Instagram: Analysis of Credibility by Consumers towards Product Recommendation in Indonesia

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September 2016

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1. Introduction

The growth of social media popularity has risen significantly. As social media get their popularity time to time, the capability of easy-generated content by user such as blogs, wikis, tweets, chats, videos, photos, etc., or defined as user generated content (UGC) (Wikipedia), has greatly influenced users to do online shopping activities in a more convenient and faster way. Also it is found that UGC can bring huge influence for brand valuation (Forrester, 2014). Preceded by the technology of weblogs which pioneers the UGC technology (Helen & Wagner, 2006), and also microblogging technology (Liu, Cheung, & Lee, 2016), an application called Instagram changes the behavior of users in terms of online shopping, especially the mobile application users to exchange information and to transact between the sellers and customers. Since Instagram is more popular with its mobile application version, its simplicity of media richness, whose criteria are instant feedback, level of cues, its variety of language used, and personal or emotional focus (Daft, Lengel, & Trevino, 1987), provides superior benefits for both sellers and customers. On the sellers’ side, they can give instant information regarding the products they promote with a rich number of cues such as audio, visual appearance, and short messages, including the hashtags. Likewise, the customers can give instant order along with the feedback directly by the relevant page, also they can recommend the product, if it is proved satisfying their need and the recommendation is beneficial for other customers who need some preliminary information which influence their buying decision. In Indonesia, (Loras, 2016) this phenomenon has boosted remarkably since the Instagram users keep growing as the country demography increases. This will bring the writer the interest to study of how the sellers and customers interactively communicate to each other and how the success factors of customers’ satisfaction is which may influence the customers to give product recommendation.

1.1 Problem Identification

Driven by the technology of UGC, the online shopping activity and its interaction between consumers and sellers have become easier than ever. (Forrester, 2014) found that UGC is also important for brand valuation, and this is very beneficial for the marketers to discover how potential the brand is by evaluating its customers review. The customer review is also easy to generate since now people can use mobile devices to deliver their review. Later on, if a brand of a product is a huge success, this could lead to a big trust for the brand’s website, so the customers will be getting more engaged and this will lead to higher desire for the customers to purchase the product. Similarly, since Instagram is a mobile application and implements UGC features like blogs, wikis, etc., customers can value a brand directly from the pertinent mobile page simply by giving “like” and give their reviews by giving their testimony on comment sections.

As the aforementioned statement before about Instagram, Instagram is a mobile application that enables mobile photo-sharing, video-sharing, and as well as social networking services
which people can share contents publicly or privately (Wikipedia). Instagram has a combination of features that exist separately from other social media applications like Facebook, Twitter and Pinterest. A research (Lin & Chung, 2014) had been conducted to identify how social media network (SMN) users experienced in Facebook, Twitter and Pinterest based on four major criteria, which are social-integration, social-interaction, self-integration, and self-determination and within 16 sub-criteria. This research found that those three social media have unique characteristics. Facebook has advantages focusing more on social interaction and interaction while Pinterest and Twitter have focused more on self-integration. This is because Pinterest and Twitter are more pertinent on personal conveniences, while Facebook is more focusing onto reach more users to build a community with the same interest and a geographic-based relationship. Instagram has its personal convenience from Twitter and Pinterest and the power to reach more users and interaction between them from Facebook capability because Instagram has a hashtag feature which allow users to search specific topic or content and also it has privacy control features for example it can allow people not to see private contents from some users. As the time goes by, Instagram has been used by the users not only to share photos, videos to other users but also to create an online shopping environment.

In online shopping environment, it is important to point out some essential components that affect customers’ online shopping experience. (Kim, Suh, & Un-Kon, 2013) studied two potential components which are embodiment and media richness. In social media context, embodiment is defined as how users can feel and express the other users’ presence as if they were in real world, usually it can be manifested as an avatar and voice chatting, while media richness is related to how communication is formed because the ease of the features embedded in social media application (Kim, Suh, & Un-Kon, 2013). The research results that this embodiment and media richness can significantly increase the feel of presence of the users and later on enhances the interaction and as well as the online shopping experience among them. Instagram has capabilities to make the users to feel the presence among them with their user accounts (with the details of profile attributes) and to communicate each other with the features of direct message or comments. If this situation is happened, the customers can give review instantaneously by giving comment and they can recommend the products to others as well.

Product recommendation is occurred when products offered by the sellers meet the quality expected by the customers. The ability of Instagram to promote or to market the products gives the marketers influence to value the brand of the products accordingly (Forrester, 2014). These marketers could assess how potential the brand is by viewing its rating and review given by the customers, (Forrester, 2014) also mentioned that good reviews and ratings are useful for attracting more customers, building trust between the customers and sellers and also making them more engaged with the brand since the gap between the customers and the sellers is closer than ever. However, this paper mentioned that marketers still found it difficult to assess UGC-oriented reviews and ratings since there is still no standard measurement tools and benchmark data for this. It is also indicated that customers are buying either the least expensive or very expensive products, which
recommendation is very effective for expensive products (Forbes & Vespoli, 2013). Moreover, for those customers who recommend their product and successfully encourage the other customers to buy products via social media they will be granted for incentives (Forbes & Vespoli, 2013). Another paper discussed that there are differences of buying behavior of customers between high reputation blogger (in this case seller website) and low reputation blogger. Customers is influenced by trust more for high reputation blogger to buy products while perceived usefulness influences customers more for low reputation blogger (Hsu, Chuan-Chuan Lin, & Chiang, 2013). This buying behavior is applicable for Instagram, since the paper research focused on Facebook and Twitter. Although it is applicable, there is still no research how is the influence of Instagram to drive customer buying behavior like.

The impact of Instagram as one of online shopping medium has affected Indonesia thoroughly. (Gilliam, 2015) In Indonesia, Instagram plays a big role in the world of ecomerce. Also, it is stated that the existence of Instagram could replace the functionality of shopping malls which are few in rural areas. (Gilliam, 2015) By using benefits of the huge number of Instagram users in Indonesia, sellers use Instagram to promote their products. The flow of the transaction is typical like any other social media, people search the products, confirm the products they wish to buy, and the products is sent to them by the sellers. (Gilliam, 2015) However, the uniqueness of the Instagram are; the sellers can easily create a catalogue on Instagram on their mobile phones rather than create ones via computers, the sellers can easily monitor which brands of product that are highly demanded, the sellers can easily response the customers in real time, and lastly the sellers can reach the same or bigger audiences easier and faster compared to other online channels. The Instagram sellers will be a huge hit if their customers are featured for promoting the products. Naturally, if the customers are satisfied with the brand they look for, they will not mind for being featured for seller commercial purposes. This will drive more and more customers to buy their products. Furthermore, the number of customers or potential customers can be roughly measured by how many followers that one account owner (one seller) has. (Sri, 2014) The trend of commerce in Instagram brings not only a wide range of customers but also a wide range of sellers. Some of the sellers are found they are still under ten years old, however they successfully regain success of doing such a business in this medium. In a way, Instagram generates more entrepreneurs (even very young ones) to do e-commerce in a very simple way and also competitively reach a vast number of customers in short time.

Nonetheless, prior studies have not specifically discussed about what makes customers of Instagram shopping satisfy about some brands or products, and if they do, what factors that will lead them to recommend them to other customers, specifically in a huge number Instagram users country like Indonesia. Most of the previous researches focused most social media like Facebook and Twitter, they also focused about user satisfaction, product recommendation and social media issues separately. This will bring the writer interest to study how the convenience of Instagram, as one of user-friendly UGCs drive customers to buy products, learn what factors that satisfy their need of doing online shopping with
Instagram and also how fast growing are the users as well as the electronic word of mouth of the customers.

1.2 Research Objectives

The objective of this thesis is to identify how Instagram as an easy-to-use UGC can bring convenience to its users in terms of ecommerce, focusing on how source credibility, normative and informational determinants can affect product recommendation to other customers in Instagram.

First, this thesis investigates what characteristics that Instagram has and why it can attract users especially in online business environment. Basically, Instagram is a novel online photo sharing application that enables users to share images and videos with some manipulation tools to beautify the photos or videos themselves and instantaneously users can share them to any other social media like Facebook, Foursquare and Twitter as well (Salomon, 2013) (Hochman & Schwartz, 2012). Compared to other social media, Instagram is a more suitable application if the targets are young, diverse and urban demographic (Salomon, 2013), while other social media are more personal and business-related (Lin & Chung, 2014). Instagram has a feature to make images or videos more appealing which the more they attractive, the more they will receive responses and also “likes”. This motivates the writer to understand how the Instagram attractiveness especially in ecommerce environment can lure customers to purchase offered product in online shopping environment.

Second, this thesis studies about how customers engage in Instagram and also what customer behavior that appears in Instagram online shopping environment. A previous research discussed how Facebook is used as a platform for apparel online shopping (F-Commerce) (Kang & Johnson, 2015). This research defines users as market mavens and social browsers. Market mavens are found that they are indicated to engage in social shopping while social browsers use F-Commerce for socializing and information-seeking (Kang & Johnson, 2015). These users’ division leads to managerial implications and strategies related to product, price, place and promotion. Some of the mentioned strategies are to use multiple channels of online marketing and to use online coupons which can attract more customers to engage in F-commerce. Behaviorally, customers are driven by emotional feeling, even as escapism of feeling bored, instead of a normal desire to purchase products in online fashion shopping. (Sundström, Balkow, Florhed, Tjernström, & Wadenfors, 2013). Preceding papers discusses about Facebook with a new definition as F-commerce with its customers division and what behavior may appear or motivate the users to do online shopping. This inspires the writer how to know exactly how the customer engage in a smaller scope of social media (Instagram) and how behaviorally customers are motivate to purchase products.

Third, product recommendation is one of salient features that holds a successful online shopping environment. Factually, product recommendation by peers, family, or other people is found as the biggest influence for customers to purchase products (Morrison,
In this era, product recommendation in social media has evolved from a very simple commentary system, recommender system until there is an artificial humanoid embodiment which resembles real sales agent so that customer can enhance more trust, social presence, and perceived enjoyment in online shopping environment. (Qiu & Benbasat, 2009). Another research found that product recommendation by a software called RA (Recommendation Agents) can positively increase decision quality (better decision making by customers), trust, satisfaction and perceived usefulness (Xiao & Benbasat, 2007). However, every social media has their own unique way of recommending product depending on how the online shopping activity is formed through the UGC technology. Since Instagram has a simple recommending system, where eWOM (electronic word of mouth), commentary system, etc. are still mostly used in this social media, it brings interest for the writer to study how satisfied customers in Instagram can influence product recommendation so that there will more purchase by the repeated customers or the new ones.

Those following statements contribute to these addressed research questions:

1) To understand what factors that affects consumers to do online recommendation and the relationship between consumers and sellers regarding credibility assessment of sellers and their promoted products.

1.3 Structure of the Thesis

This thesis is structured mainly into five main chapters. Chapter 1 covers about the introduction of the topic with problem identification, research objectives, and also overall structure of the thesis.

Chapter 2 will illustrate theoretical frameworks that underlie this research. The theories will focus on social media, dual process theory, elaboration likelihood model and recommendation credibility. These will be explained in order to understand the how the connection is like towards recommendation credibility.

Followed by the theoretical background explained in chapter 2, chapter 3 will explain an overview of methodology which explain research model, sample and data collection, and measures. Chapter 4 will outline data analysis and followed by chapter 5 which will cover about the explanation about the result found based on the research.
2. Theoretical Framework

2.1 Social Media: An Overview

According to (Scott, 2010), social media is different with social networking. He mentioned that social media is the superset of social networking because social media itself is various media in representation of blogs, wikis, video or photos which people use to communicate each other in online way, while social networking is a term which refers to how people interact in social media like Twitter, Pinterest, Facebook, etc. (Scott, 2010) also mentioned that social media give you an opportunity to share ideas, content, thoughts, and relationship online. (Evans, 2010) gives another perspective for social media, she mentioned that social media is commonly referred as user-generated content (UGC). She also highlights that the social media users are not only young generations but now the users are fast growingly for people who are above 40 years old. (Scott, 2010) (Evans, 2010) Additionally in marketing perspective, both discuss the importance of the conversation inside the social media within several stakeholders namely customers and companies. The importance of this conversation has something to do with a strategy related to purchase decision by customers and to earn their sympathy and patience if there is some misunderstanding.

Social media is also defined as the type of media that is “shared and participatory and involving others in the information lifecycle of creation, organization, sharing, finding and use”. (Mon, 2015). The author addressed that the ability to share and participate of social media conforms to Web 2.0 technologies. (Mon, 2015) Besides, social media has still no agreed upon categorization, for example LinkedIn is a social media for business and profession, YouTube is a social media for sharing videos, Instagram and Flicker for sharing photos, Pinterest and Path as geo-location sites, etc. As the new social media appear and the recent social media has extended features in them, for example, Twitter which is basically a microblogging site, extends its feature to have video sharing capability, Facebook has now event reminder, Path which is a geo-location microblogging site now has chatting feature, etc., (Mon, 2015) depicts this phenomena as the social sphere.
The Social Sphere above explains enough that social media can grow to be more useful than before. For example, Instagram which is basically used for people to share only their valuable moment in representation of images and videos, now it has turned to be also a tool to do e-commerce. Surprisingly, this has interested many people to do ecommerce in Instagram, which is considered easy, convenient and fast to earn profit from.

2.1.1 Instagram

As mentioned above, Instagram is used to share people’s valuable moments like images, video, and also doing ecommerce. Nowadays, in Indonesia the practice of doing ecommerce via Instagram has been a huge trend. According to survey of Jakpat (Indonesian-based online survey), people sell various products from body care to electronics in Instagram. The survey comprises products sold on this category; 53% fashion products, 11% pharmacy, health and beauty products and 7.3% for food and beverages. They sell the products by simply creating accounts and promote the picture of the products. With the editing technology built in Instagram itself, the image of products could be enhanced stylishly and attract more consumer to look up to the promoted products (Bakhshi, Shamma, & Gilbert, 2014).

This trend is aroused because these people have seen opportunities to sell their products online considering the users of Instagram has reach 300 million.
Based on users, Instagram has their most of the users outside USA (non-American) for 70% and only 30% from USA. Survey from Jakpat also discovered a survey of 530 respondents that more than 50% have had Instagram application since 1-2 years ago and they also share their activities through Instagram. Another fact that, the behavior of Instagram users could be differed based on gender. Male users tend to share funny pictures while female users have tendency to share foods or beverages photos on Instagram followed by other usage, like to fill their spare time, following trend and for fun only purposes. It is also found that male users use their accounts to stalk other people’s account while female users prefer to use the application for online shopping. Details of how Instagram is used based on gender and age are explained in details on tables below.

<table>
<thead>
<tr>
<th>Male Users</th>
<th>Female Users</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tend to post food or beverages photos</td>
<td>Tend to post funny pictures</td>
</tr>
<tr>
<td>Use Instagram for filling in their spare time, for fun and following trend</td>
<td>Use Instagram for filling in their spare time, following trend and for fun</td>
</tr>
<tr>
<td>Tend to stalk other people’s account</td>
<td>Tend to use Instagram for online shopping</td>
</tr>
<tr>
<td>Open Instagram every day</td>
<td>Open Instagram every day</td>
</tr>
<tr>
<td>Mostly upload photos about scenery, selfie and other objects</td>
<td>Mostly upload photos about selfie, food, and scenery</td>
</tr>
<tr>
<td>Follow their accounts of friend, family and celebrity</td>
<td>Follow their accounts of friends, online shop, and family</td>
</tr>
<tr>
<td>Edit their pictures less than women before uploading their photos</td>
<td>Edit their pictures more than women before uploading their photos</td>
</tr>
</tbody>
</table>

Figure 2: Table of Male and Female Users Behavior of Instagram (Jakpat)

<table>
<thead>
<tr>
<th>Based on age of users</th>
</tr>
</thead>
<tbody>
<tr>
<td>16-25 years old</td>
</tr>
<tr>
<td>Follow movie star, model and singer accounts</td>
</tr>
<tr>
<td>Follow joke and parody content</td>
</tr>
<tr>
<td>Follow online shop account</td>
</tr>
<tr>
<td>Tend to share their private photos</td>
</tr>
</tbody>
</table>

Figure 3: Table of Instagram Users’ Behavior Based on Age (Jakpat)

Study by (Bakhshi, Shamma, & Gilbert, 2014) found that the representation of images and videos posted on Instagram might affect social engagement on those images and videos
themselves. The social engagement studied by (Bakhshi, Shamma, & Gilbert, 2014) are “likes” and “comments”. They found that photos or images with faces are more likely receive more “likes” and “comments”, instead of what gender that those photos possess. Another study by (Ting, Ming, de Run, & Choo, 2015) focused on how attitude and usage behavior are likely appeared on Instagram users. They classified the result based on two beliefs, behavioral beliefs (the belief that sides with the perceived benefit of users) which encompass personal gratification, features usefulness, socializing role, product information and information. The other belief is called normative belief (the belief that sides with how the influence of using Instagram occur among the users to other people) which consist of siblings, relatives, close friends or peer, friends in general, Facebook friends, and application viewers.

Since this thesis is mainly focused on how the commerce in Instagram is like. Below is the diagram that explains how it works based on writer experience:
Figure 4. The Diagram of How ecommerce is occurred in Instagram

<table>
<thead>
<tr>
<th>Stages</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stage 1</td>
<td>Consumer finds a certain seller or vendor’s account (Jakpat)</td>
</tr>
<tr>
<td>Stage 2</td>
<td>Consumer is interested with the vendor’s account and follows the account in order to be kept updated with the content of the vendor’s account.</td>
</tr>
<tr>
<td>Stage 3</td>
<td>Vendor’s account approves the “follow” request from the interested consumer.</td>
</tr>
<tr>
<td>Stage 4</td>
<td>Seller shows the promoted products of his or her.</td>
</tr>
<tr>
<td>Stage 5</td>
<td>Consumer is interested with one of the products offered and willing to reach the seller privately.</td>
</tr>
<tr>
<td>Stage 6</td>
<td>Consumer and seller communicate each other about the price, the delivery and the payment of the product (Jakpat)</td>
</tr>
<tr>
<td>Stage 7</td>
<td>Consumer and seller reach the agreement made. Consumer do the payment accordingly.</td>
</tr>
<tr>
<td>Stage 8</td>
<td>Consumer receives the requested product.</td>
</tr>
<tr>
<td>Stage 9</td>
<td>The satisfied consumer gives testimony to seller. For example: by giving comments or “like”. (Bakhshi, Shamma, &amp; Gilbert, 2014)</td>
</tr>
<tr>
<td>Stage 10 (Optional)</td>
<td>The seller does endorsement to the satisfied consumer to promote more of his or her products. (Zhu &amp; Amelina, 2016)</td>
</tr>
<tr>
<td>Stage 11</td>
<td>The satisfied consumer tries to recommend the seller account to other consumers. (Ting, Ming, de Run, &amp; Choo, 2015)</td>
</tr>
<tr>
<td>Stage 12</td>
<td>The other interested consumer follows the seller account and accordingly the stage 1 is repeated.</td>
</tr>
</tbody>
</table>
The diagram above shows a basic plot how a seller firstly affects consumer(s) until how a consumer affects other consumer(s). The optional stages are put in general order that likely occurs in interaction between seller and consumers. The main stage is begun when a consumer finds an interesting content about certain product promoted by a seller. Consumer can find this seller by certain techniques used by a seller, for examples; hashtagging, endorsement, or shout for shout (SFS), or endorsed by other consumers who already trusts and gets satisfied by the seller. Usually consumer follows the seller account soon after he or she finds the seller promoted product interesting. Then, the consumer will be approved by the seller by doing so. Soon after, the consumer could see all products offered by the seller. Afterwards, the consumer can reach the seller privately to discuss about the product further. Both seller and consumer communicate to reach the agreement about the price, the delivery and the payment. Subsequently, the payment is done by the consumer, so that the product is sent respectively. After the consumer receives the product from the seller, usually he or she leaves testimonial to the seller’s comment section and he or she might get endorsed by the seller to improve the seller trustworthiness and reach more consumers.

2.2 Dual Process Theory

According to past research which contributes to social media focus, researchers used several parts of dual process theory to help them measure credibility and trustworthiness in eWOM in environment. Dual process theory is literally a psychological theory that refers to duality of persuasiveness of messages, which are called informational and normative influences (Deutsch & Gerard, 1955). Their theory is related to study of social influences in individuals or receivers self- judgment towards credibility of communication source. They made a model that accommodates called communication influence model and divide them onto informational and normative influences. It has been effective to assess communication effectiveness in a group discussion environment. Since Instagram is basically can be seen as an “online discussion forum”, this theory is appropriate to be used as one of foundation theories (Deutsch & Gerard, 1955) (Ireno,a, 2014).

2.2.1 Informational Influences

Informational influences could be seen as the power of presenter, or in this case the seller in Instagram, to authoritative, erudite, trusted, and perceived credible (Cheung, Sia, & Chen, 2009), also mentioned as the exchanged information arguments occurred during the discussion (Lis, 2013) and also as an influence which is based on intellective issues (Kaplan & Miller, 1987). Past researchers sub divides the informational influence into different parts. For example, Cheung et al. divides informational factors as argument strength, recommendation framing, recommendation sidedness, source credibility and confirmation with prior belief. Another example, Lis divides informational factors as source expertise, source trustworthiness and social homophile. However, other resources only mentioned source credibility as the factor measured related to dual process theory. As the writer focuses on how is the relationship between source credibility, informational and normative
influences affects online recommendation in Instagram, the writer chooses recommendation framing in research model.

2.2.1.1 Recommendation Framing
Grewal et al. refers recommendation framing as message framing. Message framing affects credibility of message source against a price of new brand of product (Grewal, Gotlieb, & Marmorstein, 1994). They found that message can be either positively or negatively framed. Later on they found that negatively framed message is associated with low source credibility and positively framed message is associated with the high credibility. Negatively framed message is also said very influential in terms of eWOM communication. The reason is this message could be a factor that is considered as “risk” for consumer in assessing sellers’ credibility. Also negatively framed message could also be identified as dissatisfied consumers who share their negative experiences with other people (Richins, 1983).

H1a: Negatively message framing will be negatively influential on recommendation credibility.

2.2.2 Normative Influences
Compared to informative influences, normative influences deal with the efforts of members to stay positive with the other members against the positive view or rate of opinions. This positive opinion is more likely generated soon after the consumer has access to view other opinions (Cheung, Sia, & Chen, 2009) (Lis, 2013) (Kaplan & Miller, 1987). Like informational influences, past researches subdivides normative influences onto several parts. For example, Lis divided only normative influences as aggregated recommendation rating, while Cheung et al. divides onto two categories, namely recommendation consistency and recommendation rating. There is also other research discussing about normative and informational influences but the researches uses only to assess opinion change of students involving in eWOM via SNS, not necessarily dividing them into several parts (Suki, Suki, Mokhtar, & Ahmad, 2016). As the writer focuses on how is the relationship between source credibility, informational and normative influences affects online recommendation in Instagram, the writer chooses recommendation consistency and recommendation rating to be included in research model.

2.2.2.1 Recommendation Consistency
Recommendation consistency is literally coined as how much consistent the evaluation of experienced contributors or consumers against the evaluation of same product or service (Cheung, Sia, & Chen, 2009) (Zhang & Watts, 2003). It is also found by Zhang et al. that information consistency is decreased along with genre conformity if the involvement of online member community is high. So, recommendation consistency is related to the rate of involvement of the online members of an online community in terms of “believability” perceived by them. This believability, or in this case, credibility, as long as the source of message is consistent with the experienced contributors opinion, then it will be highly rate and will be perceived credible by other users.
H2a: Recommendation consistency will be positively influential on recommendation credibility.

2.2.2.2 Recommendation Rating
Recommendation rating is basically how high or low the rate given to eWOM message. If the rate given is high, then the message will be perceived as agreeable and credible message (Cheung, Sia, & Chen, 2009). Likewise, if the rate given is low, then the message will be perceived non-credible and non-agreeable. Also recommendation rating also represents as the opinion of the members in terms of evaluating the quality of products or service (Lis, 2013). For example, in a medical case, the information rating is done by a rating tool as checklist to assess the credibility of information (Price & Hersh, 1999). So, the higher rate given to the information it is expected the more credible the information.

H2b: Recommendation rating will be positively influential on recommendation credibility.

In social media context, customer satisfaction are widely used as a part to understand how effective the social media to fulfil customer needs especially in terms of communication and delivery of feedback. (Agnitori, Dingus, Hu, & Krush, 2016) Social media is found useful to enhance customer satisfaction by the means of increasing communication and responsiveness aspects of salesperson in B2B (Business to Business) context. This research also addressed that “to attain value of social media, salespersons use social media to relay critical information and knowledge that is important to customers”.

Another research by (Pinto, 2015), pinpoints the use of social media can facilitate PCM (patient-centered medicine) philosophy (respect and dignity, information sharing, participation, collaboration) to identify customer satisfaction in healthcare service. The findings are that PCM is highly predictive against customer satisfaction by the means of enhancing patient-physician relationship and also attitude toward social media and PCM together increase customer satisfaction. Since there is no direct link between patient attitude and satisfaction, PCM takes the primary function as to lead higher satisfaction.

(Agnitori, Dingus, Hu, & Krush, 2016) (Pinto, 2015) The conceptual model studied from those articles depict that customer satisfaction have no direct causal links from social media. The first article use communication as an intermediary to bridge the gap between social media and satisfaction while the second article use PCM philosophy to bridge them.

However, social media could be negatively affect customer satisfaction when it comes to self-designed products configuration. (Hildebrand, Häubl, Herrmann, & Landwehr, 2013). This article evidenced that commentaries for a European car manufacturer that allow customers to self-design their products generated community feedbacks that lead to less unique final designs, lower satisfaction with the products, and as well as the products usage frequency and valuations. The paper indicates that the more customers do extreme self-design, the less satisfied the customers with their products.

Despite how positive or negative the social media can lead the satisfaction to, interest in analyzing what factors besides communication or philosophies still could be captivating to
learn from Instagram. Furthermore, there is still lack of research that study how the customer are satisfied and as well as what factors that lead them to be satisfied.

2.3 Elaboration Likelihood Model

Another theory that bases this thesis research model is Elaboration Likelihood Model (ELM), which discusses about the persuasiveness of informational influence in communication (Petty & Cacioppo, 1986). This theory provides a framework for better understanding in how messages delivered by people could be intended to be persuasive (Cheung, Sia, & Chen, 2009). ELM defines two routes of persuasion, they are called central routes and peripheral routes. Central routes means people who are involved in communication prone to be highly involved, very carefully scrutinize the information given and meticulously evaluate the merit of the messages (informational factors) (Amelina & Zhu, 2016) (Cheung, Sia, & Kuan, 2012) (Luo, Luo, Schatzberg, & Sia, 2013). On the other hand, peripheral routes are defined when people who are involved in communication tend to less use cognitive work, and use more heuristic cues to assess believability of information (information-irrelevant factors) (Luo, Luo, Schatzberg, & Sia, 2013) (Cheung, Sia, & Kuan, 2012). The most discussed variable in central routes is argument quality, and also source credibility in peripheral routes context. Petty et al. refers argument quality as the thoughtful consideration of arguments in persuasive messages. People, in this case have strong arguments against quality of information based on their knowledge, so it is easy for the messages to be perceived as credible since those are based on assessment of experts. On the contrary, source credibility is perceived positive characteristics by a source of message or the sender of the message itself (Amelina & Zhu, 2016) (Lis, 2013). Basically, people will trust a message, because the source is made by a high rated or trustworthy, attractive, and expert sender. This thesis if focused on source credibility, since people rely on this approach very often to assess the credibility of a message.

2.3.1 Source credibility

Source credibility (Hovland & Weiss, 1951) is mentioned that it has impact on communication effectiveness in terms of communicator credibility, attractiveness, trustworthiness and physical appearance. Although physical appearance is not relevant in eWOM context, source credibility has positive effects on reader’s information credibility perception (Luo, Luo, Schatzberg, & Sia, 2013). Since source credibility is measured by communicator’s credibility, in eWOM context, his or her credibility could be found in their member’s profile, which defines how reputation is rated by other members. If the rate given is high, other member will put more trust on this communicator (Cheung, Sia, & Chen, 2009). (Hovland & Weiss, 1951) (Petty & Cacioppo, 1986) (Ohanian, 1990) made a credibility model in such a way that comprises of expertise, trustworthiness and attractiveness. These three factors will be explained in details below.
2.3.1.1 Attractiveness
Attractiveness is related to communicator’s appearance which draws other people attention then enhances more persuasive approach to other people (Amelina & Zhu, 2016). Attractiveness is also modeled as a message that considered as effective if it has aspects of “familiarity”, “likeability”, “similarity” and “attractiveness” to receivers (Hovland & Weiss, 1951). Attractiveness in social media community could be seen for example; when a celebrity is physically attractive, then he or she could be endorsed for a brand of products by a seller. This is because physically attractive people could make opinion change in online environment. Also since attractiveness is descendant of peripheral routes, it is also measured by heuristic approach. So it is expected that the more attractive the communicator or seller and the message, it is expected that the more credible the recommendation given.

H3a: Attractiveness will be positively influential on recommendation credibility.

2.3.1.2 Trustworthiness
Trustworthiness in eWOM means how much confidence the communicator or seller has to deliver the message to his or her audiences (Amelina & Zhu, 2016). A credible message is always believed coming from trustworthy message. Also a trustworthy message is determined if the statement judged is valid, honest and to the point (Lis, 2013). Hovland et al. coins that “trustworthiness is the degree of confidence in the communicator’s intent to communicate the assertions he considers most valid”. Then, it is expected the more trustworthy the content or the seller, the more credible the recommendation given.

H3b: Trustworthiness will be more positively influential on recommendation credibility.

2.3.1.3 Expertise
Ohanian et al. states that expertise is how a person or communicator is perceived knowledgeable, skillful and experienced then he or she can provide accurate information. Amelina et al. refers that perceived knowledge is defined where a spokesperson could make a right assertions. Assertions also has big effect on customer’s decision making in processing opinion against valuation of a product (Amelina & Zhu, 2016). (Cheung, Sia, & Kuan, 2012) Message receivers could also have expertise in such a way that could affect other people decision, in this case an online user of social media could also affects other users to perceive messages. Similar to attractiveness and trustworthiness, expertise is easy to use as an heuristic cue to perceive message credibility. The higher expertise aspect in social media could be expected to higher recommendation credibility.

H3c: Expertise will be more positively influential on recommendation credibility.

2.4 Recommendation Credibility
Credibility is an important aspect to be considered especially in eWOM environment. As aforementioned above, people judge credibility of information by using peripheral routes and central routes as well as normative and informational influences. Credibility in eWOM is defined as “to extent to which one perceives a recommendation or review as believable, true, or factual” (Fogg, et al., 2002). Cheung et al. refers credibility to online
recommendation itself since in social media can apply such a concept. Furthermore, online recommendation relates to how persuasive message in social media is judged until the information is received as credible with some techniques such as central routes or peripheral routes. This could be based to this thesis to acknowledge how normative, informational determinants and source credibility affect online recommendation in Instagram.

In online shopping environment, customers who feel satisfied with brands offered by vendors are likely to recommend the product to other customers. Positive reactions indicated by the commentary in social media (i.e. Instagram) give the boost for more possible purchase decision by the new customers. This phenomenon is typical in social media context, as many literatures examined this in perspective of trust and the behavior based on product recommendation by the customers.

In social media context, trust is one of salient influences that can affect customer purchase intentions. (Hsiao, Lin, Wang, Lu, & Yu, 2010) This research divides trust into trust in a website and trust in product recommendation. Also, it indicates that trust in product recommendation can indirectly influence the customers’ intention to purchase from website through increasing their intention to purchase products. The direct effect for the intention to purchase the products from the website itself comes from customers’ trust in a website. (Hsiao, Lin, Wang, Lu, & Yu, 2010) In addition, both trust are confirmed influenced by website related-factors (i.e. perceived web reputation, perceived web quality and perceived institution assurance) and social network–related factors (i.e. perceived ability, perceived benevolence/integrity, and perceived critical mass).

(Chatterjee, 2011) examined how the users activity in SNS (Social Networking Service) influence their decision to recommend a new brand of product and their recipients’ (new users influenced) decision to make a referral visit. The researcher found that customer-generated brand messages (i.e. customer testimonials) is more likely recommended but not necessarily generate more referrals. She also emphasizes the technology that supports brand recommendation to lead higher referrals for new users should be carefully implemented, as it can backfire the recommenders in selecting less-prospected member for certain product. Another research (Senecal & Nantel, 2004) found that online product recommendation were significantly more influential than traditional recommendation sources like “human experts” or “other experts. Also the products chosen by the recommended customers are proved selected twice as if they were recommended.

Although those preceding statements above explain online product recommendation in terms of trust, referral visits, and how useful it is to influence customers, there is still no further research for current online product recommendation in Instagram. This brings to a new idea to learn how products or brands are recommended through the flow of satisfied customers.
3. Methodology

3.1 Research Model

![Figure 4: The Research Model](image)

Based on how past research (Amelina & Zhu, 2016) (Cheung, Sia, & Kuan, 2012) (Cheung, Sia, & Chen, 2009), normative determinants and informational determinants, as well as source credibility are suitable to answer this thesis research question. This research model explains how each sub factors, e.g. recommendation consistency, recommendation framing, attractiveness are valued or assessed by consumers to assess credibility of the information that Instagram seller provide. Recommendation credibility is taken to be dependent variable because the writer to see how the assessment based on those three determinants affects how consumer recommend sellers’ product to other consumers.

3.2 Sample and Data Collection

The writer acquired data from surveys taken from Instagram and also other applications that possibly Instagram users use such as Facebook, Line and Path. Questionnaire was handled by SurveyMonkey online survey tool. The questionnaire was delivered to Instagram users of Indonesia and as well as other three applications on a voluntary basis. Lucky draws valued €20 were given each to three users as tokens of appreciation for completing survey. All questions are adapted to six-point Likert scale. All measurement for questionnaire were drawn from previous research (Amelina & Zhu, 2016) (Cheung, Sia, & Chen, 2009) (Lis, 2013). Some wording was adopted to fit the commerce in social media context. A total of 225 of 319 Instagram users were selected from those four online applications. The total of 225 are the respondents who answer the questions of the questionnaire completely.
participant of users were asked to recall the most recent review they had in Instagram and they filled the survey according to their perception of review. The survey took about 10-15 minutes to complete. According to participants’ self-reports, 56% percent were female and 44 % percent were male. 92.44 percent of participants were aged between 16 and 25, and the rest are for the range of age 26-29, 30-35, 36 or older.

3.2 Measures

<table>
<thead>
<tr>
<th>Latent Variable</th>
<th>Scale Items</th>
<th>Outer Loading</th>
<th>Composite Reliability</th>
<th>Cronbach’s Alpha</th>
<th>AVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recommendation Consistency</td>
<td>Consistency</td>
<td>0.643</td>
<td>1.000</td>
<td>1.000</td>
<td>1.00</td>
</tr>
<tr>
<td>Recommendation Rating</td>
<td>High Rated</td>
<td>0.580</td>
<td>0.612</td>
<td>1.000</td>
<td>1.00</td>
</tr>
<tr>
<td>Recommendation Framing</td>
<td>Negative Way of Message Framing</td>
<td>0.134</td>
<td>0.147</td>
<td>0.516</td>
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<tr>
<td></td>
<td>Positive Way of Message Framing</td>
<td>0.675</td>
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<td></td>
<td></td>
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<tr>
<td>Attractiveness</td>
<td>Attractiveness-Unattractive</td>
<td>0.601</td>
<td>1.000</td>
<td>1.000</td>
<td>1.00</td>
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<tr>
<td></td>
<td>Beautiful-Ugly</td>
<td>0.653</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Classy-Not Classy</td>
<td>0.652</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Elegant-Plain</td>
<td>0.681</td>
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<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sexy-Not Sexy</td>
<td>0.498</td>
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<td></td>
<td></td>
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<tr>
<td>Expertise</td>
<td>Expert-Not an Expert</td>
<td>0.640</td>
<td>1.000</td>
<td>1.000</td>
<td>1.00</td>
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<tr>
<td></td>
<td>Experienced-Inexperienced</td>
<td>0.655</td>
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<tr>
<td></td>
<td>Knowledgeable-unknowledgeable</td>
<td>0.668</td>
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<td></td>
<td></td>
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<tr>
<td></td>
<td>Qualified-Unqualified</td>
<td>0.661</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Skilled-Unskilled</td>
<td>0.655</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trustworthiness</td>
<td>Dependable-Undependable</td>
<td>0.736</td>
<td>1.000</td>
<td>1.000</td>
<td>1.00</td>
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<tr>
<td></td>
<td>Honest-Dishonest</td>
<td>0.724</td>
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<tr>
<td></td>
<td>Reliable-Unreliable</td>
<td>0.782</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Sincere-Insincere</td>
<td>0.752</td>
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<td></td>
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<tr>
<td></td>
<td>Trustworthy-Untrustworthy</td>
<td>0.748</td>
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<td></td>
</tr>
<tr>
<td>Online Recommendation</td>
<td>IF the seller/information is attractive</td>
<td>1.000</td>
<td>0.933</td>
<td>0.924</td>
<td>0.401</td>
</tr>
<tr>
<td></td>
<td>IF the seller/information is consistent</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 5: Latent variables, loading, reliability and AVE

Figure 5 shows the descriptive statistics along with the loading, reliability and AVE for each constructs researched. Convergent validity is validated by determining composite reliability by above 0.70 (with the exception of variable recommendation rating which exceeds 0.612). Cronbach’s alpha of those constructs is also eligible for all constructs except recommendation framing. Overall, the constructs fulfills the internal reliability and consistency.
Figure 6 shows how discriminant validity is evaluated with all the square root of AVE constructs, (the diagonal of element of the table, which has value 1.00) are found above any shared pair of other constructs.

<table>
<thead>
<tr>
<th></th>
<th>Attractiveness</th>
<th>Expertise</th>
<th>Online Recommendation</th>
<th>R.Consistency</th>
<th>R.Framing</th>
<th>R.Rating</th>
<th>Trustworthiness</th>
</tr>
</thead>
<tbody>
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<td>Attractiveness</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expertise</td>
<td>0.543</td>
<td>1.000</td>
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<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Online</td>
<td>0.395</td>
<td>0.466</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R.Consistency</td>
<td>0.349</td>
<td>0.525</td>
<td>0.444</td>
<td>1.000</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>R.Framing</td>
<td>0.539</td>
<td>0.575</td>
<td>0.545</td>
<td>0.537</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R.Rating</td>
<td>0.400</td>
<td>0.469</td>
<td>0.539</td>
<td>0.587</td>
<td>0.557</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>Trustworthiness</td>
<td>0.438</td>
<td>0.642</td>
<td>0.464</td>
<td>0.470</td>
<td>0.537</td>
<td>0.544</td>
<td>1.000</td>
</tr>
</tbody>
</table>

Figure 7 Collinearity Statistics (VIF)

Lastly, multicollinearity is evaluated by finding all the VIF of the independent variables are below 10. So this would bring the research to exclude multicollinearity aspect.
4. Data Analysis

According to (Lohmoller, 1989) Partial Least Square (PLS) is used to test the research. PLS is technique of testing of structural equation modelling by using latent variables as a component based approach of estimation. The reason why the writer is used this technique is because this approach has strong advantages to model lower size of requirement and lack of distributional assumptions (Shackman, 2013).

Figure 8 Summary of PLS Results (significance at p<0.00 levels)

Figure 7 shows that recommendation framing has a few significant impact on recommendation credibility. Also, recommendation rating has the least significant impact on recommendation credibility. Thus, H1 and H2b are not supported. On the other hand, recommendation consistency and rating along with all the parts of source credibility have significant effect on recommendation credibility with p level p<0.00. Statistically, recommendation consistency has the most significant influence among the other constructs, so this could be implied that the more consistency of the content of the seller in Instagram has, the more the information perceive credible and recommended to other consumers.
5. Discussion

This research was started by concerning of its research question that is “to understand what factors that affects consumers to do online recommendation and the relationship between consumers and sellers regarding credibility assessment of sellers and their promoted products”. The theoretical frameworks that suit this research question is by applying dual process theory (Deutsch & Gerard, 1955) and elaboration likelihood model (ELM) (Petty & Cacioppo, 1986) by analyzing sub division of each part of theory. Later on, from dual process theory the writer analyzed normative determinants (with sub-division of recommendation consistency and recommendation rating) and informational determinants (with sub-division of recommendation framing) as well as from ELM the writer analyzed source credibility (with sub-division of attractiveness, trustworthiness and expertise) towards how those would effect of recommendation credibility (the way how consumers asses the information credibility and refer to other consumers) on Instagram users of Indonesia.

The result showed that recommendation consistency is the most influenced factor that affects recommendation credibility. That means the credibility is valued high if the other consumers value the information high well which results to consistent assessment to certain seller. However, recommendation rating and recommendation framing are found less significant among other constructs. This could be seen in Instagram that how many “likes” the seller got does not mean that the seller is credible. Another case if the information is framed negative or positive, it does not mean the seller is credible as well. The three factors of source credibility are found all significant influences to recommendation credibility. This means a seller should be attractive, expert and trustworthy not only to attract online consumers but also to promote their products with the help of recommendation of other consumers.

Several limitation of this research should be studied for further research. The demography of education background and the specific area of products could be specified.

References


Lis, B. (2013). In eWOM We Trust A Framework of Factors that Determine the eWOM Credibility. *Business & Information Systems Engineering, 129-140.*


