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The Credibility of Online Reviewers on Search, Experience and Credence Services

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## **Master Thesis**

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## **Introduction**

- *Relevance of online reviews*

Checking online reviews before purchasing has become a no-brainer today, with 86% of consumers reading reviews before visiting a local business (BrightLocal, 2018). More than just a way of knowing what to expect, reviews can also encourage consumption (Chevalier & Mayzlin 2006), or encourage consumers not to consume: 43% of consumers will not use a business if it has less than 4 stars (BrightLocal, 2018). Previous research demonstrated that reading online reviews before purchasing is a way to reduce purchase risk by seeking more information from a third party (Chakravarty, Liu, and Mazumdar 2010). Consumers appreciate being able to read Online Customer Reviews (OCR) because they find them to be a more credible source of information than the usual sales pitch (Dewenter and Heimeshoff 2015). More than useful, customer reviews are also extremely powerful, being a one-to-many means of communication, between one writer and many readers (Litvin et al., 2008).

- *Especially in the domain of services*

The importance of OCR is especially the case in the service sector. Compared to goods, services are associated with greater uncertainty, variability (Murray and Schlacter 1990; Zeithaml, Parasuraman, and Berry 1985) and heterogeneity of quality (Bansal and Voyer 2000; Ekelund et al. 1995). Services are performed by humans and, as with any other human performance, service quality can vary from great one day to very bad the next (Capella, Mitra & Reiss 1999). Murray (1991) and Newman (1977) demonstrated that perceived risk and time spent on information search were positively correlated.

Conversely, in order to reduce this accrued risk when purchasing services, consumers try to get more information and find customers' reviews, mainly online, which have a profound impact on consumer decision-making (Sotiriadis and van Zyl 2013).

The present study was based mainly on Nelson's framework (1970) and the extension of his work by Darbi and Karni (1973), to classify services as follows: search services, experience services, and credence services.

Search services are services that can be evaluated before purchase (e.g., bank account). Experience services are services that can only be evaluated after purchase and use (e.g., hairdresser). Credence services are services that cannot be judged confidently, even after purchase and use (e.g., medical diagnosis or treatment).

- *Development of online trust*

While a third-party review is often considered more trustworthy because free of vested interest (Bansal and Voyer 2000; Smith, Menon, and Sivakumar 2005), consumers are today confronted by an unprecedented number of online customer reviews, including fake (Smith, 2013) and illegitimate reviews. Thus, consumers need to be able to judge the credibility of a review. Consequently, online trust has become the main influencer of purchase on e-commerce websites (Bart, Shankar, Sultan & Urban, 2005). Interestingly, the extant literature reports that perception of consumer reviews is influenced by external factors such as the kind of service and its associated perceived risk (Keh & Sun, 2018), message sender characteristics, and the contents of the review (Filiari, 2016). Perception of reviews can also depend on the reader and his or her internal cognitive structure (Kim et al., 1991; Sujjan, 1985).

Finally, previous reports demonstrated that negative reviews weigh more than positive reviews (Kanouse and Hanson, 1972). This is especially true if the negative reviews are written by high-expertise reviewers (Friske & Racherla 2012).

### **Research Question**

As we observed in the previous section, past researches have already been conducted on the trustworthiness of OCR. However, the analytical framework seemed to be too narrow by omitting some dimensions in terms of services, valence reviews or type of reviewers. That is why, through our Master Thesis, we have decided to broaden the analytical framework by adding three dimensions: expert customers, neutral reviews and search services.

- *Addition of expert customers*

Many previous studies showed that reviews by informed writers have more impact than reviews by less informed writers, but what constitutes a professional is not perfectly clear. While some consider professionals to be reviewers with high reputation (Friske & Racherla 2012), others describe them as a third party providing a professional review that is more authoritative and formal than a peer review (Keh & Sun, 2018). Moreover, previous literature only compares high-knowledge versus low-knowledge customers (Friske & Racherla 2012; Chiou, Chiu & Hsiao 2018), or classic customers versus professionals (Keh & Sun, 2018). We propose instead to compare the perceived trust of reviews written by three kinds of reviewer: customers, expert customers and professionals.

- *Addition of neutral reviews*

The extant literature only examined the impact of positive versus negative reviews on consumers (Chevalier & Mayzlin 2006; Yang & Mai 2010; Chiou, Chiu & Hsiao 2018). Keh & Sun (2018) offered an alternative methodology with mixed reviews (i.e., showing customer one positive and one negative review). In order to approximate reality more closely, we propose instead to study three kinds of review: positive, neutral and negative.

- *Addition of search services*

Finally, most studies addressed only two kind of services: experience services and credence services. The lack of studies of search services is probably due to the belief that customers do not need further information when all characteristics can be known before purchase. Instead, we suggest also including search services.

In this context, this study addresses the above limitations and aims at answering the following Research Question: **Within the scope of service to individuals, are people more likely to trust online reviews from customers, expert customers or professionals?**

The manuscript will be structured as follows. First, we will examine the previous literature and develop crossed hypotheses on the differences between reviews written by customers, expert customers and professionals on the one hand, and between search, experience and credence services on the other hand. We then conduct a study to test the hypotheses. This study aims at having both theoretical and practical conclusions. From a theoretical perspective, the findings should shed light on the trust drivers of consumers browsing online reviews. From a practical perspective, the study provides managers of different industries with keys to understand which reviews will have the strongest impact on their business.

### **Literature review**

Even though the extant literature presents some gaps and is not sufficient to answer the Research Question, previous articles on the topic of online reviews are relevant. Especially, three dimensions are to be put forward: the source of the review, the valence, and the type of service. These three dimensions were widely dealt with:

- Customer reviews, expert customer reviews and professional reviews

In an online review, the third party may be of different sorts. The existing literature considers the two main message sources to be peer consumers and experts. Keh & Sun (2018) define peer reviews as “non-expert consumers (novice consumers) who have no commercial intentions or vested interests in the local brand”. On the contrary, expert reviews are “more impersonal, professional, authoritative and formal”.

Surprisingly, there is scant research examining the impact of another kind of review: the expert customer review. Expert customers do not have the status of professionals because they are not working in an institution (Chen and Xie, 2008). They could be considered as everyday customers but with a high level of knowledge in a given field (Bettman and Sujjan 1987) due to a passionate interest, or sometimes to particular qualifications. For instance, an expert customer might be a reviewer on TripAdvisor with a high contribution level, who wrote many reviews and received many votes testifying to their helpfulness (Lo & Siyu Yao, 2019). Expert customer reviews can be seen as intermediate between customer and professional

reviews, and may bridge the gap between peer customers and professionals. It is thus interesting to include this type of reviewer in the present study.

Past research showed that consumers do not always rely on the same kinds of reviewer, and the choice of online reviewer depends on the service to be evaluated. Firstly, the complexity of the service and the difficulty of evaluating is an argument for relying more on professional reviews (Dewenter & Heimeshoff, 2015). Moreover, when customers have the choice between numerous complicated and expensive brands, professional reviews are highly valued (Wang, 2005). However, the influence of a review depends also on a match between information giver and information seeker (Gilly et al., 1998), and everyday consumers are more likely to rely on their peers, with whom they have more in common. Considering the mediating role of expert customers, there is no clear evidence that consumers rely more on peer customers than on professionals or vice versa. The present study investigated possible correlations between the adoption of an online review by a specific reviewer and the service which was being evaluated.

In an online review, consumers are seeking not only objective source of information, but also information that is credible (Thakur, 2016). There is a clear positive correlation between the credibility of an online review and its adoption (Chatterjee, Krishnankutty, Shaheen, Zeba 2019). Many researchers examined the different determining factors that make an online review credible. Content and writing style, extremity and valence, the source of communication and the pattern emerging from reading several reviews are four groups of cues that customers use to assess the trustworthiness of an online review (Filiari, 2016). We here assume that all online reviews are credible, because we do not want to focus on this topic which has already been covered.

Taken together, prior research does not explain how customer reviews, expert customer reviews and professional reviews influence the choice of the customers between different services.

- Positive review, neutral review, negative review

Purchasing behavior is influenced by online reviews in the same direction as the valence of the review (Kerkhof, Ketelaar, Willemsen & Sleven 2015). Furthermore, a lot of researchers argue that a negative review has more impact than a positive one (Kanouse and Hanson, 1972; Skowronski and Carlston, 1989). One explanation

is that negative reviews are much rarer (Chevalier & Mayzlin 2006), and consequently are more considered as evidence of poor quality than positive reviews are of high quality (Ahluwalia, 2002; Herr, Kardes & Kim, 1991). However, the weight of negative reviews is not perfectly clear, as other researchers disagree with the idea that negative reviews have more impact than positive ones (Wu, 2013; Kimmel & Kitchen, 2014). Indeed, some consumers are able to moderate the valence of a review and the asymmetry between positive and negative effects (Kerkhof, Ketelaar, Willemsen & Sleven, 2015).

To avoid potential bias between positive and negative, we included neutral reviews. These are considered to be a helpful way of effectively matching the real situation, as consumers are rarely confronted by exclusively negative or positive reviews (Chiou, Chiu & Hsiao, 2018).

- Search service, experience service and credence service

There have been many studies of customer reviews of goods (Dewenter & Heimeshoff 2015; Kerkhof, Ketelaar, Willemsen & Sleven 2015; Fei, Tse & Zhu 2018), but fewer of services.

Surprisingly, most studies on customer reviews did not take search services or search goods into account (e.g., Keh & Sun 2018; Fei, Tse & Zhu 2018). Authors often explained that search services can be entirely and objectively described and assumed that customers do not need OCRs for this kind of service. However, the fact that customers may not need them does not mean they do not use them. In fact, information search time for search services are even longer than for experience services (Capella, Mitra & Reiss, 1999). Conversely, although search services seem to be standardized (Guiltinan, 1987), consumers may seek online reviews for search services as a source of both information and recommendation (Kusumasondjaja et al., 2012), to help them chose between available options.

Thus, we propose to examine the three kinds of service: search services, experience services and credence services, as described above.



**Table 1 - Summary of studies on consumer perceptions of online reviews**

Study	Key findings and conclusions
<b>Ahluwalia (2002)</b>	Poor-quality represented by negative reviews is more impactful than high-quality represented by positive ones
<b>Bansal and Voyer (2000)</b>	Review from a third-party is more trustworthy because there is not vested interest by the source
<b>Chakravarty, Liu and Mazumdar (2010)</b>	Reviews as a way to reduce purchase risk by seeking more information from a third party
<b>Dewenter &amp; Heimeshoff (2015)</b>	The complexity in evaluating a service is an argument to rely more on professional reviews
<b>Filieri (2016)</b>	The customers assess the trustworthiness of an online review by analyzing the content, the writing style, the extremity and the valence emerging from reading several reviews
<b>Gilly et al. (1998)</b>	The impact of a review depends on the similarity between the information giver and seeker
<b>Wang (2005)</b>	Professional reviews are highly valued when consumers face multiple complicated and expensive brands

### **Hypotheses**

Building on the previous literature, especially Keh & Sun (2018), we will focus on online trust drivers. We suggest that differences across services (search, experience and credence) can be observed. We expect our results to show a preference for customer reviews in the case of search services, for expert customer reviews in the case of experience services, and for professional reviews in the case of credence services.

- *Hypothesis 1 - Search Services*

In contrast to the existing literature, we suggest that online reviews also have their importance for search services. Moreover, we would like to demonstrate that they are mostly influenced by peer customers reviews.

**H1: There is a positive correlation between the purchase likelihood and trust of a search service review and the amateurism of the reviewer.**

- *Hypothesis 2 - Experience Services*

Concerning the two other kind of service (experience and credence), Keh & Sun (2018) demonstrated that consumers tend to trust OCRs on experience services, but only professional reviews for credence services. The authors believe that this is due to the *Mediating Role of Confidence* (i.e., customers will trust an OCR if they believe they can judge the service themselves; otherwise they will only trust professional reviews). We believe that adding expert customer reviews will drastically change these findings.

We suggest instead that experience services require more tightly constructed, well-argued reviews, with more specific knowledge from the reviewer than for search services. However, we suggest that customers will rely more heavily on reviews with which they can identify rather than a purely objective professional review (e.g., a customer's experience in a restaurant goes way beyond the quality of the food being served and the quality of service).

**H2: A review for experience services has more impact on purchase likelihood and trust variables when it is said to be written by an expert customer rather than a peer customer or a professional**

- *Hypothesis 3 - Credence Services*

Credence services often require a higher degree of customization (Guiltinan, 1987; Zeithaml, 1981). The risks are also very high when consuming a credence service: not only financial risk but also social and psychological risk (Capella, Mitra &

Reiss, 1999). Being by nature very difficult to judge, we suggest that consumers need a review by a certified professional.

**H3: There is a positive correlation between the purchase likelihood and trust of a credence service review and the professionalism of the reviewer.**

### **Methodology**

- *Design & Sample*

Our study used a 3x3x3 design (service type: search, experience, or credence; reviewer: customer, expert customer, or professional; review valence: positive, neutral, or negative).

We initially recruited 1,500 subjects on Amazon's M-Turk, a web-based crowdsourcing platform enabling people to perform tasks and studies for a fee. Approximately one-third were discarded, as failing to answer the attention test correctly, not answering every question, or finishing the survey in less than 1 minute. Finally, we obtained 1,022 respondents each answered 38 questions: 9 reviews with 4 questions per review, an attention test, and a subsidiary question asking them if they noticed that the reviews were written by 3 different kinds of reviewer. Appendix 1 illustrates the design of one of our surveys. It was ensured that respondents did not answer more than one survey.

One survey is still available at:

[https://edhec.az1.qualtrics.com/jfe/form/SV\\_eQWJ3mbIhhsDKPH](https://edhec.az1.qualtrics.com/jfe/form/SV_eQWJ3mbIhhsDKPH)

- *Experimental procedure*

For each of the 3 types of services studied (search, experience and credence), we prepared 3 reviews (positive, neutral and negative). Then, we only varied the source (customer, expert customer or professional). The reviews did not vary and did not present anomalies in content such as spelling mistakes or inappropriate vocabulary, in order to study only the influence of the source on decision-making (cf. Appendix 2). All respondents read the same nine reviews.

Each of the nine reviews in Appendix 2 was specific to one kind of service and was either positive, neutral or negative. The only criterion that varied was the source of the review. While respondents read the review, one of the three sources was randomly attributed to the review, so as to reveal whether one source is more trusted or leads more easily to purchasing than another for a given kind of service. For instance, two respondents read the same review (e.g., positive review for experience service) but one was told that the review was written by a customer and the other that it was written by a professional.

Respondents read the nine reviews successively. After reading a review, the respondent was asked questions, following Keh & Sun (2018) (Table 2), measuring expected service quality, purchase likelihood, confidence in evaluation, and source expertise.

**Table 2 – Study variables - Keh & Sun (2018)**

Variables	Measures
Expected service quality	How would you expect the service quality of the service to be? (1 = <i>very low</i> , 7 = <i>very high</i> ).
Purchase likelihood	How likely are you to purchase the service from this firm? (1 = <i>very unlikely</i> , 7 = <i>very likely</i> )
Confidence in service evaluation	How certain do you feel about your decision given the review you read. (1 = <i>not at all certain</i> , 7 = <i>extremely certain</i> )
Source expertise	How knowledgeable do you think the expert/consumer is about the service firm? (1 = <i>not at all knowledgeable</i> , 7 = <i>very knowledgeable</i> ).

We assessed the influence of a review on Keh & Sun’s variables, divided into two groups:

- **Purchase variables:** “expected service quality”, and “purchase likelihood”. Of course, purchase behavior was expected to be influenced by the online review in the same direction as the valence of the review, regardless of source. However, scores on these variables were also expected to be particularly influenced by customer reviews on search services, by expert customers on experience services and by professional experts on credence services.
- **Trust variables:** “confidence in service evaluation” and “source expertise”. The higher the score on these variables, the greater the influence of the review, regardless of valence.

### **Analysis and Results**

Firstly, we conducted three one-way ANOVAs to analyse the 3 characteristics separately: Quality (Search, Experience, Credence), Attitude (Positive, Neutral, Negative) and Type (Customer, Expert customer, Professional).

Secondly, as we can see on the Appendix 3, we conducted four multivariate one-way ANOVAs (MANOVA) to compare characteristics between each other: Quality \* Attitude; Quality \* Type; Attitude \* Type; and Quality \* Attitude \* Type. Through this method, we aim at identifying differences and interactions between variables in order to verify our three hypotheses.

The Tests of Between-Subjects Effects Table shows that the two characteristics Quality and Type taken together had a significant effect on answers to questions Q3 and Q4 (Q1:  $F(4,9123) = .745$ ,  $p = .561$ ; Q2:  $F(2,9123) = 1.647$ ,  $p = .160$ ; Q3:  $F(2,9123) = 2.327$ ,  $p = .054$ ; Q4:  $F(2,9123) = 8.169$ ,  $p = .000$ ). This analysis is really interesting, allowing us to directly compare type of service (search, experience, credence) and source of review (customer, expert customer, professional).

To support our hypotheses, we will especially focus on the three first questions (ie : expected service quality, purchase likelihood and confidence in service evaluation). The fourth question asked whether the respondent believes the

reviewer is a professional. Naturally, professional reviewers were always more trusted (Figure 4).

- *H1 supported*

Through our analysis, we observe that there is a positive correlation between the adoption of a search service review and the amateurism of the reviewer. Indeed, for Q1 and Q2 (purchase variables), the graphs below (Figure 1 and Figure 2) show that respondents were, in average, more willing to pay for search services if the review had been written by a peer customer (i.e. non-professional). Moreover, the second most influential group is the second less professional group: Expert customers. Finally, for search services, respondents were less likely to purchase if the review was written by a professional. Concerning trust variables, respondents were more confident in the search service evaluation (Figure 3) when the reviewer was a peer customer. Taken together, it implies that for search services there is positive correlation between the adoption of the review and the amateurism of the reviewer.

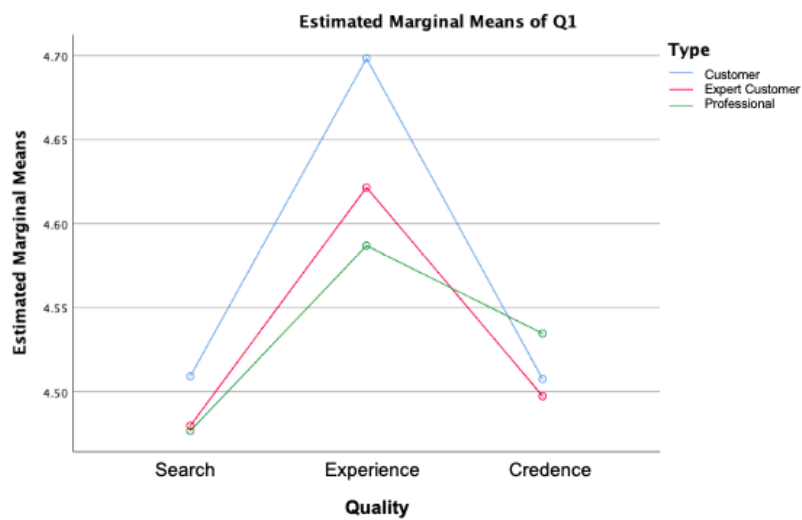
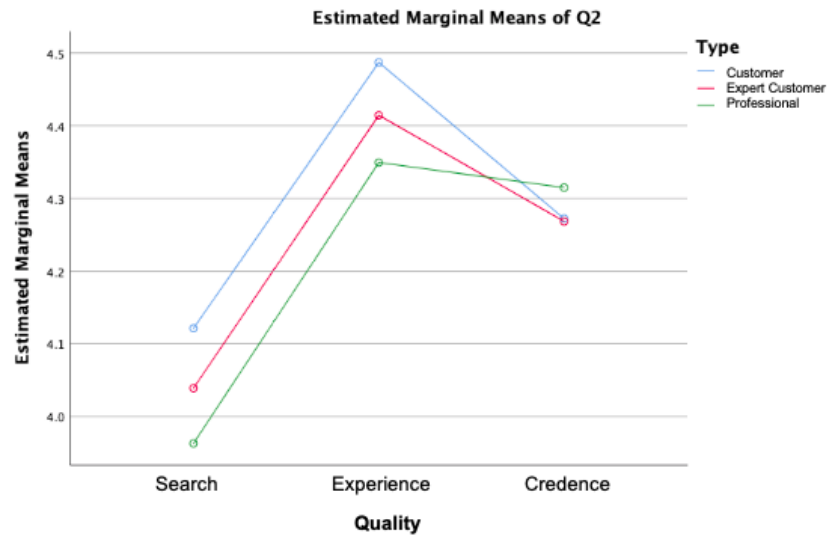


Figure 1.



**Figure 2.**

- *H2 not supported*

We observe that a review for experience services has, in average, more impact when it is said to be written by a peer customer rather than an expert customer. This observation is not in line with the hypothesis 2. The non-confirmation of H2 reinforces us in the idea that expert customers played a mixed role between peer customers and professionals. Respondents might not have a clear definition of this type of reviewer, half-way between the two other categories. Similarly, for Q3 and Q4 (trust variables), the graphs below (Figures 3 and 4) show that respondents logically trusted professionals more than the other types of reviewer. Once again, expert customers were between peer customers and professionals.

- *H3 not supported*

We observe that for the four questions, professional reviewers systematically obtained a higher grade than any other kind of reviewer for credence services. The first two graphs (Figure 1 and Figure 2) show that respondents were mostly influenced by professional reviewers when it comes to purchase a credence service. Moreover, respondents acknowledge a particularly important expertise to professional reviewers for credence services. Looking at Figure 3 and Figure 4, we observe that higher the degree of risk associated with the service, higher is the trust placed in professional reviewers. Indeed, the difference in trust variables (Figure 3

and Figure 4) among the different reviewers might seem weak for search services, but it is bigger for experience services and even bigger for credence services. However, we observe that for purchase variables (Figure 1 and Figure 2), peer customer reviewers were more influential than expert customers. Taken together, even if professional reviewers were clearly the most trusted group for credence service reviews, we cannot support Hypothesis 3, as there is no evidence of a correlation between the adoption of the review and the professionalism of the reviewer.

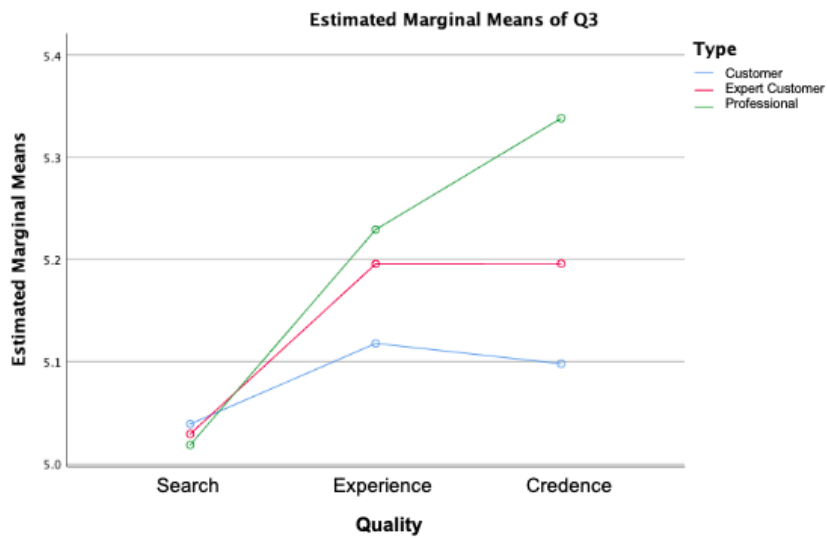


Figure 3.

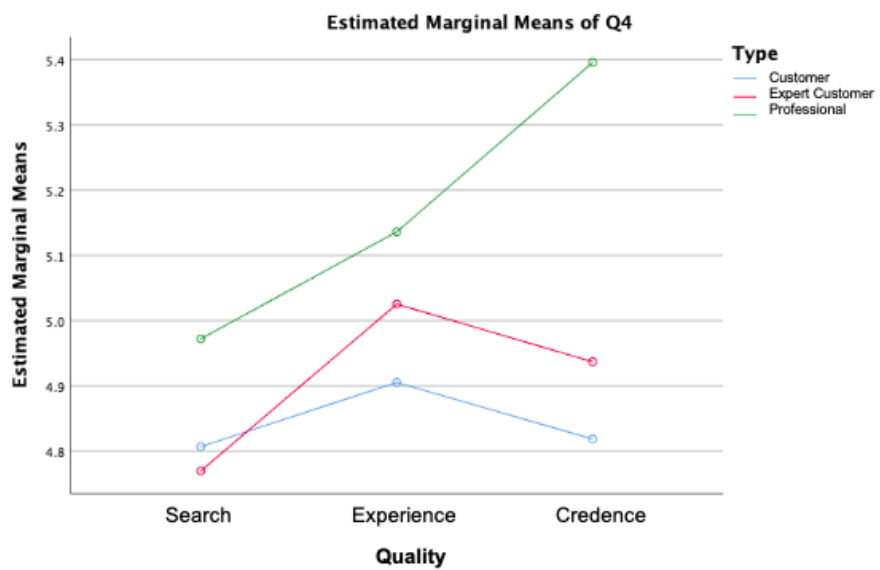


Figure 4.



## **General Discussion**

The present research examined the credibility of online reviewers of Search, Experience and Credence services. It showed that, when customers want to purchase a search service, they are not only satisfied with peer customer reviews, but these reviews are actually their preferred source. This is a consequent finding, as the previous literature rarely focused on search services. We also demonstrated that, for credence services, customers show a clear preference for professional reviewers. Finally, we believe that expert customers have a real role to play in online reviewing, although the design of our survey made it difficult for respondents to understand their particular role.

These findings have theoretical and practical implications.

- *Theoretical implications*

The present research builds on and extends the literature on understanding and being influenced by online reviews when buying a service. Previous literature mainly focused exclusively on peer customer and professional reviews (Keh & Sun 2018; Fei, Tse & Zhu 2018). By adding expert customers, we wanted not only to study their role, but also to go beyond the traditional binary approach of peer customers vs professionals. The mediating role of expert customers had an impact on our findings regarding customer reviews and professional reviews.

Even though professional reviewers were already known to be the most trusted reviewers for credence services (Keh and Sun, 2018), the present study makes a good addition to the topic: by adding expert customers and recognizing that ordinary customers can also be knowledgeable (Bettman and Sujan 1987), we answer the appeal made by Keh and Sun (2018) and move closer to reality. Also, by providing more refined valence by distinguishing neutral reviews, we answer the appeal by Chiou, Chiu & Hsiao (2018) and Keh & Sun (2018) to match real situations more effectively.

Finally, search services were rarely dealt with in the previous literature, probably because it was believed that customers did not need further information when all characteristics can be known before purchase. We rather believe that customers appreciate reviews on search services (even if less essential than reviews for

credence services). In this regard, this study shows that peer reviews are the most trusted for search services.

- *Managerial implications*

While it has been shown that reading online reviews before purchasing is a way to reduce purchase risk by seeking more information from a third party (Chakravarty, Liu and Mazumdar 2010), it is crucial for managers to understand who are the most influential third parties regarding the service they sell.

For search services, like opening a checking account, consumers tend to trust peer customers the most. Thus, managers should focus on reviews on Google My Business, Trustpilot, and others. Surprisingly, it appears that banks, for instance, rather seem to rely on professionals (such as Moody's or Standard and Poor's). Even though banks offer credence services (where professional reviews are appreciated by consumers), they seem to have forgotten that search services require a different kind of online review to effectively convince customers.

In contrast, we found that consumers tended to trust professional reviews when they needed to purchase credence services. This is explained by the fact that perceived risk is higher in credence services than in experience and search services (Capella, Mitra & Reiss, 1999).

Taken together, the main managerial implications consist in recognizing that each kind of service requires a specific approach when it comes to online reviews. While it may be easier to find professional reviews (by paying experts), motivating customers to rate a service is more challenging. In order to encourage positive eWoM (electronic word-of-mouth), online marketers tend now to find new ways to obtain customer reviews, by rewarding those who recommend the service to others, like Lyft did in 2017 (Keh & Sun, 2018).

### **Limitations**

This study has some limitations.

Firstly, surveys were published on Mturk. We chose Mturk because it is a very cost-effective solution, and it is very easy to recruit hundreds of respondents within a few hours. However, it was difficult to judge whether the respondents were really focused or not. Even though we discarded respondents who failed the attention test,

did not answer every question or finished the survey in less than one minute, some respondents may have not read every review and question carefully. Indeed, at the end of the survey, we asked respondents the following question: *Through this experience, have you noticed that the reviews were written by 3 different kind of reviewers: professionals, expert customers and other customers? (1=low; 7=high)*. Results showed that most respondents understood the idea, but it was not perfectly clear for everyone (the mean value of responses to this question was 5.61, median = 6, and standard deviation = 1.41).

Moreover, the reviews in the study visually did not look like real reviews (see Appendix 1). Thus, future research could adopt a more user-friendly approach, that more easily shows the kind of reviewer (i.e., certifications, like on TripAdvisor). This is especially true for expert customer reviews, which respondents did not seem to have really understood.

Also, trust evolves over time, and future research may want to reiterate this study at different time points in the future.

Another limitation concerns the reviews that we wrote. All reviews were either positive, neutral or negative, while review valence in real life is even more varied. Finally, it would have been interesting to also study trends by age, gender and region.

## Appendix 1: Survey design

**You would like to open a checking account. You browse online reviews to decide which is the best option.**

**First situation. You read a review written by an independent bank adviser : "This checking account is very easy to use, the interest rates are competitive and the costs reasonable. Moreover, it offers the cheapest overdraft fees before opening the account of the market. To put it in a nutshell, this checking account is a good combination of price competitiveness and high efficiency".**

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How would you expect the service quality of the service to be? (1=low ; 7=high)

1	2	3	4	5	6	7
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How likely are you to purchase the service from this firm? (1=low ; 7=high)

1	2	3	4	5	6	7
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How certain you feel about your decision given the review you read? (1=low ; 7=high)

1	2	3	4	5	6	7
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How knowledgeable do you think the expert/consumer is about the service firm? (1=low ; 7=high)

1	2	3	4	5	6	7
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**Appendix 2**

**Scenarios and contexts used in Study**

	<b>Search services (checking account)</b>	<b>Experience services (restaurant)</b>	<b>Credence services (hospital / medical treatment)</b>
<i>Context</i>	<i>You would like to open a checking account and check online reviews to decide which is the best option.</i>	<i>You would like to go to a restaurant with an old friend. You browse online reviews to find the right place.</i>	<i>A relative needs to go to the hospital for a medical treatment. You browse online reviews to find the right one.</i>
<b>Positive</b>	"This checking account is very easy to use, the interest rates are competitive and the costs reasonable. Moreover, it offers the cheapest overdraft fees before opening the account of the market. To put it in a nutshell, this checking account is a good combination of price competitiveness and high efficiency".	"The atmosphere in this restaurant was warm-hearted, and the staff was very professional. More than a just a nice place to have dinner, this restaurant serves very high-quality food. The presentation of the dishes was definitely the << icing on the cake>>".	"The hospital has the latest equipment and it is really clean. The nursing staff is very attentive, the doctors are renowned and there is a good follow-up at discharge from hospital."
<b>Neutral</b>	"This checking account presents average interest rates. The costs and overdraft fees are classic for this kind of account. It presents a standard ease of use".	"This restaurant was overall correct. The dishes were standard, the staff was common, and the dishes were acceptable. The global atmosphere of the restaurant was classic."	"The hospital has a level of equipment expected for a hospital. The waiting time is on average one to two hours and the hospital is in a relatively reasonable state of cleanliness"
<b>Negative</b>	"This checking account charges outrageous interest rates. Its associated costs are definitely exorbitant, and so are the overdraft fees before opening the account. On a user experience perspective, the checking account was onerous to use."	"The atmosphere of the restaurant is not very pleasant with a lot of background noise and oppressive waiters. The waiting time is generally long compared to the quality of the products in the plate."	"The hospital does not have a good reception. The wait is often long and is counted in hours. In addition, the waiting room is not well maintained and is not worthy of the level of hygiene of a hospital."

### Appendix 3

#### Multivariate Tests

Quality	Pillai's Trace	.020	23.280	8.000	18242.000	.000
	Wilks' Lambda	.980	23.347 <sup>a</sup>	8.000	18240.000	.000
	Hotelling's Trace	.021	23.413	8.000	18238.000	.000
	Roy's Largest Root	.018	41.255 <sup>c</sup>	4.000	9121.000	.000
Attitude	Pillai's Trace	.502	763.686	8.000	18242.000	.000
	Wilks' Lambda	.501	941.886 <sup>b</sup>	8.000	18240.000	.000
	Hotelling's Trace	.992	1130.488	8.000	18238.000	.000
	Roy's Largest Root	.987	2249.666 <sup>c</sup>	4.000	9121.000	.000
Type	Pillai's Trace	.015	17.558	8.000	18242.000	.000
	Wilks' Lambda	.985	17.618 <sup>b</sup>	8.000	18240.000	.000
	Hotelling's Trace	.016	17.678	8.000	18238.000	.000
	Roy's Largest Root	.015	34.555 <sup>c</sup>	4.000	9121.000	.000
Quality * Attitude	Pillai's Trace	.010	5.892	16.000	36492.000	.000
	Wilks' Lambda	.990	5.908	16.000	27862.698	.000
	Hotelling's Trace	.010	5.920	16.000	36474.000	.000
	Roy's Largest Root	.009	20.312 <sup>c</sup>	4.000	9123.000	.000
Quality * Type	Pillai's Trace	.005	2.670	16.000	36492.000	.000
	Wilks' Lambda	.995	2.673	16.000	27862.698	.000
	Hotelling's Trace	.005	2.675	16.000	36474.000	.000
	Roy's Largest Root	.004	9.164 <sup>c</sup>	4.000	9123.000	.000
Attitude * Type	Pillai's Trace	.003	1.674	16.000	36492.000	.044
	Wilks' Lambda	.997	1.674	16.000	27862.698	.044
	Hotelling's Trace	.003	1.674	16.000	36474.000	.044
	Roy's Largest Root	.002	3.857 <sup>c</sup>	4.000	9123.000	.004
Quality * Attitude * Type	Pillai's Trace	.004	1.194	32.000	36492.000	.208
	Wilks' Lambda	.996	1.194	32.000	33634.493	.208
	Hotelling's Trace	.004	1.194	32.000	36474.000	.208
	Roy's Largest Root	.002	1.884 <sup>c</sup>	8.000	9123.000	.058

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