

Derivation of Factors in Dealing Negative E-WOM for Maintaining Online Reputation

Rizka Dhini Kurnia^{1(⊠)}, Halina Mohamed Dahlan², and Samsuryadi¹

 ¹ Fakultas Ilmu Komputer, Universitas Sriwijaya, Palembang, Indonesia samsuryadi@unsri.ac.id
² Information System Department, Azman Hashim International Business School (AHIBS), Universiti Teknologi Malaysia (UTM), Skudai, Johor, Malaysia halina@utm.my

Abstract. The online reputation is mechanisms which is built in organization and become an essential component in online environment. However, the negative e-WOM becomes threats to the organization. This is happened when the unfavourable messages which been posted on several online platforms negatively influenced other people attitudes and behaviours, and cause negative reputation to the organization. In order to overcome negative e-WOM, the positive e-WOM is significantly needed to deal and maintain the online reputation of the organization. Positive e-WOM offers a greater influence on consumer's perceptions towards the organization. If any organization get a lot of comments as refers to the positive e-WOM through the online conversation among customers, the good online reputation regarding the organization is successfully been achieved. To solve the negative e-WOM towards the organization, the guidelines which can deal with negative e-WOM in dealing and maintaining the online reputation of the organization is needed. The aim of this paper is to develop a model which contains the factors for dealing the threats of online reputation because of the worst spread information by the negative e-WOM. Those factors were derived from the analysis of systematic literature reviews method and later be significantly implement for the enhancement of knowledge regarding a new contribution on online reputation field in organization image and reputation which becomes very important now a days.

Keywords: Online reputation · E-WOM · Negative E-WOM

1 Introduction

The electronic word-of-mouth (WOM) or familiarly known as e-WOM is the usergenerated content or online conversations between online users regarding the products, services, or businesses which able to influence the consumer behaviour [1]. On other words, e-WOM refers to any positive or negative statement that made by the targeted, actual, or any customers about a business or company, which able to influence the changing attitudes on people and institutions through the online networks [2]. This situation of e-WOM brought the threats to the business more critical when the e-WOM involved with greater scalability, speed of diffusion, persistency, accessibility, measurability, and quantifiability [2].

There are two types of e-WOM which are positive and negative e-WOM. The positive e-WOM refers to the product or service which able to increase the likelihood of its purchase and the negative e-WOM decreases the likelihood of the purchase behaviours [2]. The positive e-WOM brought the profits to the business and company but the negative e-WOM is the significantly the serious threats towards the business. The fast speed of information diffusion through online networks through all online platforms site make the negative e-WOM reach a lot of people easily and influenced them towards the negative opinions and damage the business online reputation.

Online reputation is really important because nowadays, as a lot of business used online network and online platforms that allow customers to give personal ratings to each of the online items and this make the online reputation easily able to be rated by people [10]. The online reputation is able to influenced people believes and trust towards the business. If people are not satisfied with the reputation of the business either on their products or services, or even the company's itself; people tends to spread the negative e-WOM and give the profit lost towards the businesses.

This paper consists of six (6) sections. Section 1 for Introduction of the study, Sect. 2 for Background of the Problem, Sect. 3 for the Literature Review, Sect. 4 for the Methodology, Sect. 5 for Model Development, and the last part is the Sect. 6 for Conclusion.

2 Background of the Problem

This section provides an overview of problem awareness and the suggestion as a solution to the existing problems. Those two parts are the outcome of the processes in the systematic literature review (SLR) method (Fig. 1).

The negative e-WOM brought out several problems towards online reputation. As mention in literature review, online reputation is significantly important in dealing with customers through online network as nowadays many businesses used online platforms as their main business platforms in reaching more customers. This situation brought the problem where the negative messages been spread faster and wider through many platforms, such as blogs, search engines, virtual communities, and consumer review systems, among others [3].

Furthermore, the testimonial also mostly is shared on social media platforms [1]. This becomes one of big cause how negative e-WOM transmitted the negative information among people [4] and as the social media has huge community all around the world. The huge coverage of social media able to brought the negative messages widely and damage the business reputation easily through the social media community. This situation is become worst when the negative e-WOM become viral on social media platforms.

Moreover, people mostly are focusing on existing customers reviews and how the customers' engagement in e-WOM will directly and indirectly affect to negative information [5]. Currently the negative e-WOM affects the customer-brand identification part which customer-brand identification usually use electronic e-WOM to achieve the high

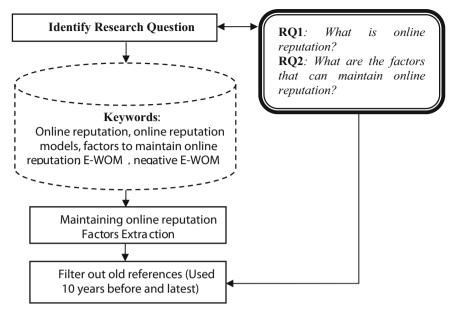


Fig. 1. The stage 1 of systematic literature review (SLR).

resilience to negative information [5]. The negative e-WOM wills hindrance the customer to engage with the organization. Due to that, it will damage the online reputation of the organization.

Previous studies also explicitly show that customers tend to post the negative e-WOM because of anger, regret, or disappointment through their experience towards the services they used [2]. Organization should not ignore the customer feelings and dissatisfaction that can lead to the negative e-WOM. Due to that, organization should improve their appearance with the presence of good CRM.

The previous researchers also developed several negative e-WOM model design theory, which significantly related and needed for this study. Even though, not many model been developed in dealing negative e-WOM for maintaining online reputation of an organization either brick-and mortar or online organization. Due to that, this research is conducted to deal with negative e-WOM in maintaining online reputation of an organization.

3 Literature Review

The reputation is the element which brought to the trusted believes among customers towards organizations [6]. It is also represents an important driver of new venture performance in business and gave benefits towards market conditions [7]. Nowadays, the reputation element is successfully moving forward with a step further by the implementing internet used around the globe and become "online reputation" which covers the trusted believe on the organization through the online networks [8]. The online reputation significantly represents the high advantages after the involvement in corporate

strategy part in each organization with the concept of creating a positive image of the entire online environment [8]. Even though, the online reputation also facing critical problem when the negative comments keep coming towards the organization and the unlimited coverage of internet make this problem become huge when the bad comments easily be spread faster and wider through online networks. This situation refers to negative electronic word of mouth (e-WOM). This chapter is reviewing all the related literatures regarding online reputation and negative e-WOM through systematic literature review technique (SLR). The SLR is been chosen in order to show the flow of how each research question been answered from extracted of articles and journals regarding the issues of online reputation in the field of negative e-WOM effects. The SLR is showing more transparent flow since SLR also covers the chosen searching keywords which involved in this study. This is showing the clear path in conducting information searching during SLR.

3.1 Online Reputation

Reputation is based on customer feedback and dealing with important informational resource for buyers to refers in order to keep track of their business value [9]. Nowadays, as a lot of business used online network; online reputation become critical important in dealing with reputation profiles. Furthermore, most of online business platforms allow customers to give personal ratings to each of the online items and this make the online reputation easily able to be rated by people [10]. The online reputation also closely related with the online user reputation. The online user reputation is identifying the rating information of the customers and products for understanding the online user collective behaviours through online any related platforms [11].

This online user reputation element is important in terms of their rating behaviours is significantly necessary for the online rating systems in monitoring business processes and necessarily needed to be maintaining for all types of businesses environment as the positive vibes is brought along the good identity of the organization and businesses in the eyes of consumers [9, 11]. Furthermore, the online reputation reviews can be derived to assist consumers to make purchasing decisions [10]. As refers to this, the online reputation holds strength in controlling and influencing customers buying decision towards business.

3.2 Maintaining Online Reputation

Customer Relationship Management (CRM): Customer Relationship Management (CRM) is the systems which refer to the key strategy for improving customer satisfaction and they are remarkably beneficial to those organizations by generating large amounts of valuable customers' information [12]. That situation proven the factor of interaction involved in CRM in dealing with negative e-WOM. Across the period of time, CRM concept has evolved from a narrow understanding as a specific technological solution to a broadly strategic approach that is concerned with creating improved shareholder value through the development of appropriate relationships with key customers and customer segments [13]. Customer segments here are related with Helpdesk service and

interpersonal communication factors because this service involved in handling customer knowledge towards organization and business.

Table 1 describes the CRM components that can be used to maintain online reputation.

CRM component	Definition
Helpdesk	Refers to the activity of handling customer knowledge management towards organization and business
Interpersonal communication	Refers to the activity of handling negative publicity which gives bad influence and effects the online reputation
Interaction	Refers to the activity of handling complaints which been write out through online network such as via social media

Table 1. CRM components

The Positive Electronic Word-Of-Mouth (E-WOM): The electronic word-of-mouth or familiarly known as e-WOM is the user-generated content via online conversations between internet users regarding any products, services, or organizations which able to influence the consumer behaviour in positive way [1]. Moreover, e-WOM refers to any positive or negative comments or statements that made by the targeted, actual, or any customers about a business or organization, which able to influence the changing attitudes on consumers and other related business institutions through the online networks [2]. The situation of e-WOM brought the threats to the business and becomes more critical when the e-WOM involved with characteristics on greater scalability, speed of diffusion, persistency, accessibility, measurability, and quantifiability [2].

Table 2 describes the positive e-WOM components that can be used in maintaining online reputation.

E-WOM Component	Definition
Apology statement	Refers to a formal written or spoken declaration regarding any regretful feeling
Problem explanation	Refers to description about the problem and measuring what kind of solution which needed
Positive statement	Refers to a positive statement which usually based on empirical evidence and brought out the good value

Table 2. Positive e-WOM components

3.3 Negative E-WOM

As contrast to positive e-WOM, the negative e-WOM also have a strong impact on purchase decisions [3]. As example, the online complaint messages against a business might be easily and rapidly distributed to public, which in turn causes huge damage to the company's reputation [3]. Furthermore, negative e-WOM communication able to brought bad affect on the attitudes and purchasing intentions of customers and a company's brand image [4]. This situation become worst when the competitors take the advantage on exploiting the negative e-WOM in putting bad image for the others business reputation. Moreover, when customer complaints go viral the bad reputation been spread wider and faster especially through social media channels and the unfavourable messages posted on these online outlets can negatively influence customer's attitudes and behaviours [1, 4].

3.4 Factors Dealing Negative E-WOM

CRM involved customer orientation in the achievement of solid relationship with customers and there is evidence of customer orientation's huge contribution to CRM's successful implementation consists of four factors which are customer orientation, organizational capability, information technology, and customer knowledge management [14]. Recently, the helpdesk system is used in handling customer knowledge management

Factor	Description
Compensation	Refers to something which been decided to be awarded to any party as overcome any loss
Replacement	Refers to action in replacing or changing position of someone or something
Repairs	Refers to restore or fixed something which damaged into a better condition
Refund	Refers to the pay back money for customer who is not satisfied with the business
Apology	Refers to an acknowledgement regarding regretful feeling
Problem explanation and what when wrong	Refers to the descriptions about the existing problem and all the negative effects which the problems brought
Why and what the organization will do	Refers to the reason regarding the action and process by organization
Interpersonal communication	Refers to an exchange of data or information between two or more parties
Interaction	Refers to direct involvement while communicate between any parties

Table 3. Factors for dealing negative e-WOM

towards organization and business. This situation related with controlling and dealing with the elements of negative e-WOM among customers nowadays.

Besides CRM, the positive e-WOM also can be used in handling negative e-WOM in maintaining online reputation. There are nine factors can be used in dealing negative e-WOM for maintaining online reputation as in Table 3.

3.5 Dealing Negative E-WOM Through CRM and Positive E-WOM in Maintaining Online Reputation

Table 4 and Table 5 show how the CRM and positive e-WOM components can be used dealing negative e-WOM in order to maintain online reputation.

CRM component	Dealing Negative e-WOM
Helpdesk	-Compensation -Replacement -Repairs -Refund -Why and what the organization will do
Interpersonal communication	-Apology -Interpersonal communication
Interaction	-Problem explanation and what when wrong -Interaction

Table 4. CRM components in dealing negative e-WOM

Table 5. Positive e-WOM components in dealing negative e-WOM

E-WOM component	Dealing Negative e-WOM
Apology statement	-Skepticism towards the apology statement
Problem explanation	-Textual descriptions on negative feedback -Prior competence trust -Anger
Positive statement	-Textual descriptions on positive feedback -Prior benevolence trust -Experience of online organizational

The components of CRM and positive e-WOM will be used in developing the model in dealing negative e-WOM for maintaining online reputation. Those components are selected based on their meaning and towards dealing negative e-WOM in maintaining online reputation.

4 Methodology

As the ultimate goal of this study is to find the factors in dealing negative e-WOM for maintaining online reputation, a series of methodology in searching strategy is needed. The searching strategy is a research approach of a procedure which shown how articles as sources of information regarding this study be arranged. The searching strategy which been implemented in this study is going through the automatic search using several journals searching platforms such as Google Scholar, Mendeley Search, and the institution available database access such as Science Direct. The automatic search is based on the keywords used which related to the domain of study. The following Fig. 2 is shown the defined keywords which been studied for investigating this research. Each of the defined keywords is controlling the information which been used in literature review process.

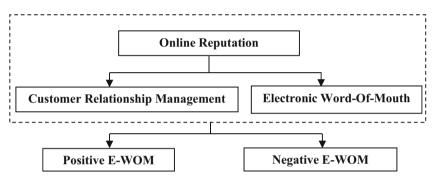


Fig. 2. The defined searching keywords.

After applied the searching strategy concept and all the related articles been saved, time to filter out all the articles based on inclusion and exclusion criteria did started. This action helps the researcher to narrow down the study space as there are thousands of articles out there. Given that this study focuses on dealing negative e-WOM, then this study is concentrating on articles from reputable Journals, Conferences, and Book Chapters. All these articles must be in English language. Table 6 shows the criteria for this review.

Inclusion criteria	Exclusion criteria
Must be in full text	Uncompleted studies
Published in the selected database	Not in English
English version of references	Duplicated studies
Domain of online reputation, customer relationship management, electronic word-of-mouth (e-WOM), positive e-WOM, and negative e-WOM	Remove un-related domain

5 Model in Dealing Negative E-WOM for Maintaining Online Reputation

This section, an initial model in maintaining online reputation is proposed. This model is based on the components of CRM and positive e-WOM as the constructs in dealing negative e-WOM for maintaining online reputation.

5.1 Constructs

Based on the literature review, CRM and positive e-WOM can be used to deal with negative e-WOM as in Table 4 and Table 5 respectively. Therefore, CRM and positive e-WOM will become the dimension for initial model.

CRM dimension is consisting of three constructs, which are helpdesk, interpersonal communication, and interaction. As for positive e-WOM dimension, also consist three constructs which are, apology statement, problem explanation, and positive statement.

These identified constructs will be used in developing the model in dealing negative e-WOM for maintaining online reputation. The operational definition for the six constructs is as in Table 7.

No.	Factor	Definition	Source
1	Apology statement	Confessions of responsibility for negative events which include some expression of remorse	[15]
2	Problem explanation	The spatial patterns of issues which needed the solving technique by brain activity either for small and large problems	[15]
3	Positive statement	The statement which can positively influence trust	[16]
4	Helpdesk	The activity to support organization including operations support of the system, network connection and system operation	[17]
5	Interpersonal communication	Interpersonal communications indicate interactions between two or more people and range from transient to sustained relationships	[18]
6	Interaction	Rests on talk and meaning making, which represents the related issues as a process through narrative stories with plots	[19]

Table 7. Dealing negative e-WOM constructs and its definitions

5.2 Model Development

Based on the identified constructs, the initial model in dealing negative e-WOM for maintaining online reputation is proposed as in Fig. 3.

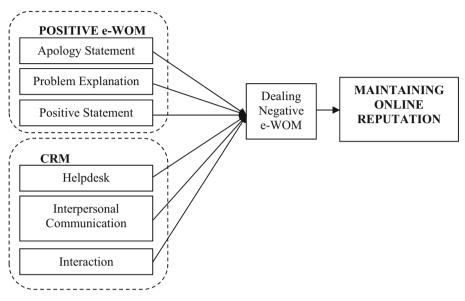


Fig. 3. The maintaining online reputation model

6 Conclusion

This study provides an overview of the e-WOM influenced in online reputation. In order to understand the online reputation concept, this paper went through the SLR process. This paper is focused on the SLR which consists of searching strategy to find out all the factors in maintaining the online reputation while dealing with the negative e-WOM. The SLR approach used to filter out all the unrelated articles and sort the related one.

As a result of SLR. CRM and positive e-WOM are identified as dimension can be used in dealing negative e-WOM in maintain online reputation. There are three constructs under CRM dimension which consists of helpdesk, interpersonal communication, and interaction factor, and three constructs under positive e-WOM dimension which consists of apology statement, problem explanation, and positive statement. For the next related work, the suggested model in dealing the negative e-WOM for maintaining the online reputation is going on the validation process. The next stage involved with data collections and analysis to validate the model.

References

- 1. Kim, S.J., Wang, R.J.H., Maslowska, E., Malthouse, E.C.: 'Understanding a fury in your words': the effects of posting and viewing electronic negative word-of-mouth on purchase behaviors. Comput. Hum. Behav. **54**, 511–521 (2016)
- Nam, K., Baker, J., Ahmad, N., Goo, J.: Determinants of writing positive and negative electronic word-of-mouth: empirical evidence for two types of expectation confirmation. Decis. Support Syst. 129(10), 113168 (2020)
- 3. Chang, H.H., Wu, L.H.: An examination of negative e-WOM adoption: brand commitment as a moderator. Decis. Support Syst. **59**(1), 206–218 (2014)
- Balaji, M.S., Khong, K.W., Chong, A.Y.L.: Determinants of negative word-of-mouth communication using social networking sites. Inf. Manag. 53(4), 528–540 (2016)
- Augusto, M., Godinho, P., Torres, P.: Building customers' resilience to negative information in the airline industry. J. Retail. Consum. Serv. 50(5), 235–248 (2019)
- Riquelme, I.P., Román, S., Cuestas, P.J., Iacobucci, D.: The dark side of good reputation and loyalty in online retailing: when trust leads to retaliation through price unfairness. J. Interact. Mark. 47, 35–52 (2019)
- 7. Taeuscher, K.: Reputation and new venture performance in online markets: the moderating role of market crowding. J. Bus. Ventur. **34**(6), (2019)
- Zraková, D., Demjanovičová, M., Kubina, M.: Online reputation in the transport and logistics field. Transp. Res. Procedia 40, 1231–1237 (2019)
- 9. Carter, M., Tams, S., Grover, V.: When do I profit? Uncovering boundary conditions on reputation effects in online auctions. Inf. Manag. 54(2), 256–267 (2017)
- Ma, L., Pei, Q., Xiang, Y., Yao, L., Yu, S.: A reliable reputation computation framework for online items in E-commerce. J. Netw. Comput. Appl. 134(5), 13–25 (2019)
- 11. Liu, X.L., Liu, J.G., Yang, K., Guo, Q., Han, J.T.: Identifying online user reputation of user–object bipartite networks. Phys. A Stat. Mech. Appl. 467, 508–516 (2017)
- Talón-Ballestero, P., González-Serrano, L., Soguero-Ruiz, C., Muñoz-Romero, S., Rojo-Álvarez, J.L.: Using big data from customer relationship management information systems to determine the client profile in the hotel sector. Tour. Manag. 68(3), 187–197 (2018)
- Foltean, F.S., Trif, S.M., Tuleu, D.L.: Customer relationship management capabilities and social media technology use: consequences on firm performance. J. Bus. Res. 104(11), 563– 575 (2019)
- Soltani, Z., Zareie, B., Milani, F.S., Navimipour, N.J.: The impact of the customer relationship management on the organization performance. J. High Technol. Manag. Res. 29(2), 237–246 (2018)
- tiberghien, K., De Smedt, B., Fias, W., Lyons, I.M.: Distinguishing between cognitive explanations of the problem size effect in mental arithmetic via representational similarity analysis of fMRI data. Neuropsychologia 132(5), 107120 (2019)
- Schneider, K., Klünder, J., Kortum, F., Handke, L., Straube, J., Kau, S.: Positive affect through interactions in meetings : the role of proactive and supportive statements. J. Syst. Softw. 143(3), 59–70 (2018)
- Wulandari, S.A., Dewi, A.P., Pohan, M.R., Sensuse, D.I., Wulandari, S.A., Pohan, M.R., Sensuse, D.I.: Risk assessment and recommendation strategy based on COBIT 5 for risk: and case study SIKN JIKN helpdesk service. Procedia Comput. Sci. 161, 168–177 (2019)
- Aghaei, A., Mohraz, M., Shamshirband, S.: Effects of media, interpersonal communication and religious attitudes on HIV-related stigma in Tehran, Iran. Inform. Med. Unlocked 18, (2020)
- Ivanova-Gongne, M., Törnroos, J.Å.: Understanding cultural sensemaking of business interaction: a research model. Scand. J. Manag. 33(2), 102–112 (2017)