



INTERNATIONAL JOURNAL OF ACADEMIC RESEARCH IN BUSINESS & SOCIAL SCIENCES



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To Link this Article: <http://dx.doi.org/10.6007/IJARBSS/v12-i8/13070>

DOI:10.6007/IJARBSS/v12-i8/13070

Received: 10 June 2022, **Revised:** 13 July 2022, **Accepted:** 27 July 2022

Published Online: 09 August 2022

In-Text Citation: (Aziz et al., 2022)

To Cite this Article: Aziz, M. A., Yahya, N. A. A., Nasir, I. N. M., Misron, M. M. @, & Nordin, N. M. (2022). Social Adoption Model: An E-commerce Perspective. *International Journal of Academic Research in Business and Social Sciences*, 12(8), 395 – 407.

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Vol. 12, No. 8, 2022, Pg. 395 – 407

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www.hrmars.com

ISSN: 2222-6990

Social Adoption Model: An E-commerce Perspective

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Abstract

Social networking is an important strategy for e-commerce businesses. The study will determine the requirements that must be completed before customers visit an e-commerce website, particularly for the electronic and media sectors. The main contribution of this paper is a conceptual model for the social adoption of factors impacting e-commerce websites by proposing a conceptual model for social adoption model using social media channels. This study will determine what factors must be present in order for customers to visit an e-commerce website especially for electronic and media industry. The outcome of this research will help sellers to increase website traffic that will result in more customers and sales. This study adopts the mixed methods approach with a combination of literature analysis, interview, questionnaire and observation. Based on the result, it was found that various e-commerce websites use different type of social media. Moreover, 89% of people aged 18 to 33 choose Instagram to Facebook as their preferred social media, despite the fact that literature review revealed that Facebook is the most popular social media. Facebook is in third position with 54 percent, while Twitter is in second place with 65 percent. It was observed that interest and intention to buy are the biggest reason for a user to click the advertisement. At the same time, the biggest reason for the unclick link is related to intention and interest to buy the product too and trust issues. Based on the result shows that most users who enjoy purchase online are the experienced user who have the intention and interest to purchase a product. Based on the findings of the research, we developed a a conceptual model for social adoption model of factors influencing e-commerce websites.

Keywords: E-commerce, Conceptual Model, Social Media, E-Business, Social Adoption Model.

Introduction

The advancement of Information Technology (IT) has had a tremendous impact on the corporate world in recent years. IT has proven valuable in various fields, including business, education, agriculture, and more. Due to the reforms, business processes and operations are

becoming more efficient and effective. Compared to history, a job can be performed in a matter of seconds with the help of technology. With this enhancement, enterprises and their consumers will be better served. E-business is described as the conduct of company processes over the Internet, allowing all employees, customers, suppliers, and other stakeholders to be connected regardless of physical location (Rodgers et al., 2002). According to Mohtaramzadeh et al (2018), the internet can facilitate the integration of e-business and communications technologies with business management. Customer demands and wants, trendy products, useful marketing tools and solutions, and order details from customers can all be found on the internet. Every organisation strives to execute an effective e-business strategy in order to improve their service and operations while also competing with their competitors in order to be successful. Implementing useful e-commerce websites is one of the strategies. E-commerce refers to the use of the Internet to manage company transactions or organisational activities. In today's business environment, e-commerce models and apps are widely used. Retail, fashion, transportation, and other business categories are only a few examples. Apart from having a physical store, e-commerce websites are now one of the most important tools for a business to sell its items (Sharma & Lijuan, 2014). It allows companies to conduct business 24 hours per week, operating worldwide. Report by The International Trade Administration (ITA) in 2019 reported among popular e-commerce website in Malaysia, such as Mudah.com, Lazada.com.my, Zalora.com.my, Lelong.com.my and eBay.com.my. It also reported that revenue in the e-commerce market amounts to US\$3,681m in 2019 by Statista.com (Geck, 2006). This report shows that users from Malaysia have a more significant amount, and the number will grow from time to time. According to Sharma et al (2014), e-commerce websites need to have great features, so that it can attract more customers to buy the items.

In e-commerce websites, one of the useful features has good interaction between customers (Liang et al., 2017) while in traditional commerce, many business applications in organizations including Supply Chain Management (SCM), Customer Relationship Management (CRM), Enterprise Resource Planning (ERP), and others. These business applications are used to integrate data and information systems for specific areas in order to have the proper operation for an organization. CRM is the core competency of organizations because it specifically manages its customers rather than the e-commerce environment, which the buyer and the seller does not meet personally (Marolt et al., 2018). This transaction is complicated for an organization to keep track of what are their customer needs and wants and handling a customer complaint. Based on this situation, social media take the role to engage with their customer at the same time social media can perceive that as opposed to overseeing customers, the job of the business is to encourage collaborative encounters and exchange that customer's value (Wongsansukcharoen et al., 2015). Social media is one of the platforms of CRM which, is expected to set-up a transformative wonder in the marketing area. Nowadays, trending social media like Facebook, Twitter, Instagram, LinkedIn, and others, were created. In the first place, this social media created to have more accessible communications tools for individuals (Robert et al., 2017). Recently, it becomes marketing tools for a business to promote their product or keep track of customer needs.

With great opportunity of e-commerce business, the competitors within the same industry will be bigger, and they need a strong relationship with their customers. In e-commerce business, they have a hard time to interact with their customers because most business happens on the Internet. From this situation, online seller tends to use social media as another platform to sell their products. According to Chen et al (2015) in their research it was

found that social media is the most popular online activity and 91% of online adults use social media regularly. However, with the advent of social media, not everyone has a social media account, and while some of them have, not all of their social media accounts are regularly used. The goal of this study is to determine which social media platforms individuals often use. Based on this, the online vendor can determine which social media platforms the buyer utilises frequently. As a result, they do not have several social media accounts to manage. Nowadays, social media is mostly used as a platform for internet sellers, with advertisements appearing on the platform. Is, however, all advertisement clicked by the user? As a result, the goal of this research is to figure out what elements online research needs to lure customers to visit an e-commerce website. As a result, they will be able to increase sales and website traffic.

Literature Review

In 2013, a research was conducted to identify the connection between customer loyalty and customer service in social media (Halova et al., 2013). However, their study was explicitly for the airline industry and focusing on the relationship between customer loyalty and customer service by using Twitter. The success of their study on the relationship between customer loyalty and customer service in the social media by using twitter. Thus, this study will be analysing the significant relationship between e-commerce and social media. This study will propose a conceptual model for social adoption model using social media channels specifically for electronic and media industry. This paper aims to propose a social adoption model for e-commerce websites to improve customer relationships among companies who used e-commerce websites as their business tool because customers are the core competency of organizations.

Based on the preliminary study and literature review, Firstly, it has been noticed that, among different parts of brand leadership, the apparent nature of the site is a significant zone for theory in the field of-commerce (Hsu et al., 2012). The outcomes got in this investigation bolstered the apparent nature of a site to affect satisfaction. Besides, apparent nature of the site includes numerous parts of administration quality that are basic in accomplishing fulfilment. While many elements influence an e-commerce Web site's success or failure, the degree of customer service provided can be a good indicator of user satisfaction with the transaction-oriented nature of the site (Lightner, 2004).

However, the outcomes demonstrated no immediate impact of apparent quality on repurchase intention, showing. DeLone (2003) outlined that, all together for ensuing buy goal to happen, the site quality should emphatically impact customers' fulfilment. It demonstrated that purchasers might believe item quality to be a higher priority than site quality (Luo et al., 2012). Second, the outcomes demonstrated apparent incentive to have a critical connection between satisfactions and repurchase intention. They have seen worth add agreeable to shoppers when the acquired item considered financially savvy, which impacts holding purchaser. Yang et al (2004) referenced the apparent incentive to be a controller of social expectation. For example, when a customer saves money on a top-notch item, the concrete saw worth accomplished, adding to fulfilment. Likewise, purchasers are persuaded to rehash support when the advantages of an item are more commendable than their sacrifice (Wu, 2014). This effect makes buyers feel gratified, which leads to increased repurchase intent. Third, this investigation found that the ingenuity of brand administration significantly affects fulfilment, though no critical relationship was found among inventiveness and repurchase aim.

Crawford (2008) noticed that ingenuity is a factor that mirrors a brand's level of receptiveness to new thoughts. From purchasers' point of view, fulfillment is achieved when an imaginative component in its administration or item is viewed as necessary. Customers expect the ideas embraced by brands to be ceaselessly developing as per the pattern. Moreover, they watch and assess the brand's degree of inventiveness, which could, at long last, impact their acquiring conduct. In this manner, specialist organizations need to guarantee that their unique qualities are Fourth, the outcomes demonstrated that the apparent fame of brand initiative decidedly impacts buyers' fulfillment and repurchase goal. The ubiquity of the leading brand can veer off purchasers from its genuine worth and guides them to advantages, for example, confidence. It demonstrated that the social acknowledgment of the brand and real prizes drive them to buy a prevalent item (Zhu et al., 2010). Moreover, Kim (2013) and Kim (2008) noticed that customers have a good opinion of driving brands even when they are not shown to deliver distinctive things. To increase and maintain ubiquity, which can build confidence and reduce apparent risks, informal interchange or online consumer online audits can be used.

As of January 2019, YouTube has become the leading active social media platform in Malaysia. Along these lines since Malaysians have inclined toward the application for perusing video content rather than the typical TV. Ninety-five percent of Mobile activity originates from watching recordings on versatile. The top YouTube search questions in 2018 are Movie, Lagu, and Live. Facebook is, without a doubt, one of the central social media platforms in the entire world. In the middle of 2018 to 2019, it saw a 9.6% expansion in month-to-month dynamic users on a worldwide scale. This worldwide arrive at still sounds accurate among Malaysians and has collected an astounding 91% rate, having its spot as the second dynamic web-based life stage in the whole nation alongside WhatsApp. Twenty-four million users in Malaysia can become too with promotions on Facebook. 98% of the Malaysian Facebook users are grown-ups matured 13 or more can become to buy promotions on Facebook. 43% of those users are female, and 57% are male. Instagram arrives as the third most utilized online networking divert in Malaysia. There are 12 million users in Malaysia that can become with commercials on Instagram. Forty-nine percent of those are grown-ups matured thirteen or more. Fifty-three percent of the users are female, while Forty-seven percent are male (Malaysia e-Commerce, 2021).

However, the outcomes showed no immediate impact of apparent quality on repurchase intention. DeLone et al (2003) outlined that the site quality should emphatically impact customers' fulfillment for the ensuing buy goal. It demonstrated that purchasers might believe item quality to be a higher priority than site quality (Luo et al., 2012). Second, the outcomes demonstrated an apparent incentive to have a critical connection between satisfaction and repurchase intention. They have seen ads agreeable to shoppers when the acquired item is considered financially savvy, which impacts holding purchasers. Yang et al (2004) referenced the apparent incentive to be a controller of social expectation. For example, when a customer saves money on a top-notch item, the concrete saw is worth accomplishing, adding to fulfillment. Likewise, purchasers are persuaded to rehash support when the advantages of an item are more commendable than their sacrifice (Wu et al., 2014). This effect makes buyers feel gratified, which leads to increased repurchase intent. Third, this investigation found that the ingenuity of brand administration significantly affects fulfillment, though no critical relationship was found between inventiveness and repurchase aim. As of January 2019, YouTube has become Malaysia's leading social media platform. Along these lines, Malaysians have inclined toward the application for perusing video content rather than

the typical TV. Ninety-five per cent of Mobile activity originates from watching recordings on versatile. Social Customer Relationship Management (Social CRM) that is veered off from CRM 2.0 connects and incorporates traditional CRM systems with the Social Web, intensifying an expansive research area. Expanding the social part into existing CRM influences overall deals, marketing, strategy, and IT offices, making reconciliation of the idea challenging, complex, and ambivalent (Baird et al., 2011).

Method

This study used a mixed methods approach in finding the significant relationship between e-commerce and social media usability issues. Evaluation methods used were heuristic evaluation (inspection method) and inquiry methods are commonly used to evaluate web applications. Compared to other methods, mixed methods are popular and widely used for e-commerce websites with their own advantages. This research project also combined a few other approaches of user requirement techniques which are observation, interview and questionnaire. There are the three (3) main phases involved in this project which are preliminary study phase, data collection and analysis phase and conceptual model development and validation.

Preliminary Study Phase

Initial works and planning to be carried out in this project were done in this phase. Among the activities involved in this phase are project initiation activities such as formulating of the problem statement, identifying research questions, setting up the aim and objectives of the project, defining the scope, and acknowledging project significance. Problem statements were formulated based on the result of the preliminary study on the website. This phase also involves a thorough review of prior and relevant articles and journals to produce a comprehensive literature review.

Data Collection and Analysis Phase

Secondly, in order to analyze the significant relationship between e-commerce and social media, few steps were taken such as literature review on previous research, website evaluation and conducting questionnaires. Websites were evaluated using the traditional heuristics evaluation by Nielsen (Nielsen, 1995). In this method, we evaluated selected e-commerce websites with detailed explanations by looking at the aspect of e-commerce system features. This method allows better understanding on the e-commerce website relation with social customer relationship management (Social CRM) and social media and their characteristics. Besides that, a set of questionnaires were distributed to respondents (public) and from the IT company, as the e-commerce website owner. The target individuals were non-members and members of social networking sites like Facebook, Instagram, Twitter, and more. A total of 71 participants ranged from 18 to 33 years old. For the analysis phase, the method used was user gold technique the result of the findings was tabulated in tables discussed in the next section.

Model Development and Validation

Based on the findings gathered from various sources, a conceptual model for assessment tools was developed. This model's main objective is to improve customer relationships in e-commerce websites. After completion of the model, the next step is the validation process. The model was validated using few approaches such as expert intuition, real systems

measurements, and theoretical results/ analysis. Depending on the research situation, some of the approaches can be combined. For this research, we used the theoretical analysis approach in order to validate the conceptual model based on the current problem analysis. Then, the proposed social adoption model was validated by experts.

Table 1
Methodology

Phase	Activity	Description
Preliminary Study Phase	Problem Assessment	Study on primary literature to identify, and understand problems. Identify research questions, objectives, aim, scope, and significance.
Data Collection and Analysis Phase	Literature Analysis	Conduct literature review on previous researches related to e-commerce website related with social CRM, and social media and their characteristics.
	Website Observation	Conduct observation on popular e-commerce websites.
	Data Collection	Perform an interview and survey for the variables in the research questions.
Model Development and Validation	Conceptual Model Development	Develop a conceptual model for assessment tool to improve customer relationships in e-commerce websites based on previous activities findings. Below is the list of steps for validation session process that have been conducted: Step 1: Identify an expert related to the field. Step 2: Setting up the validation session. Step 3: Prepare a checklist for the validation process. Step 4: Prepare a summary of findings related to e-commerce websites and social media. Step 5: Receive feedback and suggestions by the expert.
	Conceptual Model Validation	Develop a conceptual model plan to an expert.

Results and Discussion

Based on this research, website observation was conducted on the current top e-commerce websites in Malaysia, with the goal of identifying the social media that e-commerce employs. Table 2 demonstrates the social media matrix employed by the majority of Malaysian e-commerce websites..

1. There are a lot of social media nowadays that can be used. The online seller has a problem in choosing the most suitable social media to use; or to have all social media accounts.
2. Social media also provide a platform for advertising, but the effectiveness of the platform chosen needs further analysis; e.g., customer engagement and website traffic (Tafesse et al., 2018).

Table 2

Social media sites used by E-commerce websites

E-commerce / social media	Lazada	Shopee	11 Street	Mudah	Lelong	e-Bay	Carousell	Go Shop	Amazon
Facebook	√	√	√	√	×	√	√	√	√
Instagram	√	√	√	√	×	×	√	√	√
Twitter	√	√	×	×	×	√	√	√	√
LinkedIn	√	√	×	×	×	√	×	×	×
YouTube	√	√	×	√	√	√	×	×	×

For the first evaluation phase, the evaluators will identify most popular e-commerce websites used by Malaysian with specific elements that to evaluate. Firstly, a thorough investigation was performed including what is the e-commerce websites, the functionalities, and the details of social media account. These websites were not evaluated and examined for its usability. Based on the result, we have mapped all the e-commerce websites with the social media. The mapping process was useful in solving understanding the issues and conclude the findings.

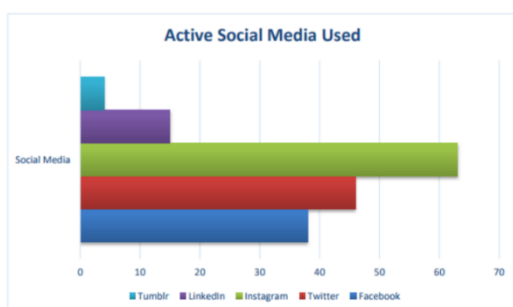


Figure 1: Active social media usage

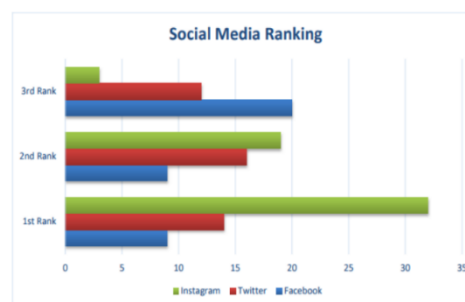


Figure 2: Social media ranking

It was identified that Instagram and Twitter are in a different category for the type of social media. Instagram is a photo-sharing social media, while Twitter is a Social Media Microblogging that have simple and minimalist interface design. As in Twitter, there is a setting for the user to personalized ads. Users can untick the setting if they prefer not to see an advertisement in their timeline. During an observation, Twitter can be a tool to engage with a customer from posting and comments but not suitable to promote advertisement through it. In March 2021, Facebook users in Malaysia estimated 80.5% of its entire population. Based on the findings Figure 1 and 2, it was found out that young adults preferred to use Instagram and Twitter rather than Facebook. It was found out that group age determines the use of social media, since this survey respondents age are between 18 to 33 years old. This is supported by research done by (Auxier et al., 2021) that majority of 18 to 29-year-old user have Instagram or Snapchat and TikTok account.

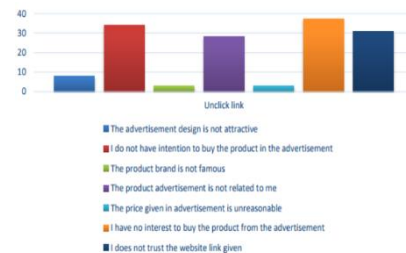


Figure 3: Reasons to unclick on advertisement link Figure 4: Reasons to click on advertisement link

Figure 3 demonstrates that 54 respondents did not click on the advertisement link, while just 17 of the 71 respondents did. Here, we'll need to figure out what's causing the problem. Even though there is a link provided. The user did not click the provided link. The user clicked and unclicked the provided link. According to Figure 4, the most important reason they did not click the commercial link because they have no desire to purchase. They do not intend to buy at the same moment, and the third-highest reason is that they do not trust the seller. As a result, the advertisement is unlikely to entice the respondent to click on it, and the trust issue arises. Another reason that caused respondent to not click on advertisement is that the link because the product piqued their interest, it was relevant to them, and the design advertisement caught their attention.

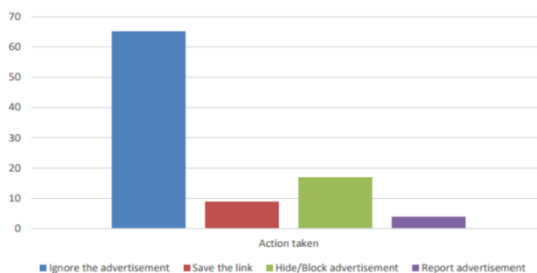


Figure 5. Respondents' actions after viewing the advertisement

Based on Fig. 5 shows the results of action taken by users after viewing product advertisements on social media. The majority of the users will ignore it, some will hide or block the advertisement, and only a few will save the link and report. The reason users hide or block the advertisement is that advertisements appear or crop up regularly, and they find it is not very pleasant. Some people additionally bookmark the site if they find the advertisement interesting and plan to revisit it in the future.

Proposed Conceptual Model

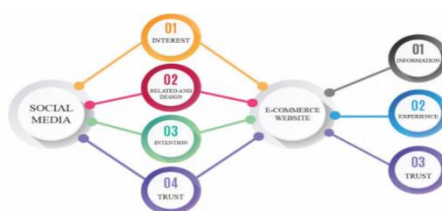


Figure 6. Initial proposed conceptual model

Based on Fig. 6 above, it displays four major social media and e-commerce website categories. According to the survey results, interest, linked and design, intention, and trust. Interest is the first category. The main motivation for customers to visit e-commerce websites via social media is their interest in buying the product. It was determined that they would not click on the provided link due to a lack of interest. A company's marketing department must have a strategy to educate clients about their product and pique their interest in purchasing the advertised product. The second is connected, and design-related refers to a product relevant to the user. For example, if the user is a man and the advertisement is for women's clothes, the user is unlikely to click the link unless they intend to buy it for someone else. An advertisement has a visually appealing design banner that can persuade users to click the provided link. This demonstrates how a designer's position can have an impact on advertising. The online seller company's designers must understand and discover design trends, appealing colors, and messaging that might capture users' attention.

The third factor is intent, or the user's desire to purchase the product. Through this strategy, most advertisements will pop up the product that is related to the user because that user intends to buy. Lastly, the top fourth main category is trust. In previous Literature analyses, much research identified trust as the main reason for online activity, especially related to transactions and data security. This study proved that trust issues are one of the essential factors regarding e-commerce websites. According to a study on the impact of customer behavior on advertising, consumer behavior will determine how frequently a consumer visits a website. As a result, advertising can now collect information about a person, allowing them to promote only related products via social media adverts. Because the user intends to buy, most advertisements will pop up with products linked to the user. Trust is the fourth category. According to previous literature analyses, many studies have identified trust as the major reason for online activity, particularly associated with buying transactions and data security. This study found that trust is one of the most important aspects of e-commerce platforms. Figure 5 also shows that information display, user experience, and trust are all variables that impact an e-commerce website. The results show that the user likes information from advertisements and websites, which is logical and comprehensive.

When you buy something online, you need to know everything there is to know about it. Users can save time by purchasing the product instead of waiting for customer care to respond to their questions if all information is provided. Second, one of the target clients is an experienced user. They are already familiar with the procedure for purchasing goods. They are already familiar with the procedure for purchasing goods. If people buy the same brand, they will likely be loyal customers. When a new product is launched, they are the first to want to know everything there is to know about it. The third most important factor influencing e-commerce websites is trust. Trust has two major roles in social media and e-commerce websites

Conceptual Model Validation

A domain expert with e-commerce expertise validated this conceptual model. He is a marketing manager from one of Malaysia's largest IT retailers. He was chosen because of his expertise and skills in marketing and managing client contacts. Based on the interview, one of his proposals is to expand this study to include various areas inside the firm, including customer service. More ideas can be generated as a result of their experience. He also proposed the conceptual model (Fig 7). Because there is a little gap between the result and the intention, the factors of interest, relatedness, and intention can be integrated as one. As revised by the expert comments, Figure 8 shows the finalized conceptual model.

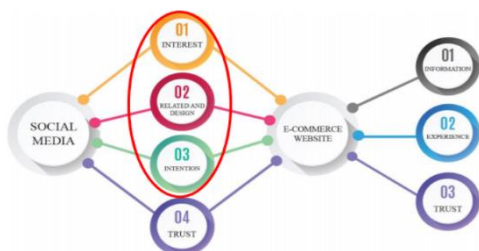


Figure 7. Feedbacks on proposed conceptual model conceptual model



Figure 8 Finalized of proposed conceptual model

Conclusions

This study on social adoption models with an emphasis on e-commerce was carried out with four primary goals. The initial goal is to identify the current issues with an e-commerce website, particularly those concerning client interactions. This study discovered that in an e-commerce environment, there is a communication barrier between sellers and customers and that social media can be used as another platform to enhance sales and website traffic. A previous study employing social media as a customer involvement backs this up. The second goal is to rank the most popular features on an e-commerce site and social media. According to this survey, all social media accounts such as Facebook, Twitter, Instagram, and YouTube apply to current popular e-commerce websites. Because not everyone has a social media account, this might be one of their techniques for maintaining a good relationship with customers. The literature analysis also shows the model attributes or factor influence for the client related to social media and e-commerce websites. The third goal is to provide a paradigm for social adoption through social media. The survey results suggest that curiosity, design and related factors, intention, and trust have the greatest impact on social networking and e-commerce websites. Information, experience, and trust are all characteristics that pertain to online e-commerce websites. The final goal is for an expert to validate the suggested social adoption model using social media. A domain expert from the validation session proposed merging three categories; interest, connected, and aim because it has a similar connotation. The other two, design and trust, remain.

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