Consumer ratings-reviews and its impact on consumer purchasing behavior

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Abstract

Storytelling is one of the most creative, powerful and effective tools of modern marketing strategies and communication. Due to the expansion of social media, storytelling has become a popular marketing and sales tool that may affect consumer behavior. This research has been conducted from a storytelling perspective with the purpose of finding the correlation between consumer reviews and consumer purchasing behavior. This study focuses on consumer stories which are reflected in terms of product reviews and ratings. Where the correlation between these reviews and ratings and their effects on overall product sales are investigated. The study answers the question, "If reviews & rating have a correlation with consumer purchasing behavior in digital marketing, and if so then how this correlation could be defined?"

The data collection and tests have been conducted in a practical environment. The German online stores have been used as the main mode of data collection. Depending on the nature of the data, the quantitative analysis approach has been adopted. By conducting real-time sales data tests, this study fills the gap in previous consumer research studies. The in-depth analysis of results show the correlation between consumer reviews and product sales. The results have revealed that consumer reviews may influence overall product sales and help a consumer in purchasing decision.

Kundrecensioner och dess inverkan på kundernas köpbeteende

Sammanfattning

Storytelling är ett av de mest kreativa, kraftfulla och effektiva redskapen i modern marknadsföring. På grund av den ökande användningen av sociala medier har storytelling blivit ett populärt redskap för att påverka konsumenternas beteende. Denna studie har utförts från perspektivet av storytelling med syftet att finna en korrelation mellan kundrecensioner och kundernas köpbeteende. Studien fokuserar på kundernas historier som reflekteras i recensioner och betyg, där korrelationen mellan recensioner och betyg och övergripande försäljning undersöks. Studien syftar till att besvara frågan "Om recensioner & betyg har en korrelation med kundernas köpbeteende i digital marknadsföring, och om så hur kan korrelationen definieras?"

Datainsamlingen och testandet har utförts i en praktisk miljö. Tyska online butiker har använts som huvudsaklig metod för datainsamling. På grund av strukturen på data har en kvantitativ analys metod använts. Genom att genomföra tester i realtid, har denna studie kompletterat tidigare forskning kring kundbeteende. Den fördjupade analysen av resultaten visar att det finns en korrelation mellan kundrecensioner och försäljning. Resultaten har visat att kundrecensioner kan påverka försäljningen av produkter och hjälpa en konsument i ett köpbeslut.

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1. Introduction

Today, social media has become an essential part of our lives and a key to success for businesses. Social media provides a global platform for businesses to understand and get more insights about consumer's needs. Similarly, consumers get an opportunity to get more information about products and provide feedback. Since, the emergence of social media technologies the world of communication has changed. In addition, people are facing an increasing shortage of time. This lack of spare time is also leading more and more people towards technological devices. Today, people would not spend time with messages that interrupt, instead they spend time with ideas that engage (Devkishin, Rizvi, & Akre, 2013).

We are now entering from a digital marketing world into a 'post-digital marketing' world. This phenomena has given rise to networked individualism, where technologies like the internet and smart phones have totally changed the consumer buying behaviors. No businesses can compete until and unless they adopt new digital media trends and technologies (Rainie, 2012).

There have been many research studies focusing on different factors influencing consumer-buying decisions. For a brand, it is crucial to understand and take into account the cultural and social factors inherent in each market or each situation. This understanding helps brands adapt their products and marketing strategies to that particular market (Punj, 2012, Javadi et al., 2012).

Businesses and marketing analysts have already accepted the importance of social media. In order to communicate with their consumers they have been active on social media channels such as Facebook, Instagram, and Twitter. Business competitors are using many techniques to capture consumer attention and get their feedback to make better consumer oriented strategies (Evrard, Hoyer, & Strazzieri, 2005).

Nowadays, applications such as search engine optimization (SEO) tools have made it easy to monitor how many visits specific social media channels have received. In this fast pace world where trends are changing every day, knowing the number of consumer visits does not seem enough. With the advancement of technology, business strategies have to be creative and attractive enough to capture the consumers' attention. The businesses need advance communication tools to compete in the market.

Storytelling is one such creative way of communication. Storytelling is an ancient art to affect human beings. Stories are illustrative and easily memorable, and if they are told in good way, they can bring a significant positive impact. All these characteristics make storytelling a powerful and necessary way of modern marketing communications (Evrard, Hoyer, & Strazzieri, 2005).

2. Theory and related research

2.1 Stories and humans

Stories have always been a strong tool of communication affecting human perception of the world. Some authors have described stories as a tool that provide simple memorable frameworks. Humans use these frameworks to organize their world around these frameworks. Stories come in both forms: self-created and heard. Stories can be about the past, present and future. Therefore, stories can help build human's perception of these periods.

There are several definitions of stories available in literature. The following definitions support the idea of storytelling in this study:

"Creating desire in the audience and then showing how your ideas fill that desire moves people to adopt your perspective. This is a heart of a story" (Duarte, 2010).

"Storytelling is the most powerful way to put ideas into the world today. "—Robert McKee

"Stories have power. They delight, enchant, touch, teach, recall, inspire, motivate, challenge. They help us understand. They imprint a picture on our minds. Want to make a point or raise an issue? Tell a story." — Janet Litherland

Then comes the way in which stories are being created and told. According to researchers, stories can have different effects based on how they are being told. The unique way of storytelling can make them holistically more powerful than the facts and arguments they contain (Devkishin et al., 2013).

Stories can be used to create biased memories in favor of the narrative that is being told in the stories. Many researchers believe that memories are mainly stories. Stories are powerful enough to create a feeling of an experience. Stories has the power to create strong mental imagination and can precisely communicate the message that is supposed to be delivered. With the help of stories, it is also possible to see the context in which the message was created (Evrard et al., 2005).

Moreover, stories are also considered to be a relationship building tool. A memorable context and high quality information sharing is a key element of relationship building. Stories help humans to share and receive not only this information but also the emotions that are linked to that information. This sharing helps to create a bonding that is necessary to build relations. Stories facilitate mutual disclosure. The disclosure and sharing of information by one participant is usually reciprocated by the other participant leading it to be a mutual process.

All the elements that are described above make storytelling one of the most powerful communication tool. The tool that has strong persuasive power and can help industries and businesses to transform their communication into a powerful communication experience.

2.2 Storytelling in modern marketing

In recent years, there have been a lot of research on storytelling and its role in communication with consumers. The researchers have widely recognized the power of stories in variety of disciplines such as psychology, social sciences, management and marketing. However, there is not enough research that addresses storytelling in digital marketing and sales perspective. One research addresses that consumers are interpreting their experiences with brands through narrative processing, and the brand story has emerged as a great marketing challenge now a days (Granitz and Forman, 2015). This makes storytelling an important element of digital marketing era and it has applied in variety of ways to utilize brand strategies. Another study describes this type of communication in terms of emotional storytelling advertisements, the brands are using stories that address and reflect consumer emotions in order to meet the emotional needs of consumers in this digital age (Lee Myung-hee, 2016).

A recent research on storytelling advertisement has confirmed that target videos visualizing stories enhances the viewer's persuasion and comprehension (Byeongbok, 2016). A journal of brand management has researched about kind of stories that attract consumers. Research revealed that consumers are interested to know brand's history, past experience and user's personal stories. Though, consumer interest varies according to the nature of their consumptions (Granitz and Forman, 2015).

A study by marketing researcher explored that storytelling play an exchanging role between sales person and buyers. The study revealed that both buyers and sellers accepts that compelling

stories help to build bonding relationships. Buyers establish a credibility with buyers when they listen stories from buyers (Gilliam and Flaherty, 2015).

Focusing to understand how stories enhance self-brand connections, a study in business administration area explored that people normally interprets their own experiences in the form of a story (Escalas, 2004). Another study have investigated that brand story advertisements help to create corporate image and consumer loyalty with brand (sand et al., 2016).

2.3 Purpose

The purpose of this thesis is to find a correlation between storytelling and consumer purchasing behavior. The research has been conducted from a digital marketing perspective. The intended idea is to find out the commercial aspects of "Storytelling" that could be a way to communicate and affect consumer behavior, allowing any firm to create stronger emotional bonds with consumers. This correlation will be investigated by representing storytelling in terms of product reviews and ratings and their impact on other consumers' purchasing behavior (eventual increase or decrease in product sales). The purpose is achieved by answering the question:

If reviews and ratings have a strong correlation with consumer purchasing behavior in digital marketing and if so then how this correlation could be defined?

The following hypotheses are used to answer this question:

1. Negative consumer reviews of a product impact overall market sales

2. The quantity of consumer reviews matters to build consumer trust in purchasing decision

While there are many other factors e.g. price, brand, reviews and rating etc. which play a role in consumer purchasing decision. This study will specifically look into one factor, consumer reviews and ratings, and its impact on the digital market sales. Since e-commerce business is on the rise and online shops are overtaking brick and mortar stores, it would be difficult to consider all online stores and sales. According to Centre of Retail Research, Germany is considered as mature ecommerce market where more than 82% consumers shop online ('European Ecommerce Report 2017 - Ecommerce continues to prosper in Europe, but markets grow at different speeds - Ecommerce Europe,' 2017). By keeping this in mind, this research is focused on the German online stores. Moreover, the research is specific to only one product category, the 'washing machine' that is an essential home appliance.

2.4 Previous findings and filling the gap

There is much research that has been conducted to ascertain the impact of consumer word-of-mouth on sales. A relevant study conducted in Korea by Sung Ho Ha, Soon Young Bae and Lee kyeong Son on the 'Impact of online consumer reviews on product sales' in 2015 gives the following insights. The study analyzed reviews specifically on seller-blogger and personal-blogger sites and their impact on product sales. As per the results of the study, all the reviews no matter from which source (seller sites, seller blog or personal blog) have a significant impact on product sales. Although, the authors have highlighted that the consumer reviews on personal blogs were more powerful than seller blogs. This finding supports the idea of storytelling and consumer word-of-mouth. Based on this study, we can say that consumers place more trust on consumer generated blogs than seller blogs (Ho Ha et al., 2015).

This present study fills the research gap in two ways. First, the previous study differs by the nature of data used to analyze the subject. For example, the above mentioned study was conducted on casual products such as books, in contrast, this study focuses on home appliances such as washing machines. Second, the previous studies measured sales using sales ranking or

sale points in terms of overall sales. Whereas, this study will fill the gap by using actual sales and in terms of the total number of products sold with certain reviews and ratings.

3. Method description

This study assumes that consumers place more trust on consumer generated stories than product description. Another assumption is that, reviews reflect the stories in digital marketing where consumers share their experiences and thoughts about the product. Keeping this in mind, the reviews and ratings are used as former stories in this study. For the sake of reviews and ratings collection, the big German online stores for home appliances such as Amazon are used.

In order to be more specific, the research is mainly limited to one product category, 'washing machine'. The assumption was that a washing machine is an essential and expensive home appliance. Therefore, consumers are more likely to consider reviews and ratings before spending money and time on buying home appliance, which is supposedly for long-term use.

In order to measure the market impact, a web dashboard was built to collect both online and offline sales information of the products over time. The research was conducted in 2016 and the yearly sales data of 2015 was used in this study. Due to confidentiality reasons data source, product models and names of online stores remain confidential.

Sales web dashboard and the reviews from online stores were used as the main mode of data collection. The sales data was collected in terms of the number of products sold with certain reviews and ratings. In total seven big German online home appliances stores have been considered for the collection of products with reviews and ratings. This study assumes that social media have influenced traditional shopping methods. Which means, even if consumers buy products directly from physical stores they still look at reviews and rating of the product to make a purchasing decision.

Online stores are a necessity of today's business, almost all physical stores in Europe have their online stores as well. It seems to be a trend now that people prefer to do online research about the product and check reviews before making a decision to buy a product. This phenomena is considered valid even if the product is later bought from a physical store. By having this in mind, the sales dashboard was not limited to online sales but it collected sales information from physical stores as well.

After collecting the data, the quantitative analysis approach adopted to analyze the data and find stories. Based on the nature of data collected, quantitative analysis approach was preferred as this analysis gives more reliable results. For the purpose of analysis, these variables were used: 'number of products sold', 'rating of products' and 'number of reviews'. The 'number of products sold' is dependent variable while reviews and ratings are independent variables.

The statistical analysis finds a correlation between variables and establishes a highly controlled cause and effect circumstance. For this purpose, the data analytical tool is used to produce graphical results.

The following approach is followed:

3.1 Hypothesis 1

"Negative consumer reviews of a product impact overall sales of the product"

These are the variables used for this analysis:

- Average rating of a sample of 80 products collected with restriction of minimum 2 reviews and lowest average rating score 2.

- Sales data of these sample products.

3.2 Hypothesis 2

"The quantity of consumer reviews matters to build consumer trust in purchasing decision"

These are the variables used for this analysis:

- Total number of reviews of sample products
- Sales of these sample products.

4. Results

4.1 Result of hypothesis 1

A sample of 80 products with at least two reviews and minimum rating 2 were considered for this test. Products with described review criteria were collected manually by visiting online stores websites. Amazon along with other big online stores for home appliances (other six stores are anonymous) were used for products data collection.

The below table briefly describes the data collection and consolidation process:

Products	OS 1	OS 2	OS 3	OS 4	OS 5	OS 6	OS 7	Average Rating	Total reviews	Number of products sold
p1	5	5	4	4.5	5	4.3	NA	4.6	449	14906
p2	4.6	5	5	5	5	5	NA	4.9	48	13357
p3	4.2	5	5	4.8	4.5	4	4.8	4.6	393	12489
p4	4.4	5	5	5	5	NA	NA	4.7	240	10805
p5	4.30	0	5	1	NA	NA	NA	2.5	51	307
pn	n	n	n	n	n	n	n	n	N	n

*NA= Not Available at store   *OS= Online Store

Table 1: Template for data collection and calculation of average ratings and reviews

The table shows the example ratings of the products on each online store. While there are some stores (mostly in UK) who provide reviews rating with scale of 10, in this study the selected 7 German online stores provide rating out of scale 5. The product ratings ranging from 0-5 were collected from the online store websites. The average ratings (with criteria of minimum 2) were then plotted against the number of products sold.
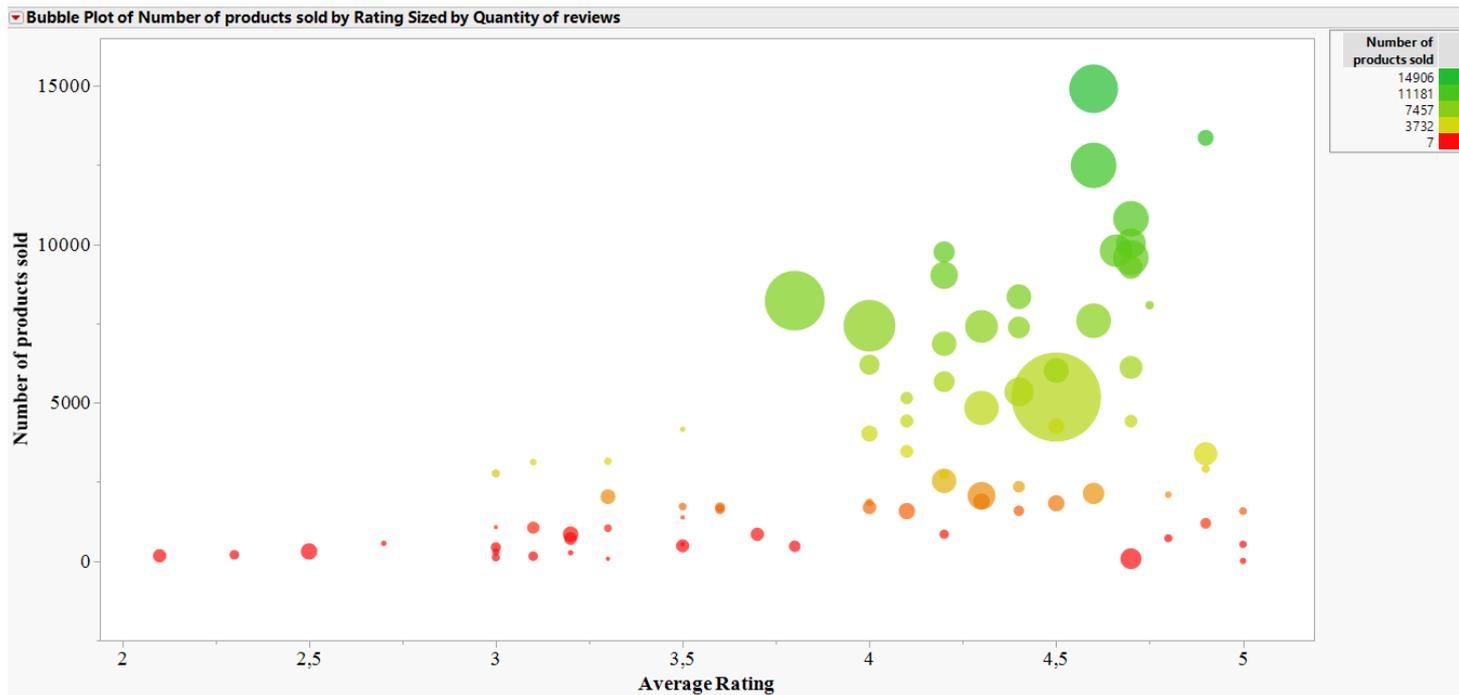
Figure 1: Consumer reviews and ratings impact on sales

Figure 1, shows the results of hypothesis 1 represented by bubble graph. The sales of low rated products are decreasing from low to almost zero.

The bubble graph's parameters are:

- X-axis= Rating
- Y-axis= Number of products sold
- Size of bubbles= Quantity of reviews
- Color of bubbles= Number of products sold
  - Color theme: Red, Yellow, Green= low, medium, high

The above graph shows that sales increase from rating 3.7 to rating 4.8. In figure, you can see the highest sold product at right top corner under legend with rating 4.6 and number of products sold 14,906. Surprisingly, sales decrease when it comes to 5/5 that may reflect over rated or fake ratings. The figure 1 shows that, the products with full rating 5 out of 5 have low sales as compare to products with rating range 4 - 4.8 out of 5. The data shows that full rating is mostly calculated from fewer reviews.

The above graph also shows that mostly the products with both positive rating and big bubble size (large quantity of reviews) have high sales. Similarly, products with negative ratings have low sales and bubble size is also smaller (which means the quantity of reviews is less).

Another observation is that despite high rating some of the products have lesser sales and meanwhile their bubble size (quantity of reviews) is also smaller. On the other hand there are few exceptions where high rated products with smaller bubble size (lower quantity of reviews) have higher sales that might be the result of other marketing parameters or product quality that are not considered in this study.

Apart from the graphical representation, during manual data collection from online stores websites it was also observed that low rated products were mostly available on big online stores (see table 1). There is a possibility that small stores avoid to have stock of low rated products.

Probably because these products already have low ratings on big stores and not in demand anymore.

Based on these observations we can say that finding role of the stores in connection with reviews ratings and popularity of the store will be interesting. It will be interesting to see that if stores perform their role in building consumer trust. How having a wide range of products with positive consumer reviews affect an online store's sales and what a store can do to raise the sale of low rating products with bad reviews are some of the interesting future research dimensions.

4.2 Result of hypothesis 2

The results of hypothesis 2 shows that mostly the products with large quantity of reviews have higher sales. This observation is also explained by the below graph that is generated by using the software SAS JMP (Statistical discovery tool). The stacked histogram graph shows different reviews segments that are auto-generated by SAS JMP and are mainly based on products with certain number of reviews. At right top corner of the figure 2, the legend is available to show different colors for different segments of products with certain range of reviews.
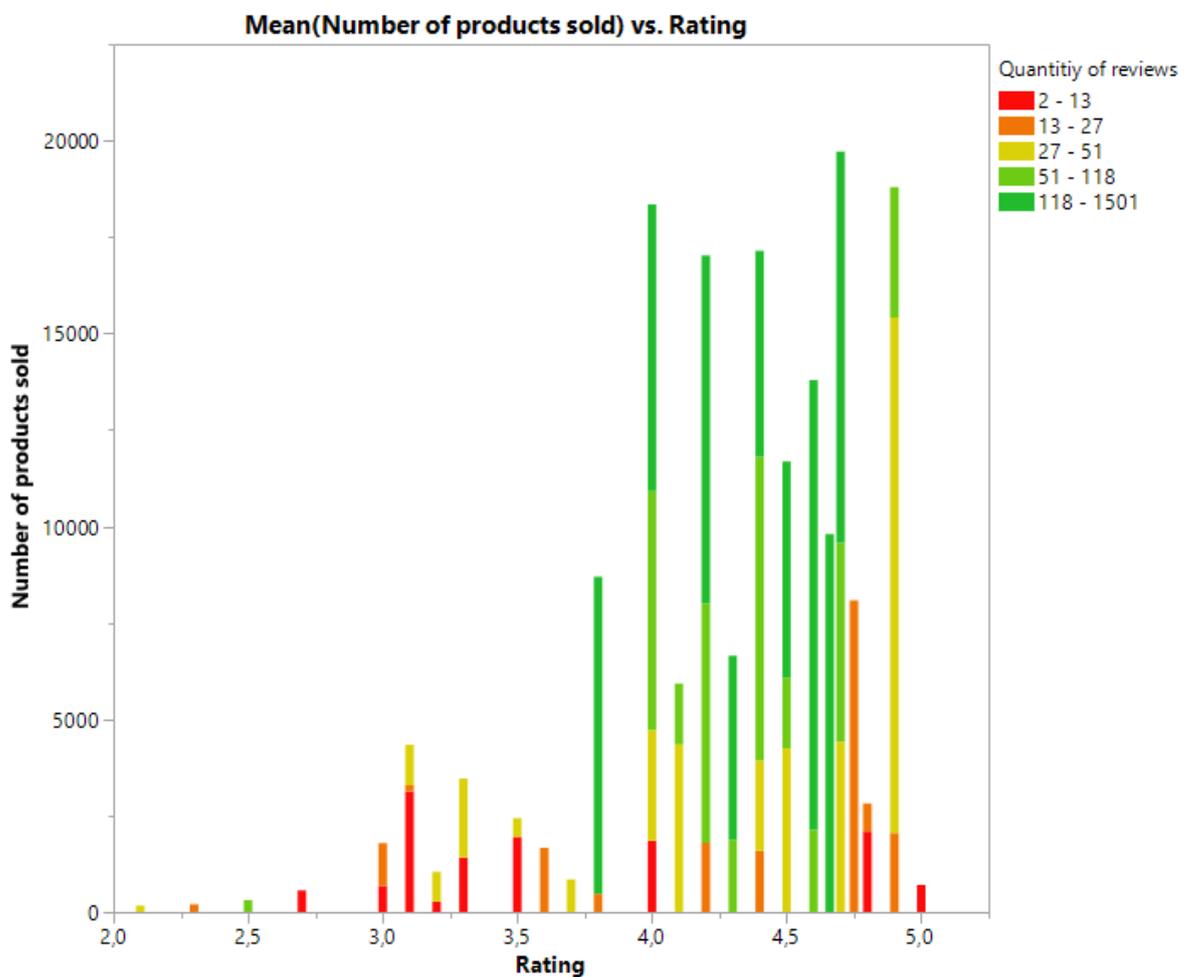

Figure 2: Quantity of reviews vs sales

The figure 2, shows the high sales of products with good rating which is calculated from the large number of reviews as compare to rating calculated from the small number of reviews.

There is a possibility that consumer finds the products with large number of reviews more trustworthy. The positive rating calculated from large number of reviews seems to be more trustworthy than high rating calculated from small number of reviews. On the other hand, negative rating no matter if calculated from large number of reviews or small number of reviews seem to have decreasing effect on the sales. For example, the rating 2.7 (next to 2.5) is calculated from the reviews range of 2-12 and the volume of sales is low. While on the other hand, the rating 2.5 is calculated from the reviews range of 50-116 and the sale is still very low.

In figure 2, it can also be seen that products with full rating 5/5 have less reviews and eventually less sold. In contrast, the rating calculated with ratio of less negative and greater positive reviews is more trustworthy and help consumers to make buying decision. The results also indicates that the products with large number of reviews support content marketing concept. Consumers get more content about a product, not only a product description written by a brand but consumer experiences with product in terms of reviews. It seems that more content of product helps consumer more in making buying decision. It would be interesting to further explore that how consumer reviews increase content marketing.

The above graph also highlights some surprising facts, that negative reviews are also good. Especially in case when products with negative reviews have greater number of positive reviews that helps to establish strong consumer trust. It reflects the success of online stores that build consumer trust by having both negative and positive reviews.

In addition, figure 3 shows the general relation between the number of products sold and average price.
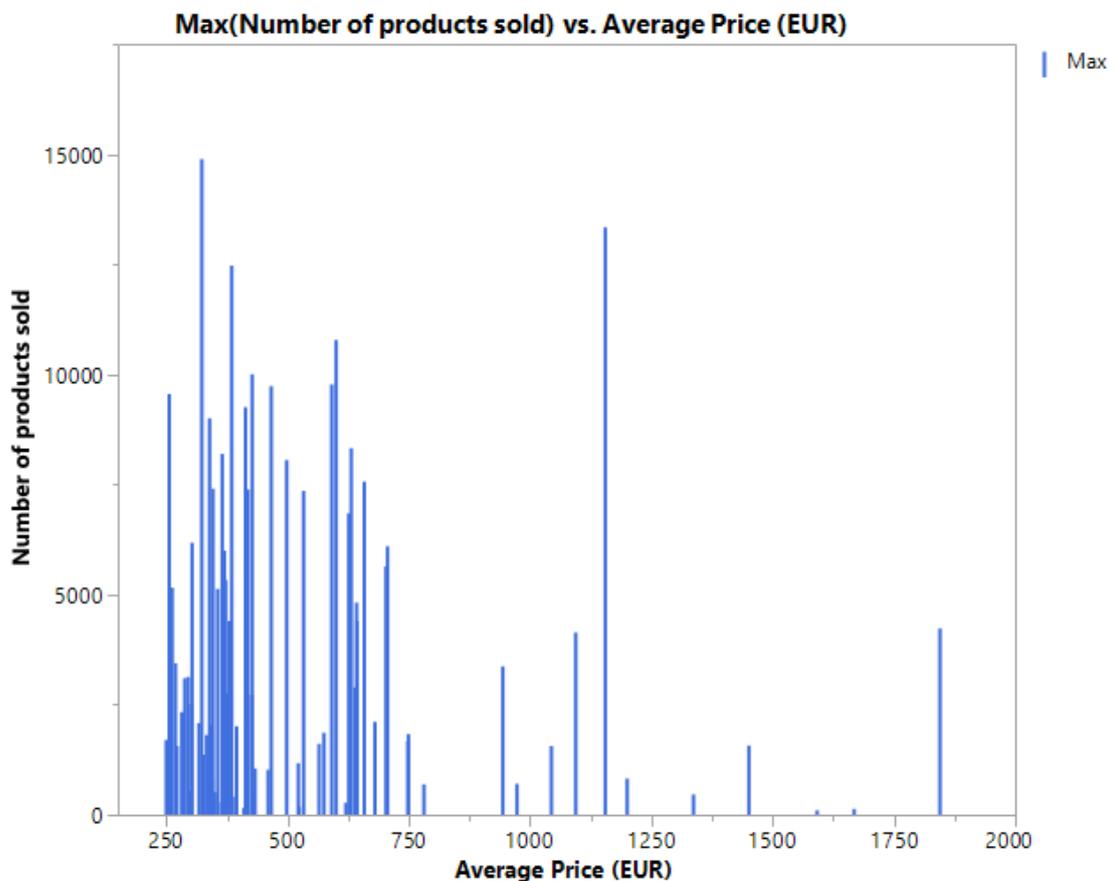

Figure 3 Average product price vs number of products sold

4.3 Correlation between reviews & rating vs sales

The results show that reviews and ratings are correlated with sales. The number of reviews and average ratings are both equally important when it comes to purchasing decision. This can be seen in figure 4, in which x-axis show average rating and y-axis show number of products sold. While the dots represent products and the trend line represent a correlation between reviews and ratings and the number of products sold. The figure 4 shows the predictive trend line (auto generated by SAS JMP) between reviews and ratings and market sales. Most probably, with the increasing technology advancement and virtual community this trend will also increase in future.
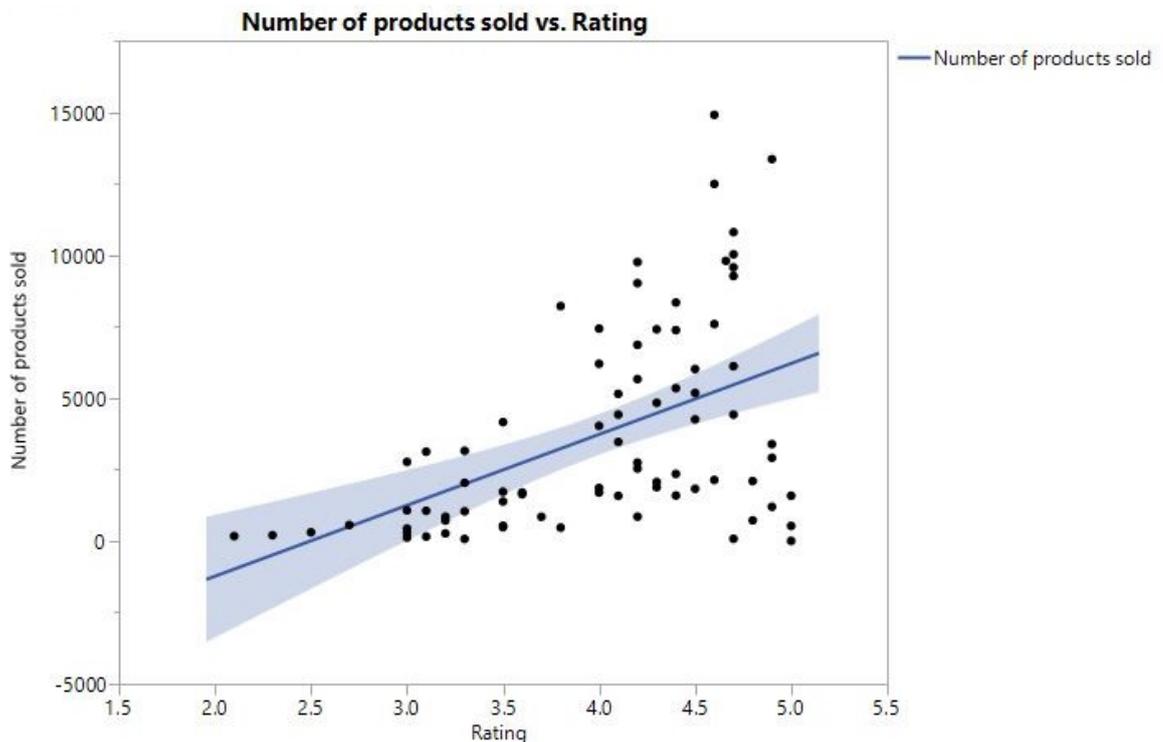

Figure 4: Predictive consumer reviews & sales correlation

The analysis of results support the concept discussed that consumers find reviews and ratings, or in other words consumer word-of-mouth, or consumer-generated stories helpful in order to make decision to purchase or not to purchase a product. Rudolph (2015) confirms in an article shared at 'Business 2 Community' portal, 90% of consumers read reviews before making purchasing decision and trust them than personal recommendations; 86% of consumers hesitate to purchase products with negative reviews; and 31% of people choose to buy expensive product with excellent reviews than cheap product with negative reviews.

5. Discussion

The purpose of this study is to find if the reviews and ratings have a correlation with consumer purchasing behavior. It is assumed in this study that reviews play the role of storytelling in digital marketing, therefore, reviews are considered as former stories. Consumer reviews are stories of their experience with a certain product. In general, the study and results show that

reviews play a role in consumer purchasing decision. The sales may get affected by negative or positive reviews depending on the quantity. The study focuses on one product category the 'washing machine'. However, the results give more generic insights and can possibly be applied to all kind of products.

5.1 Quantity of reviews matter

The results have shown that the quantity of reviews matters and they play a role in the process of purchasing decision. The results of hypothesis 2 have highlighted some very interesting facts. The quantity of reviews matters in the case of positive average ratings only. It matters if the positive average rating calculated from a large number of reviews or from a few reviews. For example, the products with ratings such as 4.5/5, 4.7/5, 4.3/5 calculated from hundreds of reviews possibly leads to more sales as compared to a rating of 5/5 calculated from few reviews. The analysis of data confirms this phenomena, the figure 2, in section 4.2 shows that the most sold product has 4.7 rating derived from a large number of reviews set.

In contrast, in the case of negative rating the quantity of reviews does not matter. Consumers seems hesitant to buy products with negative ratings even the rating is calculated from two reviews only. This can also be seen in figure 2.

A recent study has shown that social commerce sites provide a fertile platform for consumers to exchange their opinions about the product and service. Social media have completely changed traditional digital marketing. Now consumers are more mobile and virtually connected with each other (Liu et al., 2016). This can be related to the results of this study: consumers trust consumer-generated stories in form of reviews more than product descriptions provided by manufacturers. The analysis of hypothesis 2 results shows that the quantity of reviews is very important in building consumer trust. Therefore, marketers need to encourage consumers to write reviews in order to derive profitable sales.

5.1.1 Technical Aspect

From a technical point of view, the consumer reviews and sales can be associated with machine learning techniques. This can help derive profitable sales by adjusting product quality or price accordingly.

Machine learning tools can benefit marketers by predicting consumer expectations from positively reviewed products and improve the quality of negatively reviewed products. There is a possibility that high-rated products just sell better because these products are good and low-rated products sell poorly because these products are poor. Therefore, manufacturers may perceive consumer reviews as a call to improve quality of low-rated products and launch them again. These phenomenon bring many other positive opportunities as well, where manufacturers can compare the high rated products with low rated products. Manufacturers can improve those products, plan marketing and supply chain accordingly. A similar study demonstrates that consumer reviews can be used to understand their relative preferences for different product features and help to increase future sale (Archak et al., 2011). Another study reveals that generic cross-domain sentiment techniques are beneficial in finding defects in dishwashers (Law et al., 2017).

5.1.2 Marketing Aspect

From a business and marketing perspective, there are some aspects that may need further research and are not directly addressed by this study. For example, the sellers can take low-rated products as an indication to increase their marketing campaign or social media advertising. There is a possibility; that products with a low rating might actually be good but their advertisement was not. There is also a possibility that those products which are more popular on social media eventually get more reviews. A similar study supports the view that firms' online

marketing strategies need to be adjusted according to consumer reviews (Feng and Xiaoquan, 2010). Further studies should be conducted to explore social media's role in getting products more reviews and positive ratings.

5.2 Source of reviews and consumer trust

The process of data collection and analysis of data reveals that source and composition of reviews also play a role in establishing consumer trust. For instance, an interesting finding during analysis was that a product with negative rating on Amazon had low sales even though the product had a good rating on other online stores. This is possibly because Amazon has established consumer trust by having both positive and negative rated products on its platform. Based on this observation, we can say that, online stores having both positive and negative reviews are more trustworthy than those who provide mostly positive reviews. This scenario reflects the results of hypothesis 2 which shows that a good product rating, but calculated from a fewer number of reviews may not be very effective. An empirical study supports this phenomena by demonstrating the impact of reviews from different sources on sales (Ho Ha et al., 2015). However, this subject needs further research to investigate whether the source of reviews affects sales and if yes, then to what extent. In addition, it would be interesting to see how experts e.g. price and product comparison sites play their role in building consumer trust. For example, expertreviews.co.uk claim to give consumers complete information about the product at one place by saying, *"Our team of experts perform rigorous testing on every product so that you know that you can trust our conclusions. While we test everything to a high degree, our reviews are written in plain English, giving you advice that you can both trust and understand easily* (*Expert Reviews*)."

5.2.1 Ethical Aspect

It is very difficult to find out whether reviews are fake or not. This is a black box even for consumers. It is hard to know if a review is written by a real consumer who purchased and experienced the product or if a manufacturer is offering an incentive to write a review. It is good that a manufacturer encourages a consumer to write a review, but only if a consumer has the freedom and the knowledge to write a positive or negative review. It would be interesting to see reviews from the angle of transparency. Further, the analysis of data gives another important insight that some reviews are not only about the product but also reflect the ease of the buying procedure e.g. home delivery and installation services. Hence, there should be a clear differentiation between product specific review and store service review. The current study is focused on a quantitative approach, so there is need for a qualitative study in order to investigate reviews from an ethical perspective.

5.2.2 Importance of negative reviews

The negative reviews can possibly be also important and sometimes even beneficial. The analysis of hypothesis 2 results show that negative reviews may help to establish consumer trust in the purchasing decision. It helps when a good rating is calculated from a combination of both positive and negative reviews. From an ethical perspective, the negative reviews show transparency to some extent. Jonah Berger in a relevant study argues that negative publicity may have some positive effects. The study further argues that positive reviews always increase sales but negative reviews can also increase sales by increasing product awareness. This study supports the popular theory that "any publicity is good publicity" (Berger, 2010).

5.3 A storytelling perspective

This study considers the fact that stories influence human minds and build trust. For this purpose, reviews are used as former stories and sales reflect consumer purchasing behavior. The results of this study give insight that reviews may influence consumer's minds and help them make purchasing decisions. Hence, it seems to be crucial for today's businesses to understand the consumer's psychology; and see how consumer-generated stories influence them. The study gives some important insights for marketers. The marketers should give importance to both positive and negative consumer reviews and possibly use these reviews to make the consumer experience better. There are many new trends under discussion to help marketers become smarter and help them to generate expected consumer reviews. Storytelling is one of them. Sole and Wilson in their research emphasize storytelling as follows:

" Sharing experiences through stories is emerging in various professions as a powerful way to exchange and consolidate knowledge. Research suggests that sharing experiences through narrative builds trust, cultivates norms, transfers tacit knowledge, facilitates unlearning, and generates emotional connections" (Sole, D. and Wilson, D.G., 2002).

Below are the few random examples of consumer reviews that shows what kind of stories are written about a product:

Example 1

Review title: Completely wrong!

Rating: 2, written on December 2015

"We are a 5-person household, which washes a lot accordingly. This machine we bought, due to good test, great reviews and a good price decided. After two years we are now fed up with the device!

It started with the fact that I (as a rather tender woman) was able to break the closure to get to the laundry screen. Something so cheap I had not seen before. The cause for this was a stuck sock. Now after 10 months again. Pump blocked, water must drain, and sieve must be cleaned - this time: a slip. Three weeks later, yesterday, the power goes off, machine cannot be switched on again. It is running the 60 degree Eco program. Great, nothing is working. We have never had this much trouble with any machine. This was the first and last time we bought a machine from this brand. Of course we have no warranty extension. And I also wonder where the machine gets such great reviews from.

We need a reliable device and not such a scrap."

Example 2

Review title: Pleased

Rating: 4, written on January 2015

"This washing machine has many options for washing different clothes. Clothes are washed well. But it is a bit loud sometime."

Example 3

Review title: A great energy saver

Rating: 5, written on June 2015

"I'm not a great writer, so I'll keep it short.

After our old washing machine kicked the bucket, we needed a new one. Shortly looked at Amazon and decided after reviewing the reviews for this. The € 15.00 for carrying

up, dispose of packaging and connecting were worth the money. The two gentlemen were friendly and quite fast (whole 8 minutes have needed for everything).

The 7 KG drum can fit quiet a lot. The opening of the machine is also large enough. For liquid detergent users, there is an extra ease that comes into the detergent drawer. All buttons are easy to use. The program selection is plentiful. Although we use only the Eco program and then set depending on the type of laundry for appropriate temperature. Even if the machine is loaded a bit fuller, it does not come out of your corner on skidding. When the bathroom door is closed, you almost do not hear it. All in all, it is recommended."

The figure 3 in section 4.3, shows a predictive correlation between consumer reviews and sales. The above reviews clearly shows the story element and how consumers recommend the product to future consumers. It supports the concept of trustworthiness established by consumer generated content and its influence on consumer purchasing decision. This concept has been confirmed by Mamalyha, whose results showed that there is a consistent relationship between traditional marketing content and consumer-generated content in terms of perception of trustworthiness and emotional bonding. Consumer-generated stories about products are shaping content marketing in a more powerful way. Thus, the content writers should focus more on consumer generated content and based on that, improve the effectiveness of product content (Mamalyha et al., 2012).

Bae and Lee argues in their research that women are more hesitant to make purchases online and read consumer reviews to make purchasing decisions. The research identified that women are more likely to find consumer reviews helpful than men (Bae and Lee, 2011).

During the process of data collection, it was also observed that some online stores provide gender information with consumer reviews. It would be interesting to enhance this research to see how many reviewers are women or men; and if it makes a difference on sales.

5.4 Future research

This subject needs further investigation in many ways. In order to find a more in-depth impact of storytelling on sales, there is need of more qualitative analysis. For instance, comparing long and short reviews or well-written reviews in the form of stories than short reviews. There is a scale needed to measure quality of reviews.

In addition, it will be interesting to analyze reviews and sales data over time in order to find full proof of sales model. For instance, in-depth analysis of certain product by comparing reviews written date and sales in that particular period then newly written reviews date and sales in these dates respectively.

It will be interesting to see how stores perform their role in building consumer trust. How having a wide range of products with positive consumer reviews affect an online store's sales and what a store can do to raise the sale of low-rating products with bad reviews. Also, if a store popularity or a brand popularity helps to get more consumer reviews. Moreover, how brands are performing in getting more consumer reviews. If consumer-generated stories can help brands to write their own stories based on the brand's vision and consumer preferences. In addition, it would be interesting to investigate that if reviews influence brand image and if yes, then to which extent.

6. Conclusion

The reviews and ratings are correlated with consumer purchasing behavior. This correlation may possibly be defined as the relation of trustworthiness and the establishment of a virtual community. Reviews and ratings appear to act as a consumer-generated marketing content and seems to influence consumers' online and offline purchasing behavior. The analysis of results give some insights about the power of consumer stories, which in this case are reflected as consumer ratings and reviews. This storytelling is a human activity that supposedly builds seller-consumer relations.

The study gives insight that both ratings and quantity of reviews are equally important to establish consumer trust. For example, an average rating of 4.3/5 that is calculated as an average out of large quantity of reviews seems to be more trustworthy than a full average rating 5/5 that is calculated from a few positive reviews. However, low average rating from a range of 1 – 3.5 may influence consumer purchasing behavior negatively regardless of the quantity. Most probably consumers hesitate to buy products with a very low rating and are more likely to spend money on those products that have a comparatively high rating. This is probably due to the popularity of those products on social media and power of consumer stories.

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