Impact of Online Client Reviews on Sales Performance of Online Stores

Duleepa Lakshman

Lecturer, Dept. of International Business, Faculty of Management & Finance,
University of Colombo, Sri Lanka

Abstract

Customer opinions have a profound impact on both business organizations and customers. This research is focused on validating the impact of online client reviews on sales performance of the online stores based on an evidence-based approach. The research has been carried out as a systematic review which is a review of recently published academic research articles with the purpose of synthesizing current knowledge of the field of online client reviews. 15 quality journal articles published in Emerald and Elsevier have been analysed to reach the proposed objectives. This research fills the identified research gap by reporting a rich conclusion with the support of identified evidence followed by implications and logical recommendations. The findings of this review show that online client reviews play a critical role in today's online businesses and it has two main categories namely numerical reviews and textual reviews. Further, it has been found that both numerical and textual reviews are positively correlated with sales performance. Hence, the overall impact of online client reviews on sales performance is positive. It has concluded that textual reviews have a greater influence on the sales performance of online stores.

Keywords

Online client reviews, sales performance, customer feedback, textual reviews, numerical reviews

I. Introduction

Due to the rapid development in Web 2.0 technology and social media, a novel class of business model called electronic commerce (e-commerce) has emerged. With a growth of 19.9% in 2016 and a growth of 17.5% for 2017, e-commerce retailers are now accounting for 8.7% of retail sales worldwide (globalB2CecommerceReport, 2018). According to Zhao et al. (2018) these developments of web 2.0 and social media is providing an incomparable platform for online shoppers to share their experience and opinions on a product. Nowadays, customers like to share their experience with a product or the service with others via online (Niu and Fan, 2018). For instance, Amazon is now providing greater space for online customer reviews on their product as a marketing strategy to communicate product attributes and quality to peers. Consequently, online shoppers have easy access to a variety of products and brand information, especially on online retailers and consumer review websites. According to Mudambi and Schuff (2010) online client reviews can be defined as "peer-generated product evaluations posted on the company or third-party websites". These customer opinions have a profound impact on both business organizations and customers. While satisfied customers contribute to boosting sales via positive online client reviews online businesses are now focusing on negative reviews which could lead to a decrease in sales (Maeyer, 2012). A recent survey revealed that 78% of American people use online reviews before making their purchasing decision (marketingCharts, 2020). There are several internet-based information sources on products such as blogs, social media and YouTube channels. However, the concept of online client reviews on e-commerce has become one of the key success factors of the success of e-commerce platforms on the internet. Online customer reviews can be considered as a part of marketing which can serve as an effective marketing channel for firms to boost their sales and awareness at a very low cost (Zhao et al., 2019). Online customer reviews help to shape the purchase decision of a product and product awareness (Trenz and Berger, 2013). Based on the research done by Nielsen (2015) more than two-third of the consumers believe online reviews when they make their purchasing decision. According to the recent research done by Spiegel.medill.northwestern.edu (2020) they have found

that online reviews can increase conversions by 270%. Most of the studies use review data in companies like Amazon, eBay and the movie industry to analyse the significant role of online client reviews. Based on the provided information it is evident that online client reviews play a significant role as a key driver of today's e-commerce sites. Therefore, the goal of this research to understand the importance of online client reviews, different aspects of online client reviews and the impact of online client reviews on the sales performance of online businesses.

II. Theoretical Background

Sales impact of online client reviews has rapidly growing area nowadays and consumers are more rely on client reviews when they make their purchasing decision. It is crucial for researchers as well as online sellers and marketers to gain a proper understanding of the existing literature on online client reviews. This section will examine the previous studies published in the related area and important insights which could support the present study.

Online client reviews and its' importance

On e-commerce platforms, online reviews play a significant role in moderating the online purchasing decisions of the client. The impact of online client reviews on consumers' buying intention has presently gained significant attention (Elwalda, Lu and Ali, 2016). Further online customer reviews have turn out to be a significant tool on most of the e-commerce websites (Kawaf and Istanbulluoglu, 2019). At present, online client reviews have become a popular research area focuses on three main key areas by various researches namely; (1) reasons for writing, (2) reasons for reading and (3) effectiveness and influence (Chen et al., 2011; Frick and Kaimann, 2016; Folse et al., 2016). Stouthuysen et al. (2018) argued that client reviews are an influential factor in forming consumers' trust in the product as well as the store. Compared to the other offline word of mouth mediums online client reviews under electronic word of mouth have emerged as a significant source of information to online purchasers (Zhang, Ma and Cartwright, 2013). According to Zhou et al. (2014) online reviews can be used as a measurement of customer satisfaction and benchmarking tool. It is evident that online client reviews

on online business sites have opened up a new area that was not focused in the past. The impact of client reviews could be varying across industries and different product categories. Many researchers have identified that client reviews play a significant role in business such as restaurants and hospitality (Ye et al., 2009), books (Chevalier and Mayzlin, 2006), gaming products and technology products. (Frick and Kaimann, 2017; Zhang et al., 2013; Flavian et al., 2016). According to Forman et al. (2008) knowing the identity of the online reviewer can build more trust in consumers' minds. By justifying these findings nowadays, websites allow consumers to see the identity of the reviewer to some extent. According to Zhang, Ma and Cartwright (2013) influence of online consumer reviews is not limited to the local community and it can affect consumers all over the world who searched products over the internet. Niu and Fan (2018) have carried out a study to develop a sophisticated framework to manage online reviews through an online review management system. Under this research, they have conducted multiple case study by analysing 11 hospitality services based on the Grounded Theory Approach. Through this study they have emphasized that proper review management system should incorporate key dimensions such as response customization, specialization, centralization, formality and integration and review analytics.
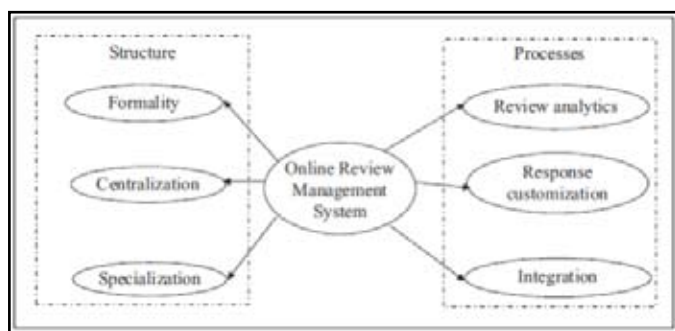

Fig.1: Online review management system
Source: Niu and Fan (2018)

It is clear that if the firms can take effective actions to handle customer complaints can lead to negative reviews into positive ones (Van Doorn et al., 2010).

Different aspects of online client reviews

Online reviews are multidimensional (Maeyer, 2012) and it is very important to identify the different aspects of online reviews. Diverse types of client reviews contain different characteristics; thus, these types of reviews have different levels of influence on sales (Zhao, Wu, Hua and Fang, 2019). It is widely accepted that online client reviews directly affect sales performance. However, there are still some contradictions about which aspects of online client reviews work more. According to the research done by Li, Wu and Mai (2019) using the joint sentiment-topic model on the effect of online reviews on product sales, they have identified two main categories of online client reviews namely, numerical rating and textual ratings. This research describes numerical ratings as a quantitative summery of the reviewer's experiences where textual ratings as open-ended descriptions on the product. Most of the online sellers provide numerical ratings such as star ratings to make consumers more comfortable in putting an online review whereas, some online businesses provide textual review options to clients to post their open-ended comments on the product. However, the level of impact on these types of reviews are different and discussed

in the coming section. Guo, wang and Wu (2019) have carried out a research on the understanding of review valence from the perspective of the emotional content in online customer reviews using the heuristic systematic model. According to this study they categorize online reviews into two major categories namely, emotional and non-emotional reviews. In this study they described emotional review as reviewers' emotional response regarding the product which can assist other customers' final judgment of the product whereas non-emotional reviews provide more detailed product information. According to the research done by Maeyer (2012) on the impact of online consumer reviews on sales and price strategies, have found the volume of reviews is very important in increasing consumer awareness and it could affect the behaviour of the reviewer. Further, they argued that verbal reviews carry more value than numeric reviews. Under this study they have analysed previous literature based on six categories namely, 1) sales and related dependent variables, 2) review dimensions, 3) reviewer characteristics, 4) reader characteristics, 5) product category, and 6) product. Lackermair, Kailer and Kanmaz (2013) carried out a research to evaluate the importance of online product reviews from a consumer's perspective. Under this research they have identified three types of customer reviews namely quantitative ratings, textual reviews and combination of both. In this study, survey was conducted among 104 German e-shoppers to examine how reviews effect on buying decisions. According to this study, some online websites provide both the textual and quantitative review options making customers more comfortable in making a review over a product. According to Zhao, Wu, Hua and Fang (2019) some reviewers like to write sizable reviews explaining their feeling and the experience on the product whereas others like to mention their review in very few words. However, most of the researchers argue that the quality of the information provided in the review is very important when determining the purchasing decision (Chen and Dibb, 2010; Song, 2010). These types of quality reviews play a huge role in the purchasing decision of review-oriented decision-making clients. Therefore we proposed the following:

H1: Online customer reviews can be divided into two main types namely, textual reviews and numerical reviews.

Sales impact of different types of online client reviews

A significant amount of studies has been carried out to find the impact of different types of online client reviews on sales. With the development of important role of online client reviews and different types of online reviews, identifying the individual impact of different types of online client reviews become challengeable Zhao et al. (2019). Business and online marketers need to identify the type of online client reviews which could make more influence on purchasing decisions. Therefore, there is a need of identifying the individual impact of different types of reviews. Li, Wu and Mai (2019) have carried out research on the effect of online reviews on product sales to identify the impact of online reviews on the business. In this research they have utilized joint sentiment – topic model to identify the impact of numerical and textual online reviews on sales.
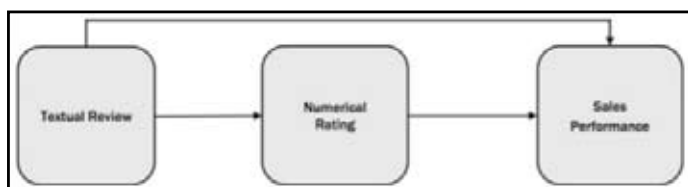
Fig. 2: Research framework by Li, Wu and Mai
Source: Li, Wu and Mai (2019)

Through this research they have found both numerical ratings and textual reviews have a significant impact on sales and numerical ratings mediate the effect of textual ratings. Research done by Chintagunta et al. (2010) shows that only the star ratings have a significant impact on the sales of the movie industry. In contrast to these findings, some researches have shown that textual reviews are more influential on sales of products (Cheng and Ho, 2015; Zhang et al., 2013). According to the comparative analysis on online reviews in the hospitality and tourism sector done by Xiang et al. (2015) found that the textual reviews are more comprehensive and accurate and have a better influence on customer's decisions. Research done by Chevalier and Mayzlin (2006) on customer reviews on Amazon.com and Barnesandnoble.com revealed that both the ratings and textual reviews have a significant impact on sales. Further, they found that negative reviews have more impact on sales than positive reviews. Duan et al. (2008) carried out a research to validate the significant impact of online reviews on box office sales. Through this research they have found that ratings have no significant impact on box office sales. In contrast to these findings research done by Chevalier and Mayzlin (2003) on the effect of customer reviews on book sales on Amazon. com and Barnes and Nobel site revealed that star ratings have a significant impact on book sale. In addition to discovering the impact of numeric review ratings on sales, some researches attempted to hypothesize the relationship between textual reviews and sales (Liu et al., 2010; Ghose and Ipeirotis, 2011; Archak et al., 2011). Ghose and Ipeirotis (2011) argued that textual reviews have more influence on sales due to the informativeness of the review. According to Flanagin et al. (2014) consumers trust and pay attention to the average ratings than the number of ratings. Based on these evidences following hypothesis was developed.

H2: both numerical and textual reviews have a significant positive relationship with the sales performance of online stores.

Overall impact of online client reviews on sales performance

Duan et al. (2008) carried out a research to identify the relationship between online reviews and revenue in the movie industry. Their findings show that the volume of online reviews positively correlated with the movie revenue. Elwalda, Lu and Ali (2016) have carried out a research on the effect of derived attributes on online client reviews on sales using the theory of planned behavior (TPB) and technology acceptance model (TAM). Findings showed that consumers' trust on e- vendor is significantly affected by online client reviews and customer's comments and online opinions have a significant impact on purchasing decisions. According to the recent research done by Spiegel.medill.northwestern.edu, (2019) they have found that online reviews can increase conversions by 270%. Based on the data of high-end gift retailer they have found that conversions are rapidly increase with the increase of number of displaying reviews.

Fig. 3: Sales impact of displaying reviews
Source: Spiegel.medill.northwestern.edu, (2019)

Several studies have shown that negative reviews have a greater impact than positive reviews on sales (Cui et al. 2010; Maeyer, 2012). Further to these researches Li, Wu and Mai (2019) argued that positive and negative reviews have a different level of impact on product sales. However, this research is limited to a single product category (tablet computers) and only focus on two aspects of online client reviews. Confirming the findings of Helversena et al, (2018) this model showed that negative reviews have more influence on online repurchase intention.
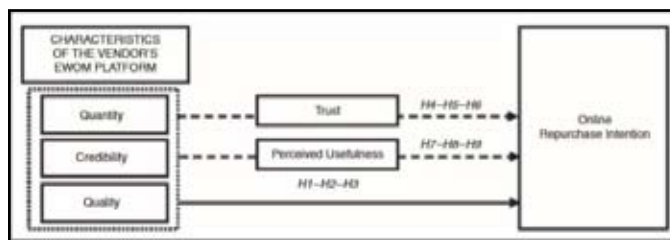

Fig.4: Model derived by Li, Wu and Mai
Source: Li, Wu and Mai, (2019)

In contrast to these findings, some researches have indicated that negative reviews have no impact or sometimes it could positively impact on sales (Duan et al, 2008; Cui et al, 2010). Guo, wang and Wu (2019) carried out a research to identify the role of emotional content from online customer reviews in purchase decisions. Through this research they have found that pleasant online client reviews have a greater impact on purchasing decisions than negative reviews. Helversen et al. (2018) carried out a research on influence of consumer reviews on online purchasing decisions in older and younger adults. The findings of this research showed that younger adults are more influenced by online client reviews where older adults have more focus on product attributes. Further, they have found that a single negative review can have a greater influence on older adults purchasing decisions. According to the research done by Lee, Park and Han (2011) they have found that when the trust of the online shopping mall is high, consumers' purchase intentions are influenced by online client reviews more favourably. Confirming to these findings research done by Matute, PoloRedondo and Utrillas (2016) showed that eWOM (electronic word of mouth) quality positively influences on consumers' trust and the purchase intention and while the quantity has a negative impact on repurchase intention. In this study they have utilized the structural equation model on a sample of 252 online consumers. Contrast to all the above findings the research done by several authors (Sen, 2008; Minemma et al.,

2016) provide some surprising findings. Sen (2008) argued that impact of e-WOM is not effective as the traditional face to face WOM. Research done by Minemma et al. (2016) on the effect of online customer reviews on product returns showed that positive reviews induce more returns. They justified this argument by if the product has a high number of positive reviews tend to have a high expectation at the moment of purchase and if these expectations not met consumers tend to return the product. Further, they have found that review volume and valence mainly affect the online purchase decision. However, in this study they have focused on only two product categories namely, electronics and furniture. Li, Wu and Mai (2019) argue that positive product reviews can provide an extra boost to sales. According to the research done by Karakaya and Barnes (2010) on the impact of online reviews of customer care experience on brand or company selection using structural equation model utilizing data from 320 consumers in the USA, they have found that customer opinions on websites can impact customer engagements more than government/consumer advocacy information sites and company web sites. These findings provide valuable insight into online businesses. In a nutshell, online businesses have to focus and pay their attention to not only the company website but socially based websites where customers put their reviews. According to the study done by Hu et al. (2008) using a portfolio approach to assess the effectiveness of online reviews, they have found that the impact of online client reviews on sales decreasing overtime. A Study done by Zhang, Ma and Cartwright (2013) on the impact of online user reviews on camera sales in Amazon.com showed some valuable insights to online sellers. This study revealed that the number of online reviews has a significant impact on camera sales in Amazon. Further, they found that changes in the total number of online reviews significantly associated with future camera sales. By keeping the consideration on above research findings, we hypothesize that

H3: In overall, online client reviews have a significant positive relationship with the sales performance of online stores.

Based on the above literature analysis it is noticeable that the findings of these researchers are conflicting and thus there is a need for clear analysis to resolve these conflicting findings. Therefore, the next section will be focusing on clearly synthesize the available evidence to reach clear conclusions on the selected area.

III. Research Method

The literature on online customer reviews has seen rapid growth among both academics and business practitioners during the past five years. Therefore, the present study was conducted as a systematic review that provides a broad overview of the impact of online client reviews on the sales performance of online stores. A systematic review answers a predefined research problem by collecting and analysing all empirical evidence related to the specific area. As per Sunders, Lewis and Thornhill (2012), this systematic review is a procedure of reviewing the available empirical evidence using a pre-planned standard to filter the most fitting and recent literature, evaluate the contribution and analyse based on deductive themes and synthesize the empirical findings. Based on the identified conflicting findings author has decided to carry out this research as a systematic review to effectively address the conflicting findings. Based on the available empirical evidence mentioned in the literature review it is proven that there are arguable findings and conclusions and indistinct areas. There are still conflicting findings on areas such as different types of online client reviews, level of impact of different types of online

client reviews. Despite large empirical studies on the topic of online client reviews and sales performance still there are grey areas to be cleared. Further, it was observed that there is a need for a general overview of online client reviews and its relationship with the sales performance to direct future studies. Based on the above reasons, there is a requirement of carrying out a systematic review on the available studies and their empirical findings. A systematic review has its inherent limitations. Mainly systematic reviews are highly dependent on secondary data which are already published in other sources. Considering online client reviews on online sites there are many avenues to conduct primary research. However, due to the mentioned benefits of systematic review author uses standard systematic reviewing to synthesize the available literature.

Selection of studies

In this systematic review, all the articles have been selected from the Elsevier and Emerald insight due to the reliability and quality of the journals. Articles were published in the area of online client reviews and their influence on sales has been selected for the evaluation.

Table 1: Search criteria

Search criterion	Value(s)
Research database	• Emerald insight • Elsevier
Database search services used	• Emerald insight Research database • Elsevier Research database
Source type	• Academic journals
Search terms (keywords)	• Online client reviews • OCR's and sales performance • Online client review management • Importance of online client reviews • Impact of online client reviews on sales performance • Impact of online client reviews on purchase intention • Online customer feedback and its importance
Search expanders	• Sorted by most recent • Content-type - articles
Search limiters	• Peer-reviewed articles only
Timeframe	• published in 2019 – 4 articles • published in 2018 – 3 articles • published in 2016 – 3 articles • published in 2012 – 3 articles • published in 2011 – 1 article • published in 2010 – 1 article

Source: Author

Inclusion and exclusion process

Based on the given guidelines in table 2, an initial search has been carried out. Several keywords have been utilized to search the most relevant articles. All the articles are written in English language and the author has selected only peer-reviewed articles publish in 2019, 2018, 2016, 2012, 2011 and 2010. Since the online client reviews is a global phenomenon, article selection has no

specific geographical restriction. This systematic review focuses on the global market. After a careful screening of the topics and the abstracts duplications were eliminated for further screening. After evaluating the conceptual frameworks some irrelevant articles were removed. PRISMA method has been utilized to select the samples and below PRISMA diagram (figure 5) shows the sample selection process of the present study. According to Saunders, Lewis and Thornhill (2012) PRISMA was an acronym for preferred reporting Items for Systematic Review and Meta-Analysis. According to the below flow diagram, author has initially selected 39 articles on Emerald and Elsevier. After removing the duplications, 32 articles have been screened by topic, abstract and table of content. 23 articles have been presented for the full evaluation. Finally, the author has selected 15 quality journal articles for the thematic synthesizing process.
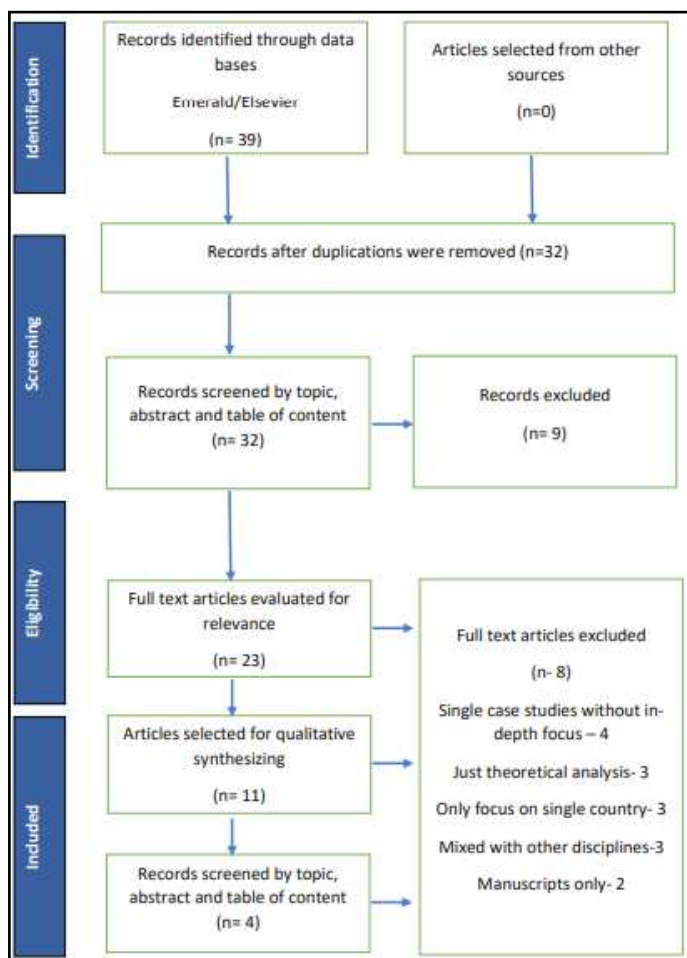

Fig.5: Flow diagram of research selection as per PRISMA model
Source: Author

Table 2: Frequency of related themes explored with reference to online client reviews

Research angle	No. of studies
Online client reviews and sales performance	9
Online client review management system	1
Online client reviews and trust	3
The quality aspect of online client reviews	3
Online client reviews and purchase intention	6

Source: Author

Table 3: Evidence
Insert table 3 here

Methodology and Data analysis method

According to Saunders, Lewis and Thornhill (2012), Based on the nature of the usage of the numeric and non-numeric data studies can be distinguished as qualitative and quantitative. This review mostly uses qualitative interpretation using thematic synthesizing while some quantitative nature has been utilized to examine the correlation of coefficient. Therefore, the mix method has been used as a methodological choice of this review. Philosophical nature of this review efforts to find out the casual relationship between online client reviews and sales performance of online stores. The deductive approach has been utilized to develop the hypothesis and to decide research strategy. Data from 15 journal articles have been collected and evaluated to examine the hypothetical relationships.

Thematic synthesizing

Insert table 4 here

Based on the outcome of the theoretical evidences as well as the method of analysis explained in the above section, researcher moves to discussion of the thesis. Discussion section inspires author to provide strong and rich judgments in the direction of achieving aim and objectives explained in chapter one.

IV. Discussion

Different types of online client reviews and its importance

Online retailers are now highly focusing on online client reviews which can be considered as a key success factor of today's online businesses. Customer reviews posted by eWOM customers are more influential on sales than reviews made by non eWOM clients. These statements highlight the importance of online client reviews effectively. Similarly, Niu and Fan (2017) argues that online businesses should incorporate proper and effective online review management system by highlighting the importance of online reviews. Holleschovsky and Constantinides (2016) highlighted the importance of online client reviews mentioning the 98% of the people rely on reviews when they making their purchasing decisions. Above findings evident that online consumers are more reliant on online product reviews compared to other factors that influence the online purchasing decision. Consistent with above findings Forman et al. (2008) online reviews can build more trust in consumers ' minds. According to these findings online client reviews can be utilized as a trust-building tool in an online store. A study was done by Lee, Park and Han, (2011) on the different effects of online consumer reviews on consumers' purchase intentions depending on trust in online shopping malls showed that greater the credibility of OCRs' greater the influence on purchasing decisions. According to these findings, online businesses need to consider the credibility of the online client reviews posted on their sites. In order to increase the credibility of online client reviews organizations can display few details of the reviewer and some information to make the credibility of ijnline client review. All the literature found out relating to online client reviews highlight the importance and its significant role in online stores. Based on the above and collected evidence it can conclude that online client reviews are a very important factor in determining the purchasing decision of the customer in online stores. These

findings confirm with part of the first objective of the current research. However, online stores have to identify the significant role of online client reviews in online stores and need to understand the effective utilization of online client reviews. After analysing the importance of online client reviews research direction focuses on identifying the different aspects of online client reviews. Based on the analysed articles more than six articles have focused on different types of online client reviews. As per the findings of Li, Wu and Mai (2019); Sebastianelli and Tamimi (2018) there are two major types of online client reviews namely, numerical ratings and textual ratings. Sebastianelli and Tamimi (2018) proposed a similar finding by identifying two categories of online client reviews namely star ratings (numerical) and summery ratings (textual). Holleschovsky and Constantinides (2016) identified two main categories of online reviews namely, qualitative reviews and quantitative reviews. Consistent with these evidence three categories of online reviews were found out by Lackermair, Kailer and Kanmaz (2013) namely quantitative ratings, textual ratings and combination of both. According to their findings, it can conclude that online retailers can provide customers a mixed review including both the numerical and textual parts. Further, both numerical and textual ratings play a significant role in online stores. In online stores, customers are open to provide their open opinions on the product or a specific brand. This allows customers to share their pleasant as well as the unpleasant experience with a specific brand or a product. The weight of evidence suggests that online client reviews could be categorically divided into two areas namely numerical ratings and textual ratings. Most of the researchers have been using several words to interpret the same. Based on the above evidence it can conclude that there are two major types of online client reviews which can affect the sales performance of online stores namely textual ratings and numerical ratings. Therefore, in this research, it has identified two types of online client reviews in online stores depicted below. These findings help to get the optimum utilization of the main two types of online client reviews to boost sales.
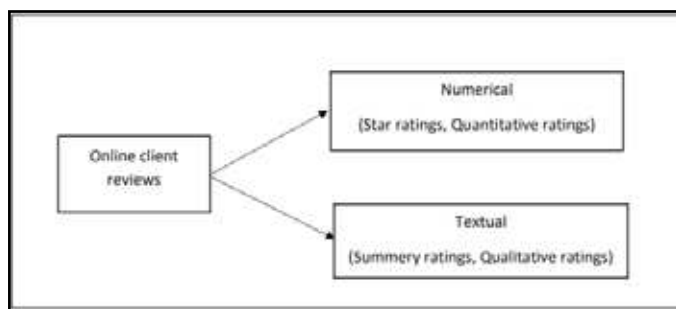

Fig. 6: Types of online reviews
Source: Author

Based on the provided evident the researcher confirmed the first hypothesis by dividing online reviews mainly into two categories namely, numerical and textual reviews.

Researcher proposed a common definition for textual reviews and numerical reviews as follows. Textual reviews on online stores can be generally defined as any kind of written comments or feedback on a product posted on an online store whereas numerical ratings can be defined as any kind of numerical range selection or a quantitative summary of the product experience.

Impact of different types of online client reviews on sales performance

Once literature highlights the importance and key components of online client reviews, it is vital to analyse the individual impact of identified components on sales performance on online stores. Primarily it has identified that textual and numerical ratings are the two major types of online cline reviews in online stores. Based on the evidence analysed in the above section it is noticed that the level of the impact of different types of client reviews can be varied. Online client reviews Numerical (Star ratings, Quantitative ratings) Textual (Summery ratings, Qualitative ratings) businesses should understand the importance of types of online client reviews based on their level of impact. Li, Wu and Mai (2019) found that both numerical and textual ratings affect sales of an online shopping mall. Further, they argued that numerical ratings mediate the effect of textual sentiment and reviews which explains the product attributes have more influence on sales. Confirming these findings Sebastianelli and Tamimi (2018) showed that numerical ratings and textual ratings have a significant impact on e- retailers' reputation. Findings of Sebastianelli and Tamimi (2018) provide valuable insight to e retailers on the utilization of different types of online reviews to enhance their reputation. Confirming the above findings, research done by Holleschovsky and Constantinides (2016) on the impact of online reviews on purchasing decisions found that both textual and numerical reviews significantly influence customers when they make their purchase decisions. Further, the findings showed that textual reviews are more influential in making a purchase decision. In this study, they have described textual reviews as qualitative reviews and numerical reviews as quantitative reviews. According to the above study, it is evident that online businesses can use textual reviews as a more credible source of information to the client. An online business can utilize textual reviews to provide 3rd party evaluation of a product which will help to leverage the purchasing decision of the customer. Customers are more rely on detailed reviews posted by peers who already experienced the same product. Based on the above theoretical evidence it can conclude that both the textual and numerical ratings have a significant positive impact on the sales performance of online stores as depicted in figure 7. However, it has identified that textual reviews are more influential in customers' decision-making process. Findings confirm with studies done by Holleschovsky and Constantinides, (2016); Guo, Wang and Wu (2019) and Zhao, Wu, Hua and Fang, (2018). With this, the researcher has confirms the second hypothesis by concluding both the numerical and textual reviews has a positive impact on sales performance and the relationship is stronger in textual reviews.
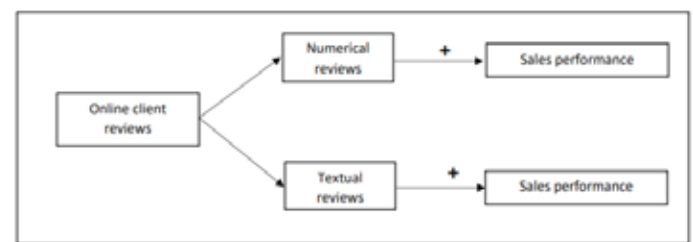

Fig. 7: Impact of different types of online client reviews
Source: Author

The overall impact of online client reviews on the sales performance

Considering the individual impact of online client reviews the next focus was to identify the overall impact on online client reviews on sales performance. Different authors have provided various opinions on the overall impact of online client reviews on sales performance. The author focuses on the findings of each study to conclude the overall impact of online client reviews. Based on the findings of Helversen, Kopec and Nielek (2018) they have figure out that the overall impact of online client reviews on sales has a significant positive impact. Findings are confirmed with studies done by Kawaf and Istanbulluoglu (2019); Zhao et al. (2018); Elwalda, Lü and Ali (2016); Lee, Park and Han (2011). Further, these findings showed that reviews are more influential on younger adults purchasing decisions. Based on these findings online businesses can weigh the importance of online reviews based on their target market. For instance, online sites that sell products to the adults may have less focus on online client reviews whereas sites that sell products to the younger crowd should highly focus on online client reviews. However, contrast to these findings research done by Minnema et al. (2016) on the effect of online client reviews on product returns showed that positive online client reviews encourage more returns. Therefore, online retailers need to focus on the proper management of online client reviews. Business can utilize the online client review management model introduced by Niu and Fan (2018). This system focuses on the key components such as formality, centralization, specialization, response customization, integration and review analytics.
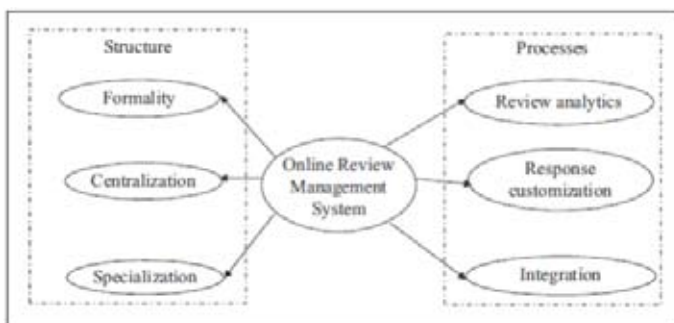

Fig. 8: Online review management model introduced by Niu and Fan (2018)
Source: Niu and Fan (2018)

According to these findings, online client reviews are one of the major factors which affect the success of an online business. However, the importance of online client reviews can be vary based on the industry type. Agreeing to this statement, findings of Kawaf and Istanbulluoglu (2019) showed that unlike other industries online client reviews are not important in the online fashion industry. In these types of high touched industries customers' needs to feel the product and experience the product physically rather than buying a product based on 3rd party evaluation. Therefore, it has identified that online customer reviews play a less significant role in industries such as fashion and clothing. By analysing the evidence author has identified that the quality of the review plays a vital role in influencing the purchasing decision. Online businesses should always try to display and attract quality reviews rather than focusing on the volume of reviews. By confirming to above insights, research done by Matute, Redando and Utrillas (2012) showed that the quality of the online client review has a direct and positive impact

on sales performance whereas quantity has a negative impact on repurchase intention. Therefore, online businesses should always focus on the quality of the reviews rather than focusing on the number of online reviews. Findings are not confirmed with the study done by Holleschovsky and Constantinides (2016) where he argued that the volume of reviews has a significant impact on the trust of the online platform. Based on the findings of Karakaya and Barnes (2010), Government/consumer advocacy information sites, company web sites, and information found through search engines are not considered important in influencing consumers. Therefore, online retailers can use online client reviews as a credible source of providing information to online consumers. Findings confirm with the studies done by Elwalda, Lu and Ali (2016) and Lee, Park and Han (2011). These reviews can impact consumer choice of company or brand selection.

Considering all above evidences and key outcome of the discussion, it can conclude that there are two major types of online client reviews namely, numerical reviews and textual reviews and both are positively correlated with the sales performance of online store and therefore, the overall impact of online client reviews have a significant and positive correlation with sales performance of online stores. With these findings, the researcher has achieved the last objective.

V. Conclusions and Implications

This systematic review was aimed to critically evaluate the available literature on the relationship between online client reviews and sales performance of online stores as there were conflicting findings on different types of online client reviews and their impact on sales performance. In order to achieve the aim of this research, three objectives were set. 15 quality journal articles published in Emerald and Elsevier have been analysed to reach the proposed objectives. Initially this research identified the significant role played by online client reviews in online stores in influencing the purchasing decision of customers. Then the research was focused on identifying the different types of online client reviews in online stores. After identifying the different types of online client reviews, researcher evaluated the level of impact of different types of online client reviews on sales performance. Finally, the research was focused on identifying the overall impact of online client reviews on sales performance. The first objective was to identify the importance of online client reviews in the contemporary online business context. By analysing 15 articles relating to online client reviews it was identified that online client reviews play a significant role in influencing the purchasing decision of customers and it can act as a credible source of information to the customer. Online businesses can use online client reviews to identify trends and required changes and then to improve their offerings. 14 articles highlighted the importance and significant role played by online client reviews in today's online businesses. Further, online client reviews are more credible and influential than Government/consumer advocacy information sites, company web sites, and information found through search engines. Organizations need to understand the effective utilization of online client reviews to use it as a tool for leveraging customers ' purchasing decisions. Therefore, it was able to achieve the part of the first objective of identifying the importance of online client reviews in online stores. With that motivation, the author has set process to identify the different types of online client reviews in online stores. After analysing the 15 articles author has identified there are two major categories of online reviews namely textual

reviews and numerical reviews. Out of 15 articles, 7 articles have identified the textual and numerical reviews as major types of online client reviews. Online businesses can use both numerical and textual reviews effectively to boost their sales performance. In this research, researcher proposed a common definition for textual reviews and numerical reviews. Researcher defined textual reviews as a form of written comments or feedback on a product posted on an online store whereas numerical ratings can be defined as any kind of numerical range selection or a quantitative summary of the product experience. After finding the major types of online client reviews the author has focused on identifying the individual impact of identified types of online client reviews on sales performance. Through this systematic review, it has found that both numerical and textual reviews are positively co-related with the sales performance of online stores. Out of all selected articles, 5 articles found out that both textual reviews and numerical reviews are positively co-related with the sales performance of online stores. Further, it has identified that textual reviews have more influence on consumer buying decisions. Evidences suggest that textual reviews are more credible and informative. Therefore, online businesses can use textual reviews as a credible source of providing information and an effective tool for boosting sales. Further, online businesses need to promote more textual reviews in order to have a better influence on customers 'purchasing decisions. After analysing the individual impacts of identified types of online reviews research focused on the overall impact of online client reviews on sales performance. Out of 15 selected journal articles, 12 articles concluded that there is a positive relationship between online client reviews and sales performance. Three authors argued that there is no or little impact of online client reviews on sales performance. Based on that author concluded the overall impact of online client reviews on sales performance is positive and significant. It was found that online client reviews are not important in industries such as fashion and design. Therefore, the importance of online client reviews can vary according to industry type. Online businesses need to understand the role of online client reviews in a particular industry that they are currently operating. However, due to the significant role plays by online client reviews nowadays online businesses can establish a proper review management system in order to get the maximum utilization of online reviews in leveraging sales performance. This research contributes a clear understanding of the importance of online client reviews, types of online client reviews and the impact of online client reviews on sales performance. The findings of this research can be utilized to use the maximum advantage of online client reviews in online businesses. This study is not without its limitations. Since the study adopts its research method as a systematic review, this research consists of the inherent limitations of a systematic review discussed in a previous section. Therefore, the aim of this research can be validated through a survey or a case study using primary data. In this study, we have not focused on reviewers' characteristics. Further studies can investigate how reviewers' characteristics effect on sales via effective client review. Factors affecting the purchasing decision of the customer can vary due to the lifestyle and culture among countries. Hence it is suggested future studies to test the impact of online client reviews across different countries.

References

[1] Archak, N., Ghose, A. and Ipeirotis, P. (2011). Deriving the Pricing Power of Product Features by Mining Consumer Reviews. Management Science, 57(8), pp.1485-1509.

[2] Anon, (2020). [online] Available at: https://www.researchgate.net/publication/258846998_Determinants_of_Consumer_Trust_of_Virtual_Word-of-Mouth_An_Observation_Study_from_a_Retail_Website [Accessed 6 Jan.2020].

[3] Constantinides, E. and Holleschovsky, N. (2016). Impact of Online Product Reviews on Purchasing Decisions. Proceedings of the 12th International Conference on Web Information Systems and Technologies.

[4] Chevalier, J. and Mayzlin, D. (2006). The Effect of Word of Mouth on Sales: Online Book Reviews. Journal of Marketing Research, 43(3), pp.345-354.

[5] Chen, Y., Fay, S. and Wang, Q. (2011). The Role of Marketing in Social Media: How Online Consumer Reviews Evolve. SSRN Electronic Journal.

[6] Chevalier, J. and Mayzlin, D. (2006). The Effect of Word of Mouth on Sales: Online Book Reviews. Journal of Marketing Research, 43(3), pp.345-354.

[7] Chintagunta, P., Gopinath, S. and Venkataraman, S. (2010). The Effects of Online User Reviews on Movie Box-Office Performance: Accounting for Sequential Rollout and Aggregation Across Local Markets. SSRN Electronic Journal.

[8] Cheng, Y. and Ho, H. (2015). Social influence's impact on reader perceptions of online reviews. Journal of Business Research, 68(4), pp.883-887.

[9] Duan, W., Gu, B. and Whinston, A. (2008). Do online reviews matter? — An empirical investigation of panel data. Decision Support Systems, 45(4), pp.1007-1016.

[10] De Maeyer, P. (2012). Impact of online consumer reviews on sales and price strategies: a review and directions for future research. Journal of Product & Brand Management, 21(2), pp.132-139.P a g e 37 | 40

[11] De Maeyer, P. (2012). Impact of online consumer reviews on sales and price strategies: a review and directions for future research. Journal of Product & Brand Management, 21(2), pp.132-139.

[12] Ecommercewiki.org. (2020). Global B2C ECommerce Country Report 2018 (free). [online] Available athttps://www.ecommercewiki.org/reports/752/global-b2c-ecommerce-countryreport-2018-free [Accessed 7 Jan. 2020].

[13] Elwalda, A., Lü, K. and Ali, M. (2016). Perceived derived attributes of online customer reviews. Computers in Human Behavior, 56, pp.306-319.

[14] Ghose, A. and Ipeirotis, P. (2011). Estimating the Helpfulness and Economic Impact of Product Reviews: Mining Text and Reviewer Characteristics. IEEE Transactions on Knowledge and Data Engineering, 23(10), pp.1498-1512.

[15] Georg Lackermair, Daniel Kailer, Kenan Kanmaz. "Importance of Online Product Reviews from a Consumer's Perspective. Advances in Economics and Business 1.1 (2013) 1 - 5. doi: 10.13189/aeb.2013.010101.

[16] Guo, J., Wang, X. and Wu, Y. (2020). Positive emotion bias: Role of emotional content from online customer reviews in purchase decisions. Journal of Retailing and Consumer Services, 52, p.101891. https://www.researchgate.net/publication/258846979_The_Effect_of_Online_Consumer_Reviews_on_New_Product_Sales [Accessed 6 Jan. 2020].

[17] Frick, B. and Kaimann, D. (2016). The impact of customer reviews and advertisement efforts on the performance of experience goods in electronic markets. Applied Economics Letters, 24(17), pp.1237-1240.

[18] Forman, C., Ghose, A. and Wiesenfeld, B. (2007). Examining the Relationship Between Reviews and Sales: The Role of Reviewer Identity Disclosure in Electronic Markets. SSRN Electronic Journal.

[19] Kawaf, F. and Istanbulluoglu, D. (2019). Online fashion shopping paradox: The role of customer reviews and facebook marketing. Journal of Retailing and Consumer Services, 48, pp.144-153.

[20] Karakaya, F. and Ganim Barnes, N. (2010). Impact of online reviews of customer care experience on brand or company selection. Journal of Consumer Marketing, 27(5), pp.447-457.

[21] Lee, J., Park, D. and Han, I. (2011). The different effects of online consumer reviews on consumers' purchase intentions depending on trust in online shopping malls. Internet Research, 21(2), pp.187-206.

[22] Li, X., Wu, C. and Mai, F. (2019). The effect of online reviews on product sales: A joint sentiment-topic analysis. Information & Management, 56(2), pp.172-184.

[23] Matute, J., Polo-Redondo, Y. and Utrillas, A. (2016). The influence of EWOM characteristics on online repurchase intention. Online Information Review, 40(7), pp.1090-1110.

[24] Mudambi and Schuff (2010). Research Note: What Makes a Helpful Online Review? A Study of Customer Reviews on Amazon.com. MIS Quarterly, 34(1), p.185.

[25] Marketing Charts. (2020). Online Customer Reviews Remain Highly Influential in Consumers' Local Business Decisions - Marketing Charts. [online] Available at: https://www.marketingcharts.com/industries/pharma-and-healthcare-58535 [Accessed 6 Jan. 2020].

[26] Minnema, A., Bijmolt, T., Gensler, S. and Wiesel, T. (2016). To Keep or Not to Keep: Effects of Online Customer Reviews on Product Returns. Journal of Retailing, 92(3), pp.253-267.

[27] Nielsen.com. (2020). Global Trust in Advertising – 2015. [online] Available at: https://www.nielsen.com/us/en/insights/report/2015/global-trust-in-advertising-2015/ [Accessed 6 Jan. 2020].

[28] Niu, R. and Fan, Y. (2018). An exploratory study of online review management in hospitality services. Journal of Service Theory and Practice, 28(1), pp.79-98.

[29] Park, J., Gu, B. and Lee, H. (2012). The relationship between retailer-hosted and third-party hosted WOM sources and their influence on retailer sales. Electronic Commerce Research and Applications, 11(3), pp.253-261.

[30] Saunders, M., Lewis, P., & Thornhill, A. (2012). Research Methods for Business Students (6th ed.). Harlow, England: Prentice Hall Spiegel.medill.northwestern.edu. (2020). How Online Reviews Influence Sales - The Medill IMC

[31] Spiegel Research Center. [online] Available at: https://spiegel.medill.northwestern.edu/onlinereviews/ [Accessed 6 Jan. 2020].

[32] Sebastianelli, R. and Tamimi, N. (2018). E-tailer website attributes and trust: understanding the role of online reviews. Online Information Review, 42(4), pp.506-519.

[33] Sahoo, N., Dellarocas, C. and Srinivasan, S. (2017). The Impact of Online Product Reviews on Product Returns. SSRN Electronic Journal.

[34] Stouthuysen, K., Teunis, I., Reusen, E. and Slabbinck, H. (2018). Initial trust and intentions to buy: The effect of vendor-specific guarantees, customer reviews and the role of online shopping experience⍰. Electronic Commerce Research and Applications, 27, pp.23-38.

[35] Trenz, M. and Berger, B. (2013). Analyzing Online Customer Reviews - AnInterdisciplinary Literature Review And ResearchAgenda. European Conference on Information Systems (ECIS), (ECIS 2013 Completed Research.Paper 83).

[36] Van Doorn, J., Lemon, K., Mittal, V., Nass, S., Pick, D., Pirner, P. and Verhoef, P. (2010). Customer Engagement Behavior: Theoretical Foundations and Research Directions. Journal of Service Research, 13(3), pp.253-266.

[37] Van Doorn, J., Lemon, K., Mittal, V., Nass, S., Pick, D., Pirner, P. and Verhoef, P. (2010). Customer Engagement Behavior: Theoretical Foundations and Research Directions. Journal of Service Research, 13(3), pp.253-266. P a g e 40 | 40

[38] Von Helversen, B., Abramczuk, K., Kopeć, W. and Nielek, R. (2018). Influence of consumer reviews on online purchasing decisions in older and younger adults. Decision Support Systems,113, pp.1-10.

[39] Xiang, Z., SchwartzJohn, Z., Henry Gerdes, J. and Uysal, M. (2014). What can big data and text analytics tell us about hotel guest experience and satisfaction?. International Journal of Hospitality Management, 44:120-130.

[40] Ye, Q., Law, R. and Gu, B. (2009). The impact of online user reviews on hotel room sales. International Journal of Hospitality Management, 28(1), pp.180-182.

[41] Zhao, K., Stylianou, A. and Zheng, Y. (2018). Sources and impacts of social influence from online anonymous user reviews. Information & Management, 55(1), pp.16-30.

[42] Zhang, L., Ma, B. and Cartwright, D. (2013). The impact of online user reviews on cameras sales. European Journal of Marketing, 47(7), pp.1115-1128.

[43] Zhao, P., Wu, J., Hua, Z. and Fang, S. (2019). Finding eWOM customers from customer reviews. Industrial Management & Data Systems, 119(1), pp.129-147

Author's Profile

Duleepa Lakshman Lecturer, Dept. of International Business, University of Colombo, Sri Lanka/ Business Consultant. Reading for MPhil in Business Economics, University of Sri Jayewardenepura, Sri Lanka. Master of Business Administration, University of Bedfordshire, United Kingdom. Bachelors of Business Administration in International Business, university of Colombo, Sri Lanka. Passed finalist of Association of Accounting Technicians, Sri Lanka

Appendices

Table 3: Evidence

Author (Year)	Code	Theme	• Method • Sample size • Platform • Industry	Key findings
Li, Wu and Mai (2019)	A1	The different effects of online consumer reviews on consumers' purchase intentions depending on trust in online shopping malls	Survey Joint Sentiment-Topic model 88,901 consumer reviews on tablet computers Online business industry	Numerical ratings mediate the effect of textual sentiments. Both the numerical and textual ratings affect sales. Negative sentiments of reviews fuel negative perception of the product. Reviews that stress particular aspects of the product may have a stronger effect on sales.
Guo, Wang and Wu (2019)	A2	Positive emotion bias: Role of emotional content from online customer reviews in purchase decisions	Laboratory experiment 106 of sample Online business industry	Pleasant client reviews lead to higher purchase intention. Perceived credibility and perceived diagnosticity have a significant impact on purchasing decisions only in the context of unpleasant online reviews.
Kawaf and Istanbulluoglu (2019)	A3	Online fashion shopping paradox: The role of customer reviews and Facebook marketing	Interviews 25 Sample Personal construct theory Facebook online businesses	The conventional use of social media is not effective in the online fashion industry. In fashion industry reviews are not important as other industries
Zhao, Wu, Hua and Fang (2019)	A4	Finding eWOM customers from customer reviews	Text mining technique E-commerce site 1,798 consumers and 10,803 pieces of reviews Case study	Customer reviews posted by eWOM customers are more influential on sales than reviews made by non eWOM clients. The predictive power of eWOM customers are higher than non eWOM clients Important to focus not only on traditional purchase value but also on their online eWOM value.
Helversen, Kopec and Nielek (2018)	A5	Influence of consumer reviews on online purchasing decisions in older and younger adults	Survey 154 younger adults and 165 older adults Online business industry	Product attributes, average ratings, positive and negative customer reviews affect the younger adults' purchase decision. Most younger adults choose high rated products Older adults are more influenced by negative reviews. Older adults are not considering average ratings and reviews.
Sebastianelli and Tamimi (2018)	A6	E-tailer website attributes and trust: understanding the role of online reviews	Observations Online retail industry Case study	Summery reviews and star ratings have a significant impact on e-retailers' reputation. Prior online experiences moderate the relationship between website attributes and trust.

Niu and Fan (2018)	A7	An exploratory study of online review management in the hospitality Services	Interviews 11 Multiple Case study Non-probability sampling Hospitality services	The online review management system should include key dimensions of formality, centralization, specialization, response customization, integration and review analytics.
Elwalda, Lü and Ali (2016)	A8	Perceived derived attributes of online customer reviews	Survey 489 responses from Amazon.com Case study E-commerce	Consumer trust is significantly affected by perceived usefulness, perceived ease of use and perceived enjoyment of OCR's Online client reviews have a direct impact on purchasing decisions. Introduced a new model "Perceived Derived Attribute (PDA) model.
Holleschovsky and Constantinides (2016)	A9	Impact of online product reviews on purchasing decisions	online survey the sample size is 211 Divided in the general population	Credibility and usability are an important factor of online reviews. Reviews act as input in the decision-making process. 98% of people rely on reviews when making purchasing decisions a mixture of qualitative and quantitative reviews can have more influence on customers. Qualitative reviews are most credible and user-friendly. The volume of reviews can increase the trust of the platform
Minnema et al. (2016)	A10	To Keep or Not to Keep: Effects of Online Customer Reviews on Product Returns	Observations 8,835,645-page views, 631,063 purchases and 2,164 products Non-probability sampling Online retail industry	Positive reviews influence more purchases but more returns. Both the volume and the variance of client review affect purchase decisions and no or little impact on returns.
Maeyer (2012)	A11	Impact of online consumer reviews on sales and price strategies: a review and directions for future Research	Systematic review Data from Amazon. com or movie theaters	Literature review organized into six categories: sales and related dependent variables, review dimensions, reviewer characteristics, reader characteristics, product category, and product.
Matute, Redando and Utrillas (2012)	A12	The influence of EWOM characteristics on online repurchase intention	Structural equation modeling Sample of 252 online customers. Online questionnaire	eWOM quality has a positive and direct impact on purchase intention. eWOM quantity has a negative impact on repurchase intention. Perceived usefulness mediates the eWOM characteristics of online purchase intention.
Zhang, Ma and Cartwright (2012)	A13	The impact of online user reviews on cameras sales	Digital camera sales at Amazon Survey Sample of 1,292 cameras and 63,121 online reviews	Average online reviews and the volume of online reviews have a significant influence on camera sales. Sales of previous periods have an impact on future sales. Changing average online review ratings and changes in rating volume have an impact on future camera sales. There is a clear relationship between online reviews and product sales.

Lee, Park and Han, (2011)	A14	The different effects of online consumer reviews on consumers' purchase intentions depending on trust in online shopping malls	Two-way factorial experiment Interviews Camera sale Online business industry	Online client reviews are more influenced by trust in the online shopping mall. Greater the credibility of OCRs'greater the influence on purchasing decisions. When the trust of an online shopping mall is high impact of OCR is high.
Karakaya and Barnes (2010)	A15	Impact of online reviews of customer care experience on brand or company selection	Structural equation modeling Data from 320 consumers in the USA	Consumer opinions can impact consumer choice of company or brand selection. Government/consumer advocacy information sites, company web sites, and information found through search engines are not considered important in influencing consumers.

Table   4: Thematic synthesizing

Aim	Objectives	Identification		Theme	A1	A2	A3	A4	A5	A6	A7	A8	A9
Evaluate the impact of online client reviews on the sales performance of online stores	Different types of online client reviews	Textual Reviews		DT-TR	✓			✓	✓				✓
		Numerical (Star) Ratings		DT-NR	✓	✓		✓	✓	✓			✓
		Combination of both		DT-CB			✓					✓	✓
	Impact of different types of online client reviews on sales performance	Textual Reviews	Positive	ITR-P	✓	✓		✓	✓				✓
			Negative	ITR-N									
		Numerical (Star) Ratings	Positive	INR-P	✓			✓	✓	✓			✓
			Negative	INR-P									
		Combination of both	Positive	ICB-P									✓
			Negative	ICB-N									
	Overall Impact on sales performance	Positive		IS-P	✓	✓		✓	✓	✓	✓	✓	✓
		Negative		IS-N									
		No Impact		IS-NI		✓							

Aim	Objectives	Identification		Theme	A10	A11	A13	A14	A15
Evaluate the impact of online client reviews on the sales performance of online stores	Different types of online client reviews	Textual Reviews		DT-TR	✓	✓		✓	
		Numerical (Star) Ratings		DT-NR	✓	✓	✓	✓	
		Combination of both		DT-CB		✓			
	Impact of different types of online client reviews on sales performance	Textual Reviews	Positive	ITR-P		✓			
			Negative	ITR-N					
		Numerical (Star) Ratings	Positive	INR-P		✓	✓		
			Negative	INR-N					
		Combination of both	Positive	ICB-P		✓			
			Negative	ICB-N					
	Overall Impact on sales performance	Positive		IS-P		✓	✓	✓	✓
		Negative		IS-N	✓				
		No Impact		IS-NI					