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Agro-products Consumer Initial Trust Formation Mechanism

In the Social Commerce Context

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Abstract: Since the online agro-products information is difficult to assess, it is critical for consumers to foster consumers' initial trust in the social commerce (s-commerce) context. On the basis of the existing research, this paper first analyzes the connotation of agro-products communication based on s-commerce. Then, it combines the inherent characteristics of agro-products, and takes the consumer characteristics as the important moderating factors, and a two-stage integration theory model based on Elaboration Likelihood Model (ELM) and Expectation Confirmation Theory (ECT) is proposed to explore the antecedent factors and the forming process of the agro-products consumer initial trust in the s-commerce environment. Finally, the further research design is simply planned for the future.

Keywords: social commerce; initial trust; agro-products; ELM+ECT

1. INTRODUCTION

With the further development of e-commerce, the consumer spending habits and consumption scenario have undergone major changes. Traditional forms of advertising are getting weaker and weaker, while the disseminate of social media-based social commerce (s-commerce), depending on its ability to propagate quickly and a more acceptable form of communication, achieves amazing marketing results [1]. The spread of social media is like water waves, and the network effect enhances its diffusion ability, enlarges its diffusion scope and reduces its information distortion. S-commerce is a new derivative pattern of e-commerce. It combines e-commerce with social media (e.g.,SNS) to support consumer decision-making through social interaction and User Generated Content(UGC) [2].

There are many studies in the field. Chen et al.(2016) [3] indicates that consumers' trust in e-commerce has a significant positive effect on trust in s-commerce. Kim et al.(2013) [2] points out that the characteristics of social business will affect trust and performance (purchase intention and word-of-mouth), and the reputation, scale, quality of information, transaction security, communication and the reputation factors have significant influence on consumer trust in. Hansen et al.(2004) [5] uses the theory of planned behavior to explain the three factors that affect the willingness of fresh online shopping: the influence of others on the behavior of consumers, the ability of consumers to buy fresh products and the positive attitude of consumers to buy fresh products. Hong et al. (2013) [6] studies the impact of different types of risk consumers on the trust and purchasing intentions of sellers of e-commerce from the perspective of risk.

Most of the existing research focuses on either the trust issues of e-commerce consumer or the consumer trust of agro-products in the context of e-commerce respectively [3][6] . Few studies have also considered the issue of consumer trust in agricultural products in the context of s-commerce environment. On the basis of the existing research, this paper first analyzes the connotation of agro-products communication based on s-commerce. Then, it integrates the inherent characteristics of agricultural products, and takes the consumer characteristics as the important moderating factors, and a two-stage integration theory model based on

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Elaboration Likelihood Model(ELM) and Expectation Confirmation Theory(ECT) is proposed to explore the antecedent factors and the forming process of agriculture consumer initial trust in the s-commerce environment.

This paper attempts to answer the following questions:

● How does the agro-products information spread and accept in the s-commerce?

● What are the factors influencing consumer trust for agro-products?

● How does the mechanism of consumer trust for agro-products come into being?

2. SOCIAL COMMERCE

S-commerce reflects the influence of social network on business model, that is, interpersonal communication network plays an important role in the development of s-commerce in the network environment. In essence, it is the interpersonal interaction of product information [7]. In the Web2.0 era, massive information from social media, more and more content and behavior are generated and dominated by the terminal user. Researches on s-commerce has gradually matured [4][8]. Hajli, M(2013) [4] constructs a s-commerce acceptance model, which considers that trust and perceived usefulness can affect consumer purchase intention, and trust is affected by recommendation, community and rating. Mangold et al.(2009) [8] deems that s-commerce is a new sales model to deliver commodity information between consumers, and the consumers receive the product information not only from the vendors also from other consumers.

Social Learning Theory

In the theory of social learning, Bandura points out that people would have similar behaviors after a period of study [9]. Thus, the social learning process will have a certain timeliness, so the s-commce information dissemination, especially the first dissemination of unfamiliar information, there may be a "time lag" [10]. The users may accept and pass on the information, but it would take a while for the message to be received. Dong el at.(2013) [10] investigates the cultural space relevance of network consumption with the aid of cultural distance and social learning theory, explaining the special rules and characteristics of Internet consumption, namely, the dependence and lag of consumption of digital content products.

Innovation Diffusion Theory

The theory of innovation diffusion divides the cognitive process of new things into five stages: cognition, persuasion, decision, implementation and confirmation. And different stages are affected by different factors [11]. The diffusion of information in the s-commerce has similarities with the early diffusion of innovation [12]. We abstract the five stages of diffusion of innovation into two stages: spread and acceptance. Trust is an important factor influencing the diffusion of information in the interpersonal relationships. Zhang (2012) [12] based on the features of interpersonal and mass communication of micro-blog, using the innovation diffusion theory, indicates that the more appropriate communication channels for the spread of micro-blog, the higher the user's personal innovativeness, and the more he will recommend others to use micro-blog.

Weak Ties Theory

Granovetter, M. S.(1973) [13] divides relationship between people into strong and weak relationships based on their closeness and frequency of contact. Strong relationship such as family and friends, they understand your hobbies, personality, and you are more willing to believe them; weak ties or the people who don't know, they are more numerous and are exposed to a wide range of different types of organizations and groups, so they are easier to spread information [13]. The theory of strong and weak relationship still applies to social business, and weak relations focuses on "communication", while strong relations focuses on "connection" [14]. Based on the difference of strength and weakness, Feng el at.(2015) [14] analyzes the influencing factors of purchase intention in s-commerce. The results show that strong relationship can improve the quality of receiving information and stimulate users to purchase. Hence, the different information is not the same as the main source of information

on degree of trust.

Accordingly, this paper puts forward two models based on whether the information spread and acceptance of socialized agro-products are separated (The figure is merely an abstraction of the source of information and communication, and the reality is much more complicated). The follow-up study of this paper explores the process of trust formation from spread to acceptance.

● Spread and acceptance simultaneously (a). Such as marketing communications based on social relationships, the spread and acceptance of information is carried out almost simultaneously. Its main features are slower spread, higher acceptance, and more targetedness.

● Spread and acceptance separately (b). Such as event marketing, information would be quickly covered in the social network, but not all consumers would immediately accept the information other than a "cognitive process". The dotted line represents the dissemination of information, the solid line shows the consumer "reverse confirmation" whether to accept the content (trust). It is characterized by faster spread, lower acceptability, and weaker targeting.
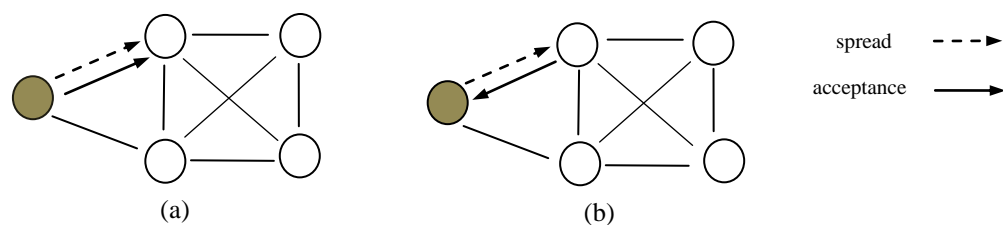

Figure 1.   The communication connotation of s-commerce agro-products

3.   TRUST AND AGRO-PRODUCTS

Trust in different disciplines have different definitions. Many scholars define the meaning of trust in the psychology, marketing, sociology, management and other fields [15]. In general, Mayer el at. proposed in 1995[16], that no matter how trust is one of oversight and control over the other party, the other party will always think of their behavior in accordance with an important act, so that the other party is willing to place themselves because of the behavior and assume the risk of the state, is the most consistent with the characteristics of s-commerce agro-products. Numerous studies fell trust into two stages: initial trust and continuous trust. Lin el at. [17] stresses that consumer trust is a ever-changing process. This paper focuses on the formation mechanism of initial trust.

Online agro-products has timeliness, perishable and other characteristics [18]. Trust plays an important role in reducing risk perception and transaction cost in the virtual s-commerce environment. The quality and safety of agro-products is one of the biggest problems affecting the trust of formation. agro-products and food have a lot in common, meaningwhile, owing to the inherent characteristics of agro-products, and it more complex than food. Based on the analysis of consumers' trust in food safety, Chen, M. F(2008)[19] showes that the trust of consumers based on food safety mainly come from the self-evaluation mechanism and the social impact mechanism.

Nelson, P. (1970).[20] the products have three castes for the degree of information asymmetry between consumers and manufacturers: search goods, experience goods and credence goods. Existing e-commerce studies generally choose the search goods and experience goods for the study, and there have less researchs select credence goods as the research object, and agro-products have a significant feature of credence goods. Meanwhile, research on the credence goods features of agro-products, focusing more on the agricultural supply chain, there is little consumer trust research in the context of s-commerce. Lin el at.(2015) [21] build a model of factors affecting fruit e-commerce trust, and empirical research find that the fruit quality and perceived value of

trust in fruit consumption is most prominent.

4. THEORY AND MODEL

4.1 Framework model (ELM+ECT)

Research on consumer trust in existing online business is mainly based on classical technology acceptance theory, theory of reasoned action, etc[18]. In this paper, the combination of s-commerce and the characteristics of agro-products, put forward a integration model of "ELM+ECT" as the theoretical framework. Elaboration Likelihood Model (ELM) argues that individual attitude transform via two routes: the central route and the peripheral route [21]. The central route involves a high level of message elaboration in which a great amount of cognition about the arguments are generated by the individual receiving the message, while the cues received by the individual under the peripheral route are generally unrelated to the logical quality of the stimulus. Expectation Confirmation Theory (ECT) is a cognitive theory which seeks to explain post-purchase or post-adoption satisfaction as a function of expectations, perceived performance, and disconfirmation of beliefs[22].

Zhou el at.(2016)[25] indicates that initial trust develops along dual routes including a central route represented by argument quality and a peripheral route represented by source credibility, which is also regulated by consumer self-efficacy. This paper holds the view that consumers' initial attitudes are affected by content and source, and in the s-commerce environment with interpersonal interaction as the core, we holds that the source not only directly affects the initial attitudes of consumers, also affects the initial attitude by strengthening the credibility of the content. In theory, this line of thinking "coincides" with the theoretical framework of ECT. Married with the ELM's "content" and the "framework" of ECT, we propose an integrated framework model of consumption initial attitudes in the context of s-commerce.
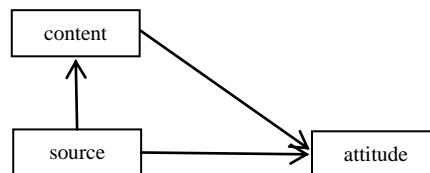
Figure 2.   An integrated framework model based on ELM and ECT

4.2 Variable

Self-efficacy, also referred as personal efficacy, is the extent or strength of one's belief in one's own ability to complete tasks and reach goals. When consumer have high efficacy, they may form favorable expectation toward future outcomes [26]. Lin el at.(2010).[27] says that the tendency of trust is a propensity of trusting others. It is a characteristic of consumers, and those with a higher propensity to trust are more likely to have trust in a new technology or service. Zhou el at.(2016)[25] states that self-efficacy, personal characteristics and cultural factors have a moderating effect on the formation of consumer trust. This paper argues that personal characteristics of consumers paly a key role in regulating the initial trust, including trust tendency, cultural background and prior experience.

Table 1.   Variable and its connotation

construct	variable	explanation	source
Content Characteristics	Content information	Including image information, text information, etc.	Hong et al. (2013)[6]
	Perceived value	Perceived value of agro-products content	Lin el at.(2010).[25]
	Perceived risk	Perceived risk of agro-products content	Zhou el at.(2016)[23]
Source	Source merchant	The agro-products of source merchant	Lin el at.(2010).[25]

characteristics	Social relationship	The agro-productss information transmission on social relationship	Li el at.(2014)[26]
	Trust tendency	A willingness to rely on others	Lin el at.(2010).[25]
Consumer characteristics	Cultural background	The consumer's cultural environment	Kim et al. (2013) [2]
	Experience	Prior experience of consumers	Hansen et al.(2004)[5]
	Characteristics of Credence goods	Strength of credence goods characteristics	Feng el at.(2015)[14]
agro-products Characteristics	Third party certification	Trademarks, geographical indications, industry standards and other certification information	Chen, M. F (2008)[19]
	Traceability mechanism	Traceability of agricultural production, processing, and other information	Chen et al.(2016)[3]

Section 3 briefly introduces the characteristics of agricultural products. Dirkliil's find that agricultural safety certification could effectively promote the development of fresh areas in Europe, and called for the construction of fresh electricity in the field of third-party certification system. Based on the related research, the connotation of agro-products characteristics is put forward, including the characteristics of credence goods, third-party certification and traceability mechanism. Section 4.1 proposes content and sources feature two variables, which features content including content information, perceived value, perceived risk; sources including sources of business and features source relationship. (Source and meaning as shown in the table 1)

4.3 Model

Section 4.1 proposes model frame and section 4.2 presentes the major factors affecting initial trust of consumers and its connotations. It can be seen from the existing research that the formation of consumer trust is a dynamic process[25], especially based on the scenario of s-commerce (such as section 2 is analyzed), consumer trust is not a "quick fixes". For example, Li el at.(2014)[26] through the image theory and elaboration likelihood model discussing the effects of trust assurances on consumers' initial online trust, and the two displaying phases are the information-searching stage and the choice stage. Lin el at.(2011)[29] demonstrates that the dynamic evolution of consumer trust fall into three stages: pre-usage, usage and post-usage.

Based on the existing literature and the previous discussion, this paper classifies the formation of initial trust into two stages: initial attitude and initial trust, and twice applies "ELM+ECT" theoretical model framework presenting in section 4.1. In the first stage, the characteristics of the content and the characteristics of the source also affect the formation of the initial attitude of consumers, while the source characteristics will affect the initial attitude through the strengthening of the content characteristics. In the second stage, the initial attitude and agro-products characteristics influence the initial formation of consumer trust, and by the initial attitudes strengthening agro-products characteristics affecting the initial trust. In the two stage, the individual characteristics of consumers will play an important role in regulation.

Figure 3.   A two stage initial trust forming model of agro-products comsumer

5. CONCLUSION AND FUTURE

On the basis of previous studies, this paper puts forward a mechanism of two stages of consumer's initial trust in the s-commerce environment.In particular, the information dissemination model of agro-products in the context of s-commerce, as well as the "ELM+ECT" model of integration are not only the innovation, but also the lack of data validation. In this paper, there is a defect that in the second class (b) communication mode, social advertising formed a large number of Word of mouth information. At this point, consumers would not only be affected by social network members, but also by the impact of the environment. Consequently, this study needs further empirical study.

The follow-up work of this paper is to verify the correctness of the model. Preliminarily, we expect the verification as the follows:

First, whether the spread and acceptance of consumer agro-products information is reasonable in the s-commerce context? Whether all of the situation?

Secend, this paper puts forward five variables such as source characteristics and their rich connotations. It is necessary to analyze the rationality of empirical data, such as factor analysis.

Thirdly, most importantly, this paper adopts the integration model based on "ELM+ECT" to explain the formation of consumer 's initial attitudes for the first time. This model needs to be validated by data, further, and the model may need to be modified.

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