

Implementation Of E-Commerce Creating the Competitiveness of Entrepreneurship of Vocational Education Students

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Abstract. This research aims to identify difficulties, explain, analyze, and evaluate the usage of e-commerce to improve the competitiveness of creative and entrepreneurial goods created by students at SMK Negeri 3 Tangerang Selatan City in Banten Province. This research is organized into three major stages: planning, implementation, and assessment. Because the school is an excellent school with experience in Motorcycles and Animation, the study place for the SMK that will be examined is SMK Negeri 3, South Tangerang City, Banten Province. The adoption of e-Commerce activities in the Production Unit of SMKN 3 South Tangerang has been successful in boosting the Production Unit's image. Direct marketing is less successful and efficient than online marketing. Furthermore, because internet marketing does not involve a lot of time, effort, or materials, it is easy to apply. This study demonstrates that using the shopee seller marketplace for e-commerce generates considerable advantages and impacts for the manufacturing unit of SMKN 3 South Tangerang. When the Production Unit uses e-commerce, sales turnover grows quickly, the number of customers increases as a method of marketing, the convenience of transaction eliminates the need to interact directly with buyers, and the business may expand. However, there are significant challenges, such as a lack of human resources, strong rivalry, and concept and product copying growth.

Keywords: e-Commerce, Vocational High School, Entrepreneurship, Production Unit, Indonesia.

1 Introduction

Based on Government Regulation No.29 of 1990, SMK can build a Production Unit that is professionally managed and profit-oriented. Production Units at Vocational High Schools can become a source of cash to support school operational activities by allowing them to make things that can be sold to the public. The critical challenges in its execution are financing and selling the output of the manufacturing unit. Furthermore, Wahjusaputri et al. explain that human resources are obstacles for business actors in managing and developing their businesses due to

a lack of knowledge, motivation, and skills to adopt new technological developments to increase the products' competitiveness from their work. [1]. According to Abed et al. (2015), an e-commerce system is the use of computer networks to conduct business communications and commercial transactions that comprise transaction components (buyers, sellers, commodities, services, and information), topics and objects engaged, and the media employed (in this case the internet) [2]. E-commerce is one of the means to support sales process problems that are still time and service quality limited for students to interact with consumers. Research by Sintha et al. (2021) indicates that a lack of human resources hinders business actors from managing and growing their enterprises, making it more difficult, for example, to adopt new technological advancements to increase the competitiveness of the commodities produced [3]. Additionally, customers won't want to purchase a product straight from the school. Additionally, it is not possible to travel to SMK Negeri 3 Tangerang Selatan Banten Province due to the distance. It is now simpler for students to start their own businesses without having to put any thinking or work into how they will sell their handmade goods. Being too occupied with schoolwork to mentor its kids, the school itself will not have the time to oversee laborious and wasteful manual sales transactions [4].

The particular targets of enforcing e-commerce in growing the competitiveness of entrepreneurial products for college kids at SMK Negeri three South Tangerang, Banten Province are (1) E-Commerce assists the Vocational High School Production Unit in enhancing statistics, merchandise/offersings or bills through smartphone lines, pc networks or different digital method with consumers; (2) E-Commerce is the utility of era toward automation of transactions and paintings waft of Production Units to growth the competitiveness of students' entrepreneurial merchandise [5]; (3) E-Commerce is a device that fulfills the needs of faculties in growing the competitiveness of pupil entrepreneurship merchandise, patron goals and control in lowering provider costs, at the same time as enhancing the first-rate of products and pace of provider; (4) E-Commerce is associated with the capability to shop for and promote merchandise and statistics at the net and different online offerings; and (5) Through the implementation of e-trade, the commercial enterprise earnings of the SMK Production Unit is growing because of an growth withinside the range of consumers [6].

Solving issues with the procural of online sales facilities resembling E-Commerce makes it easier for sellers and consumers to create unlimited sales transactions for 7x24 hours at any time, students as sellers will monitor the sales method. Build it easier for students to understand commercialism methods while not disturbing the educational process at school. E-commerce also helps make sales reports for varsity assignments and know the economy's development. Students manufacturing inventive and entrepreneurial merchandise had to be supervised and available to the school's entrepreneurial production unit directly, so student learning had issues [5]. Therefore, online marketing learning gives students the confidence to be interested in online entrepreneurship by the provision of knowledge and practice of online marketing skills, which are expected to be an excellent opportunity for SMK Negeri 3 Tangerang Selatan Banten Province students to become entrepreneurs by utilizing technology and information systems [7]

2 Methodology

The research was conducted using the Research and Development (R&D) model, which is a research model that aims to produce specific products and test the validity and effectiveness of these products in their application [8]. Creswell (2018) asserts that research and development seek to identify, create, and validate a product. The following research phases are included in the creation of the teaching factory implementation utilizing video instructional models and video-based e-report skill portfolios: (1) gathering information and conducting research; (2) planning; (3) developing a sample product form; and (4) preliminary field testing; (5) primary product revision; (6) main field testing; (7) improvement of field test results; (8) operational field testing; (9) final product revision; and (10) dissemination and implementation. In this study, the ten steps were not used entirely, and this is because this research is limited and not mass-produced (the resulting product is only an example or initial product) [9]. Thus, the research stages are summarized into seven steps, namely:

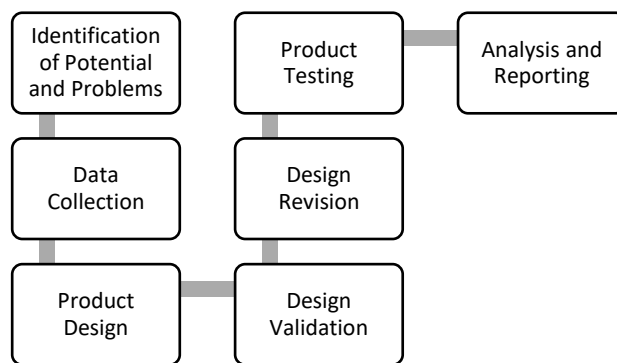


Figure 1. The steps of the research carried out

The research location is SMK Negeri 3, South Tangerang City, Banten Province. Tests of data collection techniques for need assessment were obtained through participation observations or observations and interviews with teaching teachers and several students in class X-XII majoring in culinary, automotive, and animation. After the data collection test is complete, then carry out media validation and student responses using media validation questionnaires and student response questionnaires, then learning outcomes using practical tests [10]. An assessment grid consisting of several indicators was used to analyze media validation data and student responses.

3 Result and Discussion

3.1 Description of Initial Condition of SMKN 3 South Tangerang

SMK Negeri 3 Tangerang Selatan City Banten Province is one of the State Vocational Schools whose school is outstanding and has an advantage (center of excellence) in animation expertise. Location of SMK Negeri 3 South Tangerang City on Jl. Raya Puspipitek, Perum Puri Serpong 1, Kel. Setu, District. Setu, South Tangerang City, Banten Province. SMK Negeri 3 South

Tangerang City is led by Dwi Novy Hardani, S.Pd as Plt. The principal who has served since February 2020, Rohmani Yusuf previously held, M.Pd for 7 (seven) months since the end of the Head of the School position for the 2010 - 2019 period, namely H. Abu Bakar, S.Pd, MM, who is entering his retirement period. Meanwhile, H. Idris, S.Pd is the Acting Officer. The first principal at the time this school was founded.

The vision of SMK Negeri 3 Tangerang Selatan City is "the realization of students who can work according to their fields of expertise (70%), entrepreneurship (20%) and continue to state universities (10%) based on faith and piety".

Initially, SMK Negeri 3 Tangerang Selatan City only opened 2 (two) skill competencies, namely Motorcycle Engineering and Animation, then in 2011, a new competency, namely Office Administration. Currently, SMK Negeri 3 Tangerang Selatan City graduates have entered the 8th batch with more than 2,000 alumni, most of whom work in the relevant business and industrial world and are self-employed. Some of them continue to higher education levels. The concept of learning development at SMK Negeri 3 Tangerang City, Banten Province, is production-based, by imposing manufacturing operations and services that refer to standards and procedures applicable in the industry/business world, carried out in an atmosphere like what happens in the industry, to form work habits according to quality, work flow (effective and efficient work organization), as well as the application of work safety that forms safe work habits

To achieve this vision, several missions carried out by SMK Negeri 3 Tangerang City Banten Province are:

1. Implement learning and guidance effectively by applying a scientific approach accompanied by continuous improvement efforts
2. Carry out work-oriented learning and training
3. Develop an education and training system according to the needs of the business world/industrial world.
4. Train and guide students for entrepreneurship
5. Creating a learning climate rooted in norms, cultural values, religion, and the environment
6. Realizing a clean, orderly, and disciplined culture.

3.2. Data Analysis

This study involved 10 respondents as a sample. The ten respondents are productive teachers of teaching factory learning who have competencies in the fields they are taught, such as catering, automotive, informative, and videography, as well as animation both in the area of trade (goods/products) and those engaged in services (service) with the following details: 80% of respondents are business actors in the field of trade (goods), and the remaining 20% are business actors engaged in services.

The respondent's business specifications in trade suppliers are catering and automotive repair shops for motor vehicles. Meanwhile, respondents' businesses engaged in motor vehicle services, animation, videography and video photo services, website creation services, etc. Judging by the amount of monthly turnover they have, 70% of respondents have a turnover in the range of IDR 5,000,000 - 10,000,000, while 30% of respondents who have a turnover above IDR 20,000,000 have a turnover. The motives of the respondents in the application of e-commerce to their business.

Table 1. Customer Question

No	Question	1	2	3	4	5
1	Getting New Customers	0	0	7	13	45
2	Access global market	0	0	10	35	55
3	Promote products	0	0	25	30	70
4	Brand building	0	0	37	45	60
5	Giving a Positive Image to the Vocational High School Production Unit	0	5	35	40	50
6	Help in competing with other SMK Production Units	0	15	37	45	47
7	Closer to the customer	0	0	35	47	80
8	Helping communication with customers faster	0	0	25	55	65
9	Satisfy customers	0	0	15	65	70
10	Provide service without time limit	0	0	10	43	53
11	Helping business transactions	0	0	15	45	40
12	Getting new industry partners	0	0	12	47	42
13	Facilitate communication with new industry partners	0	5	38	48	38
14	Get a business partner	0	0	28	38	48
15	Get a new distributor or agent	0	0	25	42	45
16	Accessing information from outside parties	0	0	20	35	39
17	Cost savings	0	0	15	38	42
18	Improve internal communication	0	0	20	35	40
19	Assist in the process of fostering students in entrepreneurship	0	0	25	30	38
20	Promotion and marketing cost-efficiency	0	0	15	25	35

Based on the table 1, it can be seen how big the motives of companies or business actors to implement e-commerce. Where the 1–5 scale interval has the following information: 1 = very low expectation of Production Unit, 2 = low expectation of Production Unit, 3 = neutral, 4 = moderate, 5 = very high expectation of Production Unit. Based on table 4, it can be stated that the factors that underlie the Production Units are encouraged to use e-commerce consist of six factors, namely those which are the highest expectations for the Production Units when they want to implement e-commerce, namely:

- 1) Access 55% global market
- 2) Promote 70% products
- 3) Brand building 60%
- 4) Close to 80% of customers
- 5) Helps faster communication with customers 65%
- 6) Satisfy customers 70%

In the use of e-commerce, the Production Unit often faces obstacles. Challenges often face constraints include human resources, licensing, networking, marketing, and costs. Restrictions on human resources and costs have a high percentage of 40%, meaning respondents still have barriers to human resources and costs in implementing e-commerce. This is possible because of the lack of human resources who master technology, especially e-commerce. In addition, the equipment and maintenance required in implementing e-commerce also require very high costs [11] as for problems or network barriers, licensing, and marketing with a percentage of 20%

each. According to several companies, this licensing problem is due to the complicated licensing bureaucracy of the surrounding environment.

3.3 Review of Production Units before implementing e-Commerce

The Production Unit of SMKN 3 South Tangerang concentrates on sales services, including banners, logo design services, and documentation services for formal and casual occasions like weddings and celebrations. Additionally, SMKN 3 includes a facility where auto repairs are done. New sales initiatives, such those at bazaars, school events, or alumni gatherings, are only carried out directly or through the alumni network. The Production Unit of SMKN 3 South Tangerang still relies on word-of-mouth advertising and has not utilized internet marketing strategies like social media or e-commerce. In order to enhance product sales, the manufacturing unit has used a number of strategies, including: (1) offering product price reductions and delivery discounts, (2) employing paid advertising, (3) using their separate social media profiles to promote to students and instructors [12]. The principle and the head of the production unit of SMKN 3 South Tangerang were interviewed for information, and it was discovered that the major issue was the lack of online marketing implementation—in this case, digital marketing. The Production Unit of SMKN 3 South Tangerang faces a number of additional challenges that affect its ability to perform in terms of production and sales, including: (1) Budgetary restrictions and a lack of management team transparency in the business; (2) Limited capital for purchasing materials for manufactured goods; (3) Limited access to delivery services; (4) Poor service quality; and (5) The lack of a fixed production staff, which results in inconsistent production standards.

3.4 Implementation of E-Commerce

1. Entrepreneurship Product Documentation.

Taking pictures or documentation aims to present visually attractive content on e-commerce accounts and make products look more detailed and attractive [13]. Because SMKN 3 South Tangerang's Production Unit is more inclined to sell services, taking pictures or documentation is different from selling ordinary products. For documentation services for formal and informal events such as weddings or gatherings, researchers chose images from videos or photos that had been documented by the Production Unit of SMKN 3 South Tangerang. In addition, the design team also created attractive posters using the Corel Draw application to provide an overview of the sale of these documentation services. Furthermore, logo creation services are not much different from event documentation services. Researchers chose the Production Unit of SMKN 3 South Tangerang logo to be used as an image to be used in the marketplace. Finally, for vehicle repair services, the researchers chose to photograph the Bengkel SMKN 3 South Tangerang and the Production Unit, which were repairing a number of vehicles. This shooting aims to attract consumer confidence regarding the credibility and skills of the production unit of SMKN 3 South Tangerang.

2. Edit photos or documentation and create a Shopee account.

Furthermore, editing or image documentation is carried out to be a good quality catalog [13]. The editing software used is Adobe Photoshop CC 2015. After editing the image, a Shopee SMKN 3 South Tangerang account was created because previously, the Production Unit did not have an e-commerce account. Account creation begins with creating a Shopee Seller account

for SMKN 3 South Tangerang. After the shopee seller account is formed, upload the edited photo or catalog into the system [7]. In addition to uploading photos or catalogs, filling in the required information on the shopee seller account such as a store description, image description, and the main layout form for the Shopee Seller account at SMKN 3 South Tangerang.

The shopee marketplace was chosen because it has the advantage of using an account that can be accessed only by using a cellphone and is very socially oriented. Sellers care about their store's reputation and how to gather customers, so that shoppers have a better shopping experience. There are no commission fees, no registration fees, but sellers can buy paid advertising at their own pace. After the products and information are uploaded, the next step is to register a shopee seller account at SMKN 3 South Tangerang with shopee partners. This is so that SMKN 3 South Tangerang can take advantage of the features provided by Shopee, as well as simplify the marketing and transaction processes.

3. Conducting E-Commerce Implementation Webinars (Shopee).

The final stage of e-commerce deployment is to hold webinars and produce modules on social media and e-commerce [13]. This webinar defines e-commerce and provides a quick overview of Shopee and the capabilities available to Shopee Sellers. Furthermore, the researcher described the method for making the shop more appealing and structured, both in terms of imagery and writing. Due to activity limitations during the COVID-19 epidemic, webinars are done online using Zoom Meetings. Teachers, particularly production unit managers and students from SMKN 3 South Tangerang, attended this webinar.

3.5 Evaluation of the Implementation of e-Commerce in the Production Unit of SMKN 3 South Tangerang

To understand the effectiveness and impact of adopting e-commerce in the Production Unit of SMKN 3 Tangerang in raising sales of their services and goods the researchers issued a questionnaire in the form of a google form to a number of instructors. According to the results of the questionnaires that were given out, SMKN 3 Tangerang's manufacturing unit can enhance sales and make it simpler for the team to market, engage with customers, and communicate with them by using e-commerce. Potential customers can get a better idea of the work and services offered by the production unit with the aid of appealing product photographs. Additionally, complete store location information or store descriptions can make it simpler for customers to visit the SMKN 3 South Tangerang Production Unit. Additionally, by utilizing e-commerce, the Production Unit of SMKN 3 South Tangerang will improve since customers may submit reviews of the goods or services they have purchased or received; if the reviews are positive, the sale of these goods or services will attract more customers.

Because the system can assess products that customers are often looking for and then propose other pertinent products, e-commerce also strengthens the manufacturing unit of SMKN 3 South Tangerang in a competitive position. This is also seen in the growth and diversity of consumers, who include young people, adults, seniors, and even small children. There are occasions, nevertheless, when consumers still struggle to use e-commerce to make purchases because they, among other things, do not fully grasp the application or online shopping. Along with the customer side, manufacturing employees might also cause issues since they still don't completely comprehend the characteristics of Shopee merchants.

The adoption of E-Commerce operations in the Production Unit of SMKN 3 South Tangerang has succeeded in enhancing the Production Unit's reputation, it can be inferred from the above description. In addition to being more successful and efficient than direct marketing, internet marketing is also simpler to adopt because it doesn't take as much time, work, or resources.

4 Conclusion

The use of E-Commerce in an endeavor to enhance teaching factory learning production through the Business Unit of SMK Negeri 3 South Tangerang, Banten, provides several benefits for schools and students. In the business sector, e-commerce makes use of cutting-edge technology such as the internet to expedite commercial transactions. E-commerce is being used by the Production Unit of SMK Negeri 3 Tangsel via the Shopee page. The production unit of SMKN 3 South Tangerang can launch items more rapidly, effectively, and efficiently through the Shopee website, especially amid current covid-19 epidemic. Customers (consumers) can also be quicker in obtaining information, making purchases, or purchasing things. Customers (consumers) can also be quicker in obtaining information, making purchases, or purchasing things. The advantages perceived by both students and instructors in the Production Unit of SMK Negeri 3 Tangsel, Banten. Sales turnover surged dramatically once the Production Unit introduced e-commerce. The number of consumers rose as a result of advertising, simplicity of transaction, the elimination of the need to interact personally with purchasers, and the expansion of the business. In addition to the benefits of implementing e-commerce, the Production Unit of SMK Negeri 3 Tangsel, Banten frequently faces various challenges, including: limited human resources (students and teachers), high expenses, and severe rivalry from SMK products outside of Banten Province. The growth of concept and product plagiarism, telecommunications networks, and fraud and fraud. Many things must be done to build a business, one of them is the implementation of an e-commerce system. E-commerce makes use of cutting-edge technology, such as the internet, to expedite commercial transactions. Business actors may readily connect and correspond using email, chat, and other means. Can use the page to market items through internet advertising, present the firm, and discover new consumers (website).

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