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Captured Knowledge Transaction Analysis and Promotion at Small and Medium Enterprises (SMEs) in Semarang, Indonesia

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Abstract:

The behavior of business enterpreneur in Micro, Small and Medium Enterprises (MSMEs) is very important in entering digital commerce (e-commerce). If they want to be left behind by the times. In order to survive in today's challenging environment, it is important that SMEs become competitive and resilient. The use of captured knowledge in the transaction analysis and SME online shop promotion is that the promotion implementers know the conditions of the promotion target and what unwritten procedures need to be carried out during the promotion, the experience and the proposed needs of the promotional implementers in the field and in the office can be stored and used as knowledge to make improvements, and the operator can estimate the planned cost of using promotional materials needed for certain promotional targets based on previous promotional experiences. While the suggestion is that SME online shop can improve its promotion better and more attractive.

Keywords: SMEs, promotion, online shop

1. Introduction

The emergence of e-commerce creates a fundamental change in the way business is run (Zulkifli, 2017). According to Edim (2014), although SMEs may have difficulty developing a sophisticated web because of lack of expertise and funds, they still need e-commerce for survival. There have been interesting phenomena in recent years. A number of modern retail industries in Indonesia close their outlets in shopping centers. This phenomenon is the impact of developing technology, especially internet technology, which changes the behavior of some people from conventional transactions (offline) to online ways. This shift in behavior forces business, micro, small and medium enterprises (MSMEs) to enter digital commerce (e-commerce) if they do not want to be left behind by the times. So, the online shop in SMEs is an important thing to study.

Social media is a digital marketing tool that is the easiest to use. Before a business has a site, it is not uncommon for us to find it especially in markets like Indonesia that they have begun to enter the realm of cyberspace through social media. This can be a stimulant for the development of entrepreneurship and the sustainability of SMEs. In addition to the low cost and no need for special expertise in carrying out initial initiation, social media is considered capable of directly engaging potential customers.

The most fundamental problem of the ability of SMEs in utilizing IT as a means of supporting business management is the issue of knowledge and skills (skills), as well as infrastructure issues. However, the IT infrastructure problem can be overcome by increasingly populating Smartphone use among SMEs. In connection with that, the most important thing to optimize is the program increasing knowledge and skills of SMEs in empowering information technology to support the management of their businesses.

Captured knowledge is chosen as an approach to provide a comprehensive picture of the situation in SMEs so that the process of capturing knowledge can be done more optimally. In several previous studies, it has been shown that captured knowledge is suitable for modeling knowledge management in organizations. Therefore, this research is intended to produce a model that can be used for capturing knowledge by utilizing captured knowledge as a method of completion. Based on the description above, the formulation of the problem is how captured knowledge is in the analysis of SME online shop transactions and promotions.

2. Materials and Methods

2.1. The Research Designs

The research methodology used in designing the model is by using the captured knowledge approach with the steps added in accordance with the case study, namely interviews with SME online shops in Semarang. The following will explain the Data collection.

2.1. Data collection

Data collection methods used in this study is

2.1.1. Documentation Method

The documentation method is one method of collecting qualitative data by looking at or analyzing documents made by the subject itself or by someone else by the subject. Documentation is one way that qualitative researchers can do to get a picture from the point of view of the subject through a written media and other documents written or made directly by the subject in question. The researcher collected data from the Semarang UKM, the number studied was 5 SMEs in Semarang. The data includes transaction data and transaction systems.

2.1.2. Interview Method

In qualitative research, interviews become the main data collection method. According to Ghozali (2016), interviews are conversations with specific intentions, conversations are carried out by two parties, namely interviewers (interviewers) who ask questions and interviewees (interviewees) who provide answers to these questions. Another definition of interview is a conversation between two people, one of which aims to explore and obtain information for a particular purpose. The informants in this study were SME online shops. Interviews were conducted with UKM management in Semarang, in the form of data on the SME system that had been implemented so far, buying, selling and so on.

2.2. Data analysis

The purpose of this study is to reveal events or facts, circumstances, phenomena, variables and circumstances that occur when the study takes place by presenting what actually happened. This study interprets and describes the data concerned with the current situation, attitudes and views that occur in a society, the conflict between two or more circumstances, the relationship between variables that arise, differences between existing facts and their influence on a condition, etc. The captured knowledge method has seven (7) stages. The seven stages are summarized briefly in Figure 1 below:

2.2.1. Check for Unstructured Problems

At this stage, information gathering is needed in relation to the school development strategy, including some views from the parties involved. Information collection is done through various news in online media. News in online media contains a lot of information collected by journalists through the opinions of stakeholders related to schools such as students, parents, teachers, principals, central and local level officials, academic experts or examiners.

2.2.2. State the Problem Situation

Information obtained in the first stage is then expressed in the form of a rich picture or also called the representation of the current situation. A rich picture is an unstructured figure who communicates all things that think about the situation being analyzed.

2.2.3.Build Definitions Related To Problem Situations.

An important part of this stage is to formulate a root definition, is a short sentence to declare "the system to do P by means of Q reaching R". Furthermore, Root definitions are stated in the CATWOE model as shown in Table 1.

2.2.4. Build a Conceptual Model

Based on the root definition above for each element that is defined, then build the conceptual model needed to achieve the ideal goal. This model identifies the results of the system of human activity from the expression of problem situations in a rich picture and presents the relationship between activities. This conceptual model is a process adaptive because there is feedback between the modeling process and the results of the problem situation expression. All elements in CATWOE are included in the conceptual model.

Elemen Element of	Description	
CATWOE	Who benefits from targeted activities?	
Customers	Who implements activities?	
Actors	What must be changed so that the input becomes output?	
Transformation	What is the point of view that makes the system meaningful?	
World-view	Who can stop the activity?	
Owners	What are the obstacles in the system environment?	

Table 1: Elements and Description of CATWOE

2.2.5. Compare the Conceptual Model with the Problem Situation

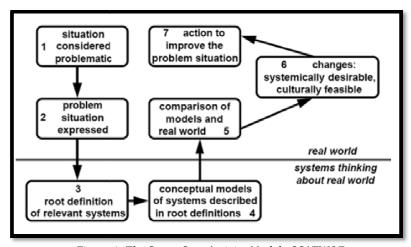


Figure 1: The Seven-Step Activity Model of CATWOE

This stage aims to compare the conceptual model developed in stage 4 with the problem situation stated in stage 2. At this stage each party involved can provide perceptions and assessments of the activities being modeled to determine what must be maintained and reviewed.

2.2.6. Adjust the Changes That Are Appropriate and Desirable

The purpose of this stage is to identify and regulate desired changes systemically and fairly. Changes can occur in the structure, procedures, or attitudes of people. The modified model will be a recommendation model for intervention strategies to improve the situation.

2.2.7. Actions to Correct the Problem Situation.

At this stage, the school development strategy is implemented in concrete actions to produce the desired change.

3. Results and Discussion

Based on the seven stages of Captured Knowledge, the following is an explanation of the results and discussions obtained from each of the stages studied:

3.1. Study of Unstructured Problems

One of the most important problems in promoting SMEs is the quality aspect the products of the parties involved in the promotion of SMEs. Some problems in the quality aspects of the promotion of SMEs obtained from this study are as follows:

3.1.1. Transactions Tend to be Long

Transactions in SMEs still use a manual system so it takes time to process them.

3.1.2. Many Who Lack Faith?

Today's SMEs often commit fraud to buyers, so many people don't trust shopping at SMEs.

3.1.3. Promotion Is Done Less

Promotion by SMEs is still lacking and unattractive.

3.1.4. Promotion is not widespread

Promotion is carried out only by word of mouth and uses social media so that it is less widespread.

3.2. Expressing the Problem

At this stage the researcher expresses or expresses the problems experienced by SMEs, namely:

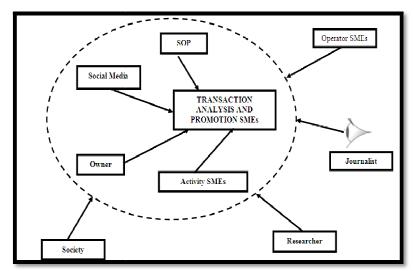


Figure 2: Rich picture

Based on this description, it can be understood the problem map around the issue of promotion in SMEs, starting from public perceptions, and activities that are lacking in the online domain. If various factors that contribute to this are not handled properly, then fraud in the promotion of SMEs will continue to occur. This is the concern of various groups because the promotion of SMEs gets less focus and many parties involved are willing to take various actions, even this situation is getting rooted and systematic.

3.3. Definition of Root Problems

Promotion of SMEs formulates root definitions and describes how attractive and objective SME promotion system models are, then promotion of SMEs CATWOE analysis models

Description	Results Definition	
Society	People make transactions through social media	
Owner	The owner has a business and conducts online transactions	
Transformation: process and change	Formation of a system model with a low level of cheating and	
	without anxiety	
World-view: Impact of system	What is the point of view that makes the system meaningful?	
implementation	 All stakeholders involved have responsibilities 	
Consumer	Someone who conducts online transactions	

Table 2

3.4. Conceptual Model

By referring to the root definition of the problem, a conceptual model compiled about the promotion of SMEs identifies the activities needed in developing a system that can enhance online promotion of SMEs. The conceptual model of promotion of SMEs is the activity of actors and processes in the system (Figure 3). The explanation of this conceptual model can be explained as follows:

- Starting from managing existing knowledge in SMEs through training, communication, transactions, targets for promotion, inventory, evaluation, facilitators, consumers, processes, supporting technology, and promotion.
- Training is carried out by all SMEs and aims to be able to develop following this technological era.
- Communication is carried out by consumers and sellers.
- Transactions for purchasing SME products can be done through ATMs, M-banking, mini markets and credit cards.
- The target is the middle-class community.
- These consumers from SMEs are all people who like to shop using online.
- Supporting technology is the use of gadget, MacBook or computer.
- Media promotions used such as social media (Instagram, Twitter, Facebook, WhatsApp, and many other media).

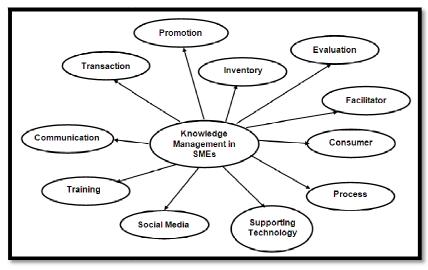


Figure 3. KC UKM Conceptual Model

Based on figure 3. it is known that the management of existing knowledge in SMEs is supported by the process of transactions, communication, training, media promotion, supporting technology, process, consumers, facilitators, evaluation, inventory, and promotion targets.

3.5. Model Comparison

After the conceptual model is obtained, the next step is to compare the conceptual model (system of human activities) with real results that produce recommendations that must be maintained, promotion of SMEs to improve or create new ones. The recommendations presented in the process include the six points shown in detail in Table 3 below:

Activities	Real conditions	Recommendation
Manual transactions become online	SME transactions that were previously	Slowly, Ukm can implement transactions
	manual can be ordered online	through online
Training uses online transactions	Many owners and operators who have	Training should be conducted so that SME
and promotions	been conducting transactions and	owners and operators can implement
	promotions are not online because	promotions through social media and
	they do not have these capabilities	online transactions
Process and make guidelines for UK	The perception is difficult to develop	Eliminate these perceptions and make
owners	for small SMEs	guidelines or help for SME owners to be
		more advanced through online
		transactions and promotions
Quality of sales and increase in	At present, it requires an increase in	For SME owners, they can increase their
turnover	turnover through online promotion	sales or turnover through online
	media	promotional media, for example
		Instagram, WhatsApp, Twitter, Facebook,
		BBM

Table 3: Comparison of the Results of the Conceptual Model and the Promotion Situation of Real SMEs

3.6. Change Planning

The proposed change planning is as follows:

- Owners must promote more often
- Promotion is done through social media

3.7. Corrective Action

Efforts to eliminate the level of fraud in the promotion of SMEs are not simple actions by simply removing the promotion of SMEs. Related things in promoting SMEs have many sources that are interrelated with each other. From the planned changes above, there are two important things that must be done. First, the owner gradually needs to improve SME facilities and infrastructure to provide a promotional process to consumers.

3.8. Difference from Previous Work

This research provides a more holistic and comprehensive approach to the promotion of SMEs through SME Promotion social media, this research does not aim to create knowledge management system initiatives, as well as implementation of the resulting plans. This is only a recommendation to be able to further develop SME promotions through social media.

4. Conclusion

Captured knowledge in SME online shop transactions and promotions is an important thing to do and SME owners and promotional operators must know the exact conditions of the target promotion site, what procedures need to be done when promotion, training and proposed needs of operators or promotional implementers. Promotion of SMEs can be used as knowledge to make improvements, and SME owners can estimate the planned cost of using promotional materials needed to target specific promotions. While the suggestion is that you should shop SMEs online to improve their promotions better and more interesting through social media.

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