Hostile Bidding" present - BR = Low/High

Q40 Let's picture the following scenario: You are wondering about buying a new TV. You first discuss with your friends, then you look at social media and blogs to evaluate which brand is best for you. In this scenario, you decide that you want to buy a new TV from Funai, so the first step in this scenario is that you Google for this brand. Keep this scenario in mind for the following question(s).

Page Break		

Q66 Please use some time to study the following Google search result (picture below) you got when you searched for a Funai TV. The following questions will be associated with the picture of the search result, so <u>take a close look at everything</u> from how many results you generated, advertisements below the search field and the result list etc.



Page Break			
rage Dieak			
8			

Q35 With the scenario in mind, please answer the following statements about the Funai brand using your personal opinion

	Strongly disagree (8)	Disagree (9)	Somewhat disagree (10)	Neither agree nor disagree (11)	Somewhat agree (12)	Agree (13)	Strongly agree (14)
I consider myself to be loyal to the Funai brand (1)	0	0	0	0	0	0	0
Funai would be my first choice of TV brands (4)	0	0	0	0	0	0	0
I will not buy other brands if Funai is available at the store (5)	0	0	0	0	0	0	0

O No (1)
O NO (1)
O Yes (2)
Skip To: Q31 If Q34 = No
Q30 In your own opinion, how would you rate the following TV brand? (1 = verbad) (7= very good)
1 2 3 4 4 5 6 7
Samsung ()

Q31 With your scenario in mind, please answer the following statements about the TV category in general

	Strongly disagree (8)	Disagree (9)	Somewhat disagree (10)	Neither agree nor disagree (11)	Somewhat agree (12)	Agree (13)	Strongly agree (14)
It is something that interests me. (1)	0	0	0	0	0	0	0
I get bored when people talk to me about it. (4)	0	0	0	0	0	0	0
I do not pay attention to information about it in magazines, on TV, or in stores (5)	0	0	0	0	0	0	0
When I am with a friend, we occasionally talk about it. (6)	0	0	0	0	0	0	0

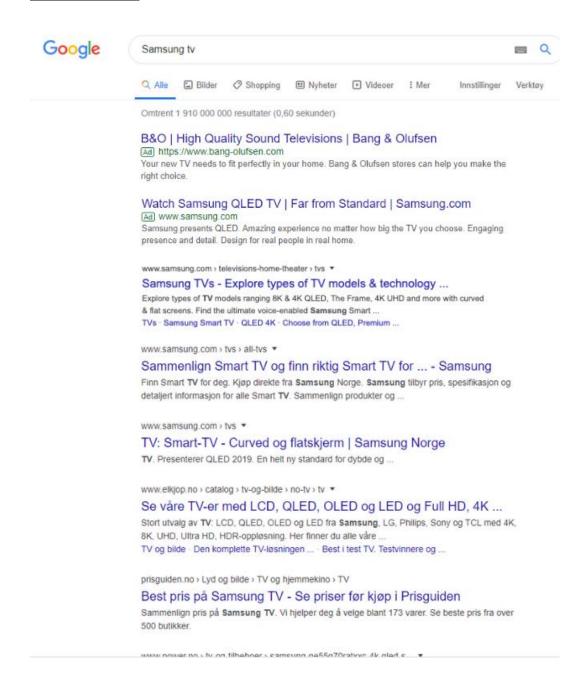
End of Block: Group 4 - "Hostile Bidding" present - BR = Low/High

Start of Block: Group 5 - "Hostile Bidding is present" - BR = High/high

Q31 Let's picture the following scenario: You are wondering about buying a new TV. You first discuss with your friends, then you look at social media and blogs to evaluate which brand is best for you. In this scenario, you decide that you want to buy a new TV from Samsung, so the first step in this scenario is that you Google for this brand. Keep this scenario in mind for the following question(s).

Page Break			

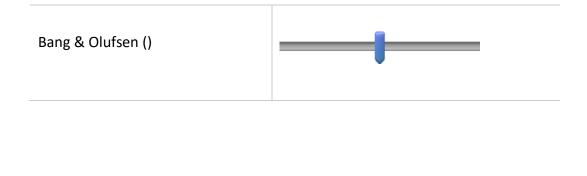
Q40 Please use some time to study the following Google search result (picture below) you got when you searched for a Samsung TV. The following questions will be associated with the picture of the search result, so take a close look at everything from how many results you generated, advertisements below the search field and the result list etc.



	Strongly disagree (8)	Disagree (9)	Somewhat disagree (10)	Neither agree nor disagree (11)	Somewhat agree (12)	Agree (13)	Strongly agree (14)
consider myself to be loyal to the Samsung brand (1)	0	0	0	0	0	0	0
Samsung would be my first choice of TV brands (4)	0	0	0	0	0	0	0
I will not buy other brands if Samsung is available at the store (5)	0	0	0	0	0	0	0

Q31 In your own opinion, how would you rate the following TV brand? (1 = very bad) (7= very good)

1 2 3 4 4 5 6 7



Q32 With your scenario in mind, please answer the following statements about the TV category in general

	Strongly disagree (8)	Disagree (9)	Somewhat disagree (10)	Neither agree nor disagree (11)	Somewhat agree (12)	Agree (13)	Strongly agree (14)
It is something that interests me. (1)	0	0	0	0	0	0	0
I get bored when people talk to me about it. (4)	0	0	0	0	0	0	0
I do not pay attention to information about it in magazines, on TV, or in stores (5)	0	0	0	0	0	0	0
When I am with a friend, we occasionally talk about it. (6)	0	0	0	0	0	0	0

End of Block: Group 5 - "Hostile Bidding is present" - BR = High/high

Start of Block: Questions regarding attitude towards the advertisement



Q72 In the Google search results you were shown earlier in your scenario where you searched for either a Samsung or Funai TV (picture of Google results), there was an advertisement from a different TV brand as the first result. Based on this

information, and your given scenario, <u>please state how much you agree or disagree</u> with the following statements about the advertisement in the search results.

	Strongly disagree (27)	Disagree (28)	Somewhat disagree (29)	Neither agree nor disagree (30)	Somewhat agree (31)	Agree (32)	Strongly agree (33)
I find this advertisement convincing (1)	0	0	0	0	0	0	0
I find this advertisement intelligent (2)	0	0	0	0	0	0	0
The advertisement shows the product's qualities (4)	0	0	0	0	0	0	0
This is an attention check, please choose "Agree" on the scale (5)	0	0	0	0	0	0	0
The advertisement is pleasant to look at (6)	0	0	0	0	0	0	0
The advertisement is informative (9)	0	0	0	0	0	0	0
- Page Break							
End of Block: C	Questions	regarding a	attitude tow	vards the a	dvertiseme	nt	

Start of Block: Questions regarding perception of brand using hostile bidding

Q73 In the Google search results you were shown earlier in your scenario where you searched for either a Samsung or Funai TV (picture of Google results), there was an advertisement from a different TV brand as the first result. Based on this information, and your given scenario, please state how much you agree or disagree with the following statements about the advertisement in the search results.

	Strongly disagree (15)	Disagree (16)	Somewhat disagree (17)	Neither agree nor disagree (18)	Somewhat agree (19)	Agree (20)	Strongly agree (21)
The brand in the ad is likely to possess the stated ad claims (1)	0	0	0	0	0	0	0
I react favourably to the brand (2)	0	0	0	0	0	0	0
I feel positively towards the brand (3)	0	0	0	0	0	0	0
I dislike the brand (6)	0	0	0	0	0	0	0
I am more interestend in the brand as a result of seeing the message (5)	0	0	0	0	0	0	0

End of Block: Questions regarding perception of brand using hostile bidding

Start of Block: Questions regarding the concept of fairness

Q38 In the Google search results you were shown earlier in your scenario where you searched for either a Samsung or Funai TV (picture of Google results), there was an advertisement from a different TV brand as the first result. Based on this

information, and your given scenario, <u>please state how much you agree or disagree</u> with the following statements about the advertisement in the search results.

	Strongly disagree (15)	Disagree (16)	Somewhat disagree (17)	Neither agree nor disagree (18)	Somewhat agree (19)	Agree (20)	Strongly agree (21)
The brand is fair (1)	0	0	0	0	0	0	0
The brand is unreasonable (2)	0	0	0	0	0	0	0
The brand is honest (8)	0	0	0	0	0	0	0
The brand is unfair (4)	0	0	0	0	0	0	0
The brand is unacceptable (5)	0	0	0	0	0	0	0
The brand is questionable (6)	0	0	0	0	0	0	0

End of Block: Questions regarding the concept of fairness

Start of Block: Wordcloud - participants are asked to describe "HB" with one word

Q30 The concept we are conducting research on is something called Hostile Bidding. This is when a firm buys another firm's brand name in Google. For example, if you Google "Brand A", you would get advertisement from "Brand B" and "Brand C" as the first results, despite that you search for "Brand A". <u>Describe your opinion about this concept in ONE WORD - (We accept both English and Norwegian words).</u>

End of Block: Wordcloud - participants are asked to describe "HB" with one word

Start of Block: Demographics

Q16 What is your age?	
Q17 What is your gender?	
O Male (1)	
Female (2)	
O I decline to answer (3)	
End of Block: Demographics	

${\bf Appendix} \ {\bf 3-Word} \ {\bf Cloud} \ {\bf Data} \ {\bf Transcription}$

Smart	13	Default	Default	Default	•
Annoying	10	Default	Default	Default	•
Unethical	8	Default	Default	Default	*
Unfair	8	Default	Default	Default	•
Sneaky	6	Default	Default	Default	*
Misleading	4	Default	Default	Default	*
Wrong	4	Default	Default	Default	*
Cunning	3	Default	Default	Default	•
Dishonest	3	Default	Default	Default	•
Interesting	3	Default	Default	Default	*
Ok	3	Default	Default	Default	*
Trickery	3	Default	Default	Default	*
Confusing	2	Default	Default	Default	*
Dislike	2	Default	Default	Default	*
Expected	2	Default	Default	Default	*
Fair	2	Default	Default	Default	*
Manipulative	2	Default	Default	Default	*
Naughty	2	Default	Default	Default	*
Not	2	Default	Default	Default	*
	_				

Appendix 4 - Internal Consistency Reliability for all the Three Concepts

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
,669	,653	16

$Appendix \ 5-Test \ of \ Homogeneity \ of \ Variances$

	Test of Homogenei	ty of Variance	5		
		Levene Statistic	df1	df2	Sig.
Overallscore_perception_ brand_that_uses_HB	Based on Mean	1,276	3	112	,286
	Based on Median	1,099	3	112	,353
	Based on Median and with adjusted df	1,099	3	97,382	,354
	Based on trimmed mean	1,122	3	112	,343

Appendix 6 - Levene's Test of Equality of Error Variances

Levene's Test of Equality of Error Variances a,b

		Levene Statistic	df1	df2	Sig.
Overallscore_attitude_to wards_ad	Based on Mean	1,681	3	116	,175
	Based on Median	1,585	3	116	,197
	Based on Median and with adjusted df	1,585	3	106,711	,197
	Based on trimmed mean	1,620	3	116	,188

Appendix 7 - Levene's Test of Equality of Error Variances

Levene's Test of Equality of Error Variances a,b

		Levene Statistic	df1	df2	Sig.
Overallscore_fairness	Based on Mean	1,066	3	105	,367
	Based on Median	,644	3	105	,589
	Based on Median and with adjusted df	,644	3	82,058	,589
	Based on trimmed mean	,781	3	105	,507

Appendix 7 - Preliminary Thesis Report

BI Norwegian Business School - Preliminary Thesis Report

- How does "Hostile Bidding" affect consumers' perception of a company's brand? -

Supervisor:

Auke Hunneman

Hand-in date:

15.01.2020

Campus:

BI Oslo

Examination code and name:

GRA 1970 Master Thesis

Programme:

Master of Science in Strategic Marketing Management

Content

1.0 INTRODUCTION	1
1.1 HOSTILE BIDDING	
1.2 RESEARCH QUESTION	
2.0 LITERATURE REVIEW	0
2.1 SEARCH ENGINE RESULT PAGES (SERP)	6
2.2 Online Marketing strategies	7
2.3 Online consumer behavior	9
3.0 RESEARCH METHODOLOGY AND DESIGN	11
4.0 PLAN FOR DATA COLLECTION AND ANALYSES	12
5.0 CONTRIBUTION AND MANAGERIAL IMPLICATIONS	14
6.0 REFERENCES	15

1.0 Introduction

As former CEO of J.P. Morgan Chase, Douglas Warner once said, "In the world of Internet Customer Service, it's important to remember that your competitor is only one mouse click away." (Pickard, 2015). With that quote in mind, being present in the same online channels as your competitors has never been more important, and at the same time extremely crowded. A channel that a lot of digital marketers use today is Google, a staggering 116.3 billion US dollars where generated in ad revenue for Google in 2018 (Alphabet, 2019). It is not only companies that spend a huge amount of money and time on Google, but they also depend on the use of us as consumers. Today, Google gets over 63,000 searches per second on any given day and an average person conducts 3–4 searches on a daily basis (Sullivan, 2016) and 35 percent of all product searches start on Google (Garcia, 2018). This gives marketers many possibilities to target their product or service directly to consumers through an online marketing strategy.

Consumers can with the use of search engine result pages (SERPs) like Google, Bing and, Yahoo, search for products and services in order to fulfill a need they might have. Today, Google and other SERPs present consumers with two different types of search results, organic and paid. The organic result is natural results based upon the search engine algorithms and how a company has optimized their website and its content, this process is commonly referred to as search engine optimization (SEO). Paid results are advertisement results based upon keywords that companies have to pay for in order to be displayed as the top results for the consumer, this is referred to as search engine marketing (SEM) and the search results are labeled as ads. Both SEO and SEM aim to enhance the click-through-rate for companies or to put it in a simpler context, increase the traffic on their website. More traffic on a website increases the possibility of higher profit for a product or a service, and with a highly competitive marketplace, companies need to put up a fight to capture value.

With a tremendous number of websites available, SERPs have given access to an enormous amount of information and companies have to differentiate themselves in order to be chosen by consumers. However, a new online marketing practice that violates previously good business ethics and challenging laws regarding marketing, is becoming more popular both in Norway and internationally. This online marketing activity is something called hostile bidding where companies buy competitors' names as keywords in order for them to be the first paid result over competitors, in other words, companies are leveraging on competitors' brand equity.

1.1 Hostile bidding

Hostile bidding is the activity when a company bid and buy branded search terms for its competitors, such as their brand names. The term is also referred to as AdWords competitor targeting, for this kind of activity on the Google platform (Smith, 2018). The idea is when a consumer type in a specific brand name, they are shown ads in the form of search results, by that brand's competitors.

The company you searched for should be shown as the first search result based upon SEO and organic searches, but competitors might try to leverage this in order to get customers to buy their service or product instead of the specific brand that is actually searched for (Smith, 2019). In offline marketing, it is comparable to if a Burger King employee trying to drag you into their restaurants on your way into McDonald's in a last desperate attempt to change customer behavior. There is a difference in what kind of industries that hostile bidding occurs more in, and it is more often in highly competitive markets it happens. A good "real life" example (fig. 1) of the consumer credit industry in Norway where a search for consumer credit together with the brand names of Norway's biggest banks displays a big competitor as the first paid ad result.

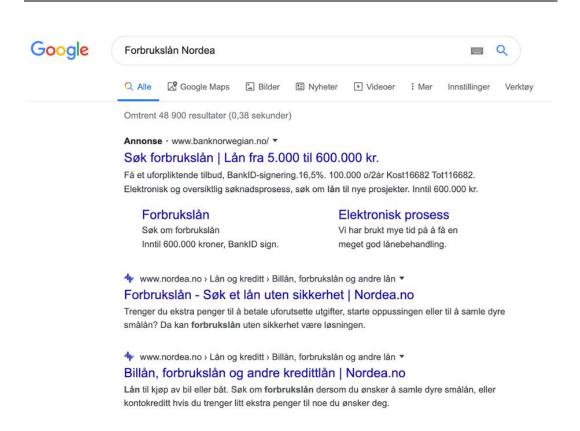


Fig. 1 Screenshot of a hostile bidding strategy conducted by Bank Norwegian

In Norway, hostile bidding is currently heavily debated among companies in different industries, marketers and the Norwegian Competition Commission. The latter has stated that hostile bidding is a violation of good business practice, despite that there is no likelihood of confusion of brand names (Næringslivets Konkurranseutvalg, 2019). One of the Norwegian companies that are heavily using this practice is Bank Norwegian, one of Norway's biggest consumer credit banks. They have with the use of Google AdWords, bought competitors' names as keywords so that when consumers use Google and type in a specific brand as a keyword, Bank Norwegian will be their first result as a paid ad.

Bank Norwegian's strategy has been discussed among its competitors that believed they broke the law. In 2018, the competitors Komplett Bank, Ikano Bank and Monobank took the matter to the Norwegian Competition Authority, which concluded that Bank Norwegian had acted unfairly and exploited competitors'

brand names, buying keywords such as "Monobank" and "Komplett bank" (Johannessen & Klevstrand, 2019). Because of this, the competitors filed a lawsuit against Bank Norwegian. In 2019, Asker and Bærum District Court stated that they did not believe that Bank Norwegian exploited competitors when the bank bought ad space with their characteristics in Google search results. The court was not convinced that the Norwegian Marketing Act sets limits for Bank Norwegians' practice; a practice nor the special legislation protecting the trademark against, and Norwegian Bank was exonerated acquitted.

Some marketers believe that this hostile strategy both has pros and cons for companies using it as the outcome actually can increase your performance online. Using the strategy can increase your company's brand awareness and open your products and services for consumers who might not have known about your company. However, if your company uses this strategy and leverage from it, competitors can follow and start buying keywords for your company, leading to a race to the bottom (Cummins, 2019).

On the other side of this debate, we have the consumers who actually use search engines like Google in order to fulfill a potential need they might have. They also have an important role in this practice as they are the ones who experience the effect of hostile bidding. Many consumers might not even think about the display of company B when searching for company A, some might go for their initial chosen company, but others might actually change their behavior and go with company B either due to unawareness or due to a shift in preferences. It might be many reasons for when consumers change their mind after experiencing a hostile bidding strategy, but in order to find these reasons, one should investigate the effect of consumers perception of the different brands.

1.2 Research Question

Hostile bidding is still a new type of online marketing and there has not been written any academic papers regarding the strategy nor the effect it has for both consumers and the companies involved. Information regarding the strategy can to some extent be found on websites and blogs, written by marketers working with SEM. With Google's advertisement in mind and information regarding the cost of buying popular keywords, the activity can be quite expensive for some companies and cheap for others, depending on how popular the keywords are. Some research is conducted on the effect of paid aids in light of click-through-rate, others have been written with a focus on the labeling and if consumers spot the difference, but nothing is found on how it affects consumers.

Consumers often conduct open searches where they search for a product such as for example a computer, and from there click on results that seem interesting for their need. In the cases where they type in keywords for a specific brand but are displayed other competitors, will their perception of the two different brands change and to what extent will it be positive or negative? SERPs could be a goldmine for companies, but they have to conduct business in such a way that does not harm their own brand equity and it is therefore quite interesting to investigate the effect of hostile bidding in terms of consumers' perception. For our research, the dependent variable will be the consumer's perception of a specific brand, the independent variables will depend on the design of the hostile bidding search results shown to the participants (high exposure vs. low exposure vs. no exposure) (fig. 2), and the research question will be the following:

"How will a company's use of a hostile bidding strategy in Google affect consumers' perception of their brand?"

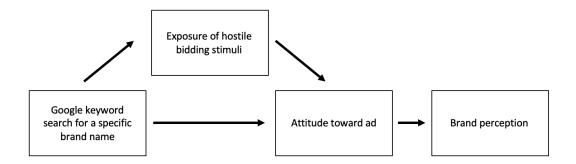


Fig. 2 Visualization of research question

We intend to test the following hypotheses, where the first hypotheses are for the pre-experiment in order to test the awareness of hostile bidding in search results, while the followed hypotheses will test the effect it has on consumers' perception of brands.

Hypothesis for Pre-experimental design:

H1: Participants are aware of companies using hostile bidding strategy

Hypothesis for Main-experimental design:

H1: Using a hostile bidding strategy positively increases consumer perception of your brand

H2: Using hostile bidding for a brand with high brand awareness in a product category will affect consumer perception negatively.

H3: Using hostile bidding for a brand with low brand awareness in a product category will shift the perception of that brand in a positive direction.

2.0 Literature Review

SEO and SEM in regard to online marketing strategy have been a popular topic among journals in many industries. However, there is a lack of literature written on the newest form for SEM used by companies, hostile bidding, and how this affects consumers' perception of their brand. We found little to no information regarding the consequences of using such a strategy and what implications it has for both the company and consumers. There is a gap in the literature, and we believe this is a topic that is highly relevant for companies in all industries when planning their online marketing activities. The following literature review will focus on available

research and information regarding important aspects of what lies behind a hostile bidding strategy.

2.1 Search engine result pages (SERP)

The World Wide Web (WWW) is built up by an enormous number of sites and contains information about almost everything in the world. In order for consumers to find relevant information in this endless network of information, one uses search engines result pages (SERPs) to categorize and list up relevant information based on the keywords entered (Jerath, Ma & Park, 2014; Search engine, 2020). Today, several search engines exist for personal use, but there is a major difference in the market share held in the global market. Google is dominating as the biggest search engine with a market share of 87.96 percent, followed by Bing with 5.26 percent and Yahoo with 2.73 percent as of October 2019 (StatCounter, 2019a).

Search engines work by crawling information from the endless network of information on the open WWW using what is referred to as search engine bots, which is a software developed by the search engine companies such as Google ("How Google Search Works - Search Console Help", 2020). When a webpage is discovered by these crawlers/bots, search engines algorithms try to find out what the page is about by analyzing the content, indexing the page and store it in huge databases operated by the company. After hundreds of billions of web pages are crawled and indexed by the search engine, users of the SERP can type in queries in the form of keywords and the SERP will then find and display the most relevant answer from its index using advanced algorithms that constantly adapts to new information on the WWW ("How Google Search Works - Search Console Help", 2020). When the users are presented with the results, several factors such as the location of the user, the set language and previous search history determines which results that is listed high and which is listed low on the result page ("How Google Search Works - Search Console Help", 2020). This is done to rank the results to be as relevant as possible, and this is one of the reasons that companies worldwide are

using search engine optimization and marketing to be listed higher for a relevant search term or keyword.

2.2 Online Marketing strategies

Search engine results pages such as Google, Bing and, Yahoo as the three biggest and most dominating both worldwide and in Norway (StatCounter, 2019b; Chris, 2019), changed have the way companies marketed themselves and their product/services. Before consumers accessed and used the web on a daily basis, the main channels for attracting attention from consumers where either advertising on billboards or flyers through print media such as newspapers/magazines or through television (Scott, 2015, p. 34). In today's global society where consumers can search and buy products and services across countries and continents, SEM and SEO are critical for companies in order to stand out in a competitive marketplace with millions of companies competing for the same customer within a given industry. Search engine marketing and search engine optimization are both two essential elements of a company's online marketing strategy on SERPs. Both activities aim to increase the click-through-rate (CTR) by being among the first result on the search engine result page. The click-through-rate is the percentage of how many clicks on a search engine result per impression the website had after the user searched for a keyword (Mackey, 2019).

SEM

Search engine marketing, also referred to as paid search marketing (Li, Lin, Lin & Xing, 2014) and sponsored search advertising (Jerath, Ma & Park, 2014; Nagpal & Petersen, 2019) is when a company bid on one or more keywords that is likely for consumers to type in when they are using SERPs for search of a product or a service. If the company has the highest among all bid, their website with the following product or service will appear as the highest result marked as an advertisement. Most academic research within online marketing strategies has focused on SEM

and regards to strategies, use of keywords and the bidding (Sen, 2005; Chen & He, 2011; Yao & Mela, 2011; Li et al., 2016).

Some academic research states that companies prefer to invest in paid placements instead of prioritizing search engine optimization. Justifying it by saying that the result of SEO work does not defend its cost and there is a lack of consistency when it comes to ranking in the Google Search section (Sen, 2005). Paradoxically, consumers prefer to ignore the paid placements and follow the links in the editorial section of the results. This makes the marketing decision in Google hard to justify (Sen, 2005). This is supported by Yang and Ghose (2010), stating that companies can expect the consumer to value more the editorial integrity that the organic listings have, which again leads to higher click-through-rate. Hotchkiss, Garrison & Jensen (2005) also support this by finding out in their research that over 77 percent of participants preferred organic links over paid placements.

On the other hand, there is also some evidence that suggests that paid placements are more important. For example, research by Jansen (2007), found out this in the context of e-commerce search queries. It seems in the literature that there are mixed findings and that there is no "right path", and that companies should look at the relationship between paid and organic as an interdependent relationship, as Yang and Ghose (2010) found out. The authors claimed that CTR on organic links has a positive interdependence with CTR on paid placements and the other way around.

SEO

SEO is a practice of optimizing a company website to become more visible among the top results on SERPs. Compared to SEM, this is an activity that does not cost the company any money besides time and effort to meet SERPs requirements and standards a website must meet and have to be ranked high in the search results when searching for a keyword. The idea is to generate free organic traffic to your website by having a site that is accessible and possible to index in addition to have sufficient keywords. Academic contribution regarding SEO is lower compared to SEM, and

much of the research published explains more how to use SEO in marketing it rather than the managerial implications it might have (Yalçın & Köse, 2010). Nagpal & Petersen (2019) argue that there is less research on SEO due to lack of available data and that SERPs algorithms are changing every day, making it harder to conduct experiments. Despite that SEO activities are a possible way of receiving free traffic to companies websites, many companies are violating SERPs guidelines and manipulate their sites to a better ranking. Malaga (2008) discuss this increasing problem and show evidence of the consequences of these actions, namely that websites can get banned.

2.3 Online consumer behavior

Consumers' behavior and interaction with companies online differ in many ways, especially when it comes to how they select results after searching for a product or a service on a SERP. An online experiment conducted by Lewandowski, Sünkler & Kerkmann (2017) investigated if paid ads (SMA) were labeled clearly enough for consumers. The research concludes with evidence that consumers who did not manage to tell if the search result was paid ad selected them more often compared to those who could tell if it was a paid ad.

Consumers' use of SERPs also depends on their decision process. Joachims et al (2005) conducted an experiment using eye-tracking to measure the click-through-rate on SERP and found evidence that the first result on the result page gain higher attention and was clicked on substantially more times by consumers compared to results longer down on the result list. This trend of choosing the top results is also supported by research conducted by Petrescu (2014) where he found evidence that the five first organic results accounted for 67.6 percent of all the clicks and that the first result on SERP accounted for 31.4 percent of all clicks. Furthermore, differences in consumers' use of SERPs, whether if it is on a mobile device or on a personal computer and the window size of the device used has an effect on which of the results consumers click on. Jansen & Spink (2007) investigated this during their research on sponsored searches (SMA) and found that consumers tend to click

on SERP results which are visible without having to scroll down to see more results. Jansen & Spink (2007 p. 3) calls these results "above the fold - the visible portion of the screen" and "below the fold" for results that are not visible for the consumers without scrolling down (Jansen & Spink, 2007 p. 6).

Another study by Dean (2019), where over 5 million search queries and click-through-rate of close to 850 000 pages were analyzed, showed the strong positive effect of being among the first organic results on Google. The results were quite similar to the research by Petrescu (2014) and showed an average CTR of 31.7 percent for the first organic result, this result was also ten times more likely to be clicked on compared to the 10th result on Google, illustrating the effect of being "above the fold" in the research of Jansen & Spink (2007). These academic papers' contributions have shown strong evidence that consumers are more likely to choose from the first search results, but lack contributions to the implications of how paid ads affect consumers' perception of the different brands.

3.0 Research methodology and design

The current research plan for our master thesis will be divided into several pieces. The first part of our primary research will be to sample a small group of participants and conduct a pre-experiment to see if the average consumer even notices the fact that companies buy advertisements using their competitor's brand name, hostile bidding. Using a pre-experiment is a considerable method to test the potential of the research question. The design for the pre-test will be a static-group comparison, which will give us the opportunity to test one group that has been exposed to a stimulus against a control group. The difference between the two observed groups can be assumed as a result of the treatment (ResearchConnections, 2020). There are known validity issues with a pre-experimental approach, that is why we need to interpret the data with caution and not generalize the results, but rather give us a feeling if there is any potential for our research question.

If we find that this is something that the consumer actually notices, then the plan is to go further with both qualitative and quantitative data to evaluate our hypotheses. For the qualitative data, our plan is to conduct two or more in-depth interviews with company leaders that use hostile bidding as a strategy. The advantage of including this in our paper is that we get detailed insight into the reasoning that lies behind the choice of pursuing this strategy since the strategy can be interpreted as leveraging other companies' brand equity. The data collection plan for this is to conduct interviews with senior executives that are willing to answer questions regarding our topic.

For the quantitative part of the research, the plan is to run an experiment using the online survey tool Qualtrics. We want to expose participants to these types of Google advertisement, to see if it changes their opinion of the company using the hostile bidding strategy. We have not planned the exact details around the survey, but we believe this method is most effective for answering what implications companies get for using this type of strategy. The survey will also be as generic as possible so that more industries can relate to the outcome of the survey. In order to gather quality data, we need to make sure that the right sampling method is used.

The ideal sampling method could be a challenge to go through with since time and money are restricted for the project. To get generalizable results, the ideal solution would be to go for a probability sampling, where every element in the population has an equal chance to join (Singh, 2018). Ideally, we would use simple random sampling for our survey since we do not have any prior information regarding the target population (Singh, 2018). For example, we could randomly pick 20 of our 50 student colleagues to take the survey. The more feasible and realistic solution for our thesis would be to sample participants using a nonprobability sampling technique like convenience sampling. This technique is great to use in order to get rapid and accessible results.

The plan is that the qualitative interviews will provide data that will be questioned further in the survey for participants to take. So far, the plan is to use analysis of

variance (ANOVA) to test variance in the population. Secondly, we also want to use regression (Linear or Binary) to see how different variables affect the constant, which is going to be the change in perception of the brand we are testing with. We will know more about what methods to use in our analysis ones we have the output in SPSS.

4.0 Plan for data collection and analyses

The main work on our master thesis will be conducted in March/April after our preexperiment and preparations. When we have collected a sufficient amount of data to process, this data will be analyzed before we can continue on writing our findings. The aim is to have the first draft for the master thesis ready by the end of May and use June to finish and proofread the paper. Our tentative plan for our work is listed below (Fig. 3).

Master Thesis tasks	Jan	Feb	Mar	Apr	May	Jun
Start of the thesis project						
Find literature						
Find gaps in the literature						
Write up introduction						
Conduct qualitative interviews						

Create and conduct online pre- experiment			
Analyze and interpret data from pre- experiment			
Create and conduct the online main experiment			
Analyze and interpret the data from the main experiment			
Write up methodology			
Write up findings			
Write up discussion, conclusion and proofread the paper			
Deliver master thesis paper			

Fig. 3 Tentative schedule for work

Our pre-experiment will be conducted before the main experiment in order to test the potential of the research question. Both the pre-experiment and the main experiment will be conducted in a way where all participants are anonymous. The intended data output will not contain information that can identify a single individual, nor direct or indirect, IP-address tracking will also be turned off with functions in Qualtrics. With this in mind, there is no need for us to file an application to the Norwegian Centre for Research Data (NSD).

5.0 Contribution and managerial implications

The thesis will contribute to a deeper understanding of Google advertising, and if hostile bidding is a valuable strategy for companies to use. By testing this strategy, companies will know more about how it affects the consumer's perception of their brand. Companies can also get more information about the short-term effects of using this strategy.

Today, almost every major brand uses Google as a marketing tool, either at a large or a small scale. We hope that our thesis will give a significant amount of valuable implications for company leaders and especially digital marketing managers. The research planned to be conducted in the paper will hopefully support managers in their decision making when planning their Google marketing strategy. It will be especially important for smaller brands, as they will see the biggest upside in using this strategy. This is because they can leverage traffic from companies that are often searched for. Most importantly, we hope that our thesis will give marketeers an easier job when justifying their marketing budget on Google and that the paper will help them increase their ROI in a digital advertisement campaign.

6.0 References

Alphabet. (February 6, 2019). Google's ad revenue from 2001 to 2018 (in billion U.S. dollars) [Graph]. In Statista. Retrieved January 13, 2020, from https://www.statista.com/statistics/266249/advertising-revenue-of-google/

Chen, Y., & He, C. (2011). PAID PLACEMENT: ADVERTISING AND SEARCH ON THE INTERNET. *The Economic Journal*, *121*(556), F309-F328. Retrieved January 13, 2020, from www.jstor.org/stable/41301345

Chris, A. (2019). Top 10 Search Engines In The World. Retrieved 12 January 2020, from https://www.reliablesoft.net/top-10-search-engines-in-the-world/

Cummins, E. (2019). Bidding on Competitors' Brands: Pros, Cons & Common Mistakes. Retrieved 14 January 2020, from https://www.wordstream.com/blog/ws/2015/06/12/bidding-on-competitor-brands

Dean, B. (2019). We Analyzed 5 Million Google Search Results. Here's What We Learned About Organic CTR. Retrieved 13 January 2020, from https://backlinko.com/google-ctr-stats

Hotchkiss, G., Garrison, M., & Jensen, S. (2014). Search Engine Usage In North America [Ebook] (1st ed., p. 5 and p. 14). Kelowna, BC Canada: Enquiro Search Solutions. Retrieved from

https://www.richswebdesign.com/SearchEngineUsageinNorthAmerica.pdf

How Google Search Works - Search Console Help. (2020). Retrieved 13 January 2020, from https://support.google.com/webmasters/answer/70897

Jansen, B. (2007). The comparative effectiveness of sponsored and non sponsored links for Web e-commerce queries. ACM Transactions On The Web, 1(1), 3-es. doi: 10.1145/1232722.1232725

Jansen, B., & Spink, A. (2007). Sponsored Search: Is Money a Motivator for Providing Relevant Results?. *Computer*, 40(8), 52-57. doi: 10.1109/mc.2007.290

Jerath, K., Ma, L., & Park, Y.-H. (2014). Consumer Click Behavior at a Search Engine: The Role of Keyword Popularity. Journal of Marketing Research, 51(4), 480–486. https://doi.org/10.1509/jmr.13.0099

Joachims, T., Granka, L., Pan, B., Hembrooke, H., & Gay, G. (2017). Accurately Interpreting Clickthrough Data as Implicit Feedback. ACM SIGIR Forum, 51(1), 4-11. doi: 10.1145/3130332.3130334

Johannessen, S., & Klevstrand, A. (2019). Bank Norwegian vant Google-rettssak mot konkurrentene. Retrieved from https://www.dn.no/jus/bank-norwegian-vantgoogle-rettssak-mot-konkurrentene/2-1-512635

Lewandowski, D., Sünkler, S., & Kerkmann, F. (2017). Are Ads on Google Search Engine Results Pages Labeled Clearly Enough? In M. Gäde, V. Trkulja, & V. Petras (Hrsg.), Everything Changes, Everything Stays the Same? Understanding Information Spaces. Proceedings of the 15th International Symposium of Information Science (ISI 2017), Berlin, 13th—15th March 2017 (S. 62–74). Glückstadt: Verlag Werner Hülsbusch.

Li, Hongshuang, PK Kannan, Siva Viswanathan, and Abhishek Pani (2016), "Attribution strategies and return on keyword investment in paid search advertising," Marketing Science, 35 (6), 831-48.

Li, K., Lin, M., Lin, Z., & Xing, B. (2014). Running and Chasing -- The Competition between Paid Search Marketing and Search Engine Optimization. Hawaii International Conference On System Sciences, 47. doi: 10.1109/hicss.2014.640 Garcia, K. (2018). More Product Searches Start on Amazon. Retrieved 14 January 2020, from https://www.emarketer.com/content/more-product-searches-start-on-amazon

Mackey, M. (2019). What Is Click-Through Rate & Why CTR Is Important? Retrieved 13 January 2020, from https://www.searchenginejournal.com/ppc-guide/click-through-rate-ctr/#close

Malaga, R. (2008). Worst practices in search engine optimization.

Communications Of The ACM, 51(12), 147. doi: 10.1145/1409360.1409388

Næringslivets Konkurranseutvalg. (2019). Sak 6/2017 – Næringslivets konkurranseutvalg. Retrieved from http://konkurranseutvalget.no/2017/sak-6-2017-article1337-668.html

Nagpal, M., & Petersen, J. (2019). Keyword Selection Strategies in Search Engine Optimization: How Relevant Is Relevance? Marketing Science Institute, 19-113-03. Retrieved 13 January 2020, from https://www.msi.org/reports/keyword-selection-strategies-in-search-engine-optimization-how-relevant-is-relevance/

Petrescu, P. (2014). Google Organic Click-Through Rates in 2014. Retrieved 13 January 2020, from https://moz.com/blog/google-organic-click-through-rates-in-2014

Pickard, T. (2015). Top Ten Customer Service Quotes and What You Can Learn From Them. Retrieved 14 January 2020, from https://www.linkedin.com/pulse/top-ten-customer-service-quotes-what-you-can-learn-from-tim-pickard/

Scott, D. (2015). Search Engine Marketing. In The New Rules Of Marketing & PR: How to Use Social Media, Online Video, Mobile Applications, Blogs, News

Releases, and Viral Marketing to Reach Buyers Directly (pp. 395-406). Hoboken, New Jersey: John Wiley & Sons.

Search engine. (2020). In Encyclopædia Britannica. Retrieved from https://academic.eb.com/levels/collegiate/article/search-engine/396602

Sen, R. (2005). Optimal Search Engine Marketing Strategy. *International Journal Of Electronic Commerce*, 10(1), 9-25. doi: 10.1080/10864415.2005.11043964

Singh, S. (2018). Sampling Techniques. Retrieved 13 January 2020, from https://towardsdatascience.com/sampling-techniques-a4e34111d808

Pre-Experimental Designs. (2020). Retrieved 13 January 2020, from https://www.researchconnections.org/childcare/datamethods/preexperimental.jsp

Smith, B. (2018). AdWords Competitor Targeting: Everything You Need To Know To Do It Right. Retrieved 13 January 2020, from https://adespresso.com/blog/adwords-competitor-targeting/

Smith, B. (2019). AdWords Competitor Targeting: Everything You Need To Know To Do It Right. Retrieved from https://adespresso.com/blog/adwords-competitor-targeting/

StatCounter. (November 17, 2019a). Worldwide desktop market share of leading search engines from January 2010 to July 2019 [Graph]. In Statista. Retrieved January 13, 2020, from https://www.statista.com/statistics/216573/worldwide-market-share-of-search-engines/

StatCounter. (October 16, 2019b). Market share held by the leading search engines in Norway as of October 2019 [Graph]. In Statista. Retrieved January 12, 2020, from https://www-statista-com.ezproxy.library.bi.no/statistics/621417/most-popular-search-engines-in-norway/

Sullivan, D. (2016). Google now handles at least 2 trillion searches per year - Search Engine Land. Retrieved 13 January 2020, from https://searchengineland.com/google-now-handles-2-999-trillion-searches-per-year-250247

Yalçın, N., & Köse, U. (2010). What is search engine optimization: SEO?. *Procedia - Social And Behavioral Sciences*, *9*, 487-493. doi: 10.1016/j.sbspro.2010.12.185

Yang, S., & Ghose, A. (2010). Analyzing the Relationship Between Organic and Sponsored Search Advertising: Positive, Negative, or Zero Interdependence? Marketing Science, 29(4), 602-623. Retrieved January 14, 2020, from www.jstor.org/stable/40864637

Yao, S., & Mela, C. F. (2011). A dynamic model of sponsored search advertising. *Marketing Science*, 30(3), 447-468. https://doi.org/10.1287/mksc.1100.0626