



Use of E-Commerce in Increasing Sales of Small and Medium-Sized Micro Enterprises (MSMEs) Boutiques is Amid Pandemic Covid-19

Mohammad Imam Sufiyanto¹, Shalehodin²
Institut Agama Islam Negeri Madura
bersamabiologi@gmail.com

ABSTRACT

The Covid-19 pandemic struck Indonesia and also the rest of the world, which has a huge impact in the Micro, Small and Medium Enterprises (MSMEs). It is necessary to have a big movement to revive the economic passion in Indonesia, especially MSMEs, one of which is by utilizing e-commerce. E-Commerce is one of the means in the process of buying and selling products produced with a system that includes the use of the web online. Boutique is a fashion store that sells a variety of high-quality and exclusive clothing and accessories, customers can directly view the products being sold, register personal information, make orders, pay for goods. E-Commerce is created using the PHP programming language and MySQL database, using the Web Modeling Language (WebML) methodology. It was obtained that the E-Commerce data presented can increase the value of sales in the covid-19 pandemic with the use of E-Commerce makes it easier for consumers to choose items to be consumed or used without face-to-face or meeting between sellers and buyers. The online process is much more efficient compared to visitors coming directly to the store.

Keywords: “E-Commerce”, “Web Modeling Language (Web ML).”

Received: 20 January 2022

Accepted: 31 May 2022

Publish: June 2022

How to Cite:

Sufiyanto, M.I., *et.al.* (2022). Use of E-Commerce in Increasing Sales of Small and Medium-Sized Micro Enterprises (MSMEs) Boutiques is Amid Pandemic Covid-19, *International Journal of Human Capital Management*, 6(1), 76-86. <https://doi.org/10.21009/IJHCM.06.01.7>

INTRODUCTION

The development of Information Technology (IT) cannot be denied anymore. The field of business, social, IT development provides such great benefits and the community is easier to conduct business transactions and communicate. Information Technology (IT) plays a role in improving the quality of the economy of the community. The pace of IT provides development opportunities in the economic sector and increases social interaction in a more advanced direction through the technology offered and provides opportunities for all parties to be able to share information and knowledge (Daariy, 2021).

The Ministry of Cooperatives and MSMEs that was of has been quoted from the <https://kominfo.go.id/> page reported the growth of several entrepreneurs who initially 1.6% to 3.1% of the existing population-based on BPS data processing. The creation of jobs and the pace of the economy are supported by the population of entrepreneurs because they can see opportunities and create new businesses. Especially in this day and age, in starting a business there are almost no obstacles.

But there is a difference with the present. The International Labour Organization (ILO) surveyed the impact of the Covid-19 pandemic on 571 Micro Small and Medium Enterprises (MSMEs). The survey was conducted on April 6-24, 2020, where the result was that 70% of MSMEs experienced production stops due to Covid-19 (<https://katadata.co.id/berita>). On the other hand, the Minister of Cooperatives and MSMEs stated that the Covid-19 pandemic had a greater impact on the sustainability of MSMEs (<https://bisnis.tempo.co/read>). Furthermore, it was revealed that MSMEs are constrained in terms of cash flow health that requires is laying off workers, constrained by supply and lack of purchases from consumers.

Before the Covid-19 pandemic, boutique sales are usually done conventionally or waiting for customers who come to buy goods sold are still ongoing, supported by the Covid-19 pandemic that requires always being at home, so sales are decreasing so that it requires making an online sales system. The existing cycle in e-commerce includes all components in the trade such as customer service, product services, way of ordering, payment methods, and promotions that apply to certain goods (Pancasasti et al., 2021).

Problems that are often faced by conventional boutique stores in the sale of clothing products include old items that are not sold, the need for the latest information about products that are rather difficult to obtain, the service process in order becomes slower due to the Covid-19 pandemic, less vociferous promotions make sales not maximal (Andriyanto, 2018).

The creation of a sales system on an e-commerce basis is expected to increase sales to the maximum either obtained from ordering directly in the store or ordering online. Facilitates the information that, customers want to know about the type of product, the number of products, product searches. For promotions are carried, out for new goods and also goods that have not been sold by imposing discounts in accordance with boutique management policies (Irawan et al., 2020).

From these problems, support is needed to increase sales and cash inflows. The emergence of the e-commerce market has created vast market opportunities for retailers and logistics service providers, can increase purchasing and sales satisfaction, and can facilitate the ability of logistics service providers to manage larger ones. Although the Covid-19 pandemic is sweeping, internet access can still be utilized. The world of e-commerce is wide open for MSMEs to increase their sales. MSMEs are indirectly forced to change the way their transactions, which were initially offline than in this pandemic period turned online. E-commerce is believed to increase sales of MSMEs (Azizah et al., 2019).

LITERATURE RIVEWEW

a. E-Commerce

E-Commerce is a trading system using the web online, has many definitions embraced by experts, namely:

- a. According to McLeod Pearson (2008: 59) states that electronic commerce or also called E-Commerce is the use of communication networks and computers to conduct business processes. A popular view of e-commerce is the use of the internet and computers with browsers for the purchase and sale of products.
- b. According to Shely Cashman (2007: 83) who states e-commerce or short for electronic commerce which is defined literally as electronic commerce is a business that occurs in electronic networks such as the internet. Anyone who can use and access a computer can make purchases and payments from goods or services they purchase and participate in e-commerce.
- c. According to Joni Wong (2010: 33) states that electronic commerce has the understanding of buying, selling, and marketing goods and services through electronic systems, such as radio, television, and computer networks or the internet.

Based on the statement of the experts it can be concluded that the understanding of E-Commerce is the process of buying and selling transactions conducted over the internet where the website is used as a container to carry out the process.

b. Types of E-Commerce

Based on its characteristics e-commerce can be divided into several types, namely:

- 1) Business to Business (B2B)
This type has the characteristics of trading partners who already know each other and between them have established a relationship that lasts quite a long time. The information you have is exchanged only with the partner. Data exchange is done repeatedly and periodically with a mutually agreed data format. One of the perpetrators did not have to wait for their colleague to send the data. A commonly used model is peer-to-peer where processing intelligence can be distributed across both businesses.
- 2) Business to Customer (B2C)
This type of e-commerce has characteristics that are open to the public, where information is disseminated in general and can be accessed freely. The services used are general so that they can be used by many people, for example: because web-based systems are commonly used. On-demand services, manufacturers must be ready to respond according to consumer demand, often done client-server approach system.
- 3) Customer to Customer (C2C)
This type of e-commerce has the characteristics of selling that can be done directly to other consumers both in the form of products and services. For example: a consumer sells goods and advertised on the web, and purchased by other consumers who participate in accessing them.
- 4) Costumers Business (C2B)
Characteristics the possessed by this type of e-commerce is a business model where consumers create value and companies consume that value. For example: when consumers write reviews, consumers as individuals provide and create value for the company.

c. Benefits of E-Commerce in the Business World

In the world of e-commerce business has a very important role in making transactions such as:

1. Can increase market exposure or market share with online transactions everyone can see and order goods sold globally worldwide.
2. Lower operational costs because transactions conducted online are already programmed in the computer so that costs for showrooms, excessive salary expenses, and others do

not occur.

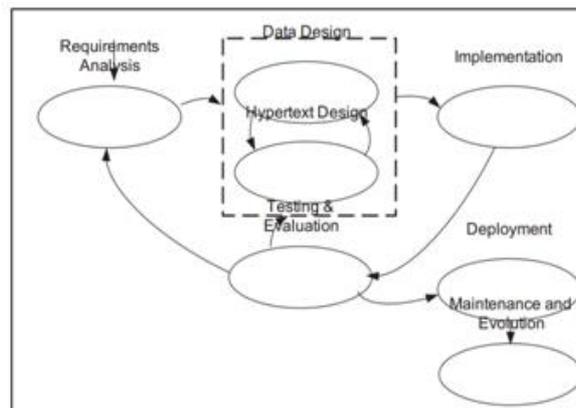
3. Expand the reach to be wider, because access is not limited by place and time, everyone can access it if they have an internet-connected computer.
4. Increase customer loyalty due to the provision of complete information so that purchases can be made at any time and consumers can choose their own desired products.
5. Increasing supply management is seen from the efficiency of the company's operational costs, especially in the number of employees and the number of stock of goods available so that to further improve the efficiency of these costs, a good supply management system must be improved.

In terms of opportunities, e-commerce benefits greatly compared to traditional transactions, offering reduced transaction costs and providing convenience for all consumers. During the Covid-19 pandemic, e-commerce was able to accelerate business development and accelerate operational adjustments (Paryadi, 2018).

d. Web Modeling Language (Web ML)

Web Modeling Language is one way of doing web design which is the third generation built by modeling the web using special symbols. The purpose of using Web ML is to support the design and implementation of so-called data-intensive web applications defined as websites using access as well as maintaining a certain amount of structured data, usually stored as records in database management systems, such as those imposed on Online commerce and e-commerce applications. What is meant by data-intensive is a site that has a large amount of data, interfaces aimed at the general public, oriented to browsing and fascinated, and the content, structure, navigation and presentation are volatile (Firmansyah et al., 2020).

Web ML is used to model conceptual data and propose original notation to express navigation and interface composition features. Visually modeling the scope of a page or site, it is structured to make it easier to implement a new generation of case tools that are able to automate all approaches related to the same sematic modeling of web applications so as to separate the specifications from each site page (Setiawan, 2018).



Picture 1 Development concept Web ML

The specification of the site with Web ML is by describing the content of a website, describing the flow of the data organization conceptually. Web ML still combines with ER modeling, object-oriented modeling, and class diagrams in UML. For calculation depictions, structured models use QOL, which is a query language to be able to provide a more specialized set of information (Cicik Harini dan SB Handayani, 2019).



Picture 2 component unit

Web ML has a basic component unit in the creation of web design, a unit of data describing all information about a single object. By describing the selection of a lot of information, a meaningful site of the concept has been given a structure chart. Data units describe the same components or entities to display alternative views on the web. A data unit requires a component or entity as a pointer unit. The selection that includes data units is described using unit data elements (Tunnufus, Zakiyya, Wulandari, 2019).

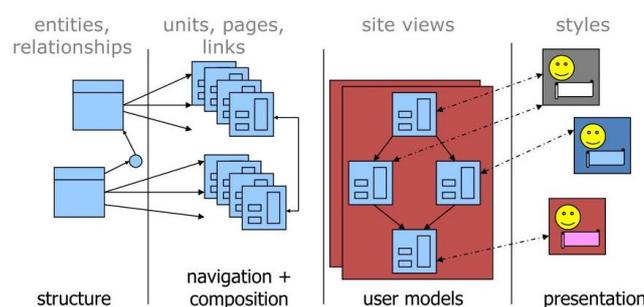
Multi-Data Units describe various events of a component or entity that are in a set of objects, with repetitions pointing several similar units, with specification components for containers used in indicating events referring to entities, relationships, or components. Multi data units are represented by how a component can be described in the same multi-data unit by displaying all attributes.

Index Unit is a description of an index that presents various activities carried out by entities or component lists by tagging each object like a table of contents without displaying detailed information from each object (Yulida Army Nurcahya, 2019).

Scroller Units to provide commands in accessing elements of a system ruled through units of objects in containers. Events that exist in an entity or all objects are connected to other objects through relationships or relationships. Scroller units can be used in conjunction with data units that describe the container elements.

The filter unit provides an input place to search for objects in a container of a set of objects. Used in conjunction with index or multi-data units, to present objects performing search conditions by assigning containers in search attribute elements (Saputra, 2021).

Direct units describe the information of various indexes that contain a single object that connects to another object with a one-to-one relationship.



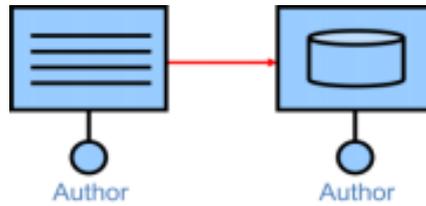
Picture 3 Design Development Web ML

Accessing a website requires navigation to be able to jump to another site page by assigning links depicted in a unit on a single page, between units on different pages, and between pages. Links can run view transfer from one page to another, relaying information from one unit to another, resulting in some additional commands (Rustandi et al., 2020).

Types of Links used in Web ML:

a. *Contextual Link*

This link to connect between two units, i.e. the source and destination units, is usually run through the anchor link or the submit button. This link is used to move users and from one page to another and send information through that move.



Picture 4 Contextual Link

This type of link consists of several types that can be used as needed, namely:

a) *Parameter Link*

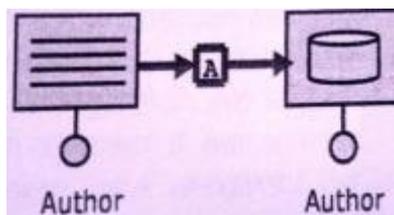
This link is used by listing the parameters that are desired to be sent with this link. Sometimes in some conditions, this link does not include the name of the parameter on the link line so it is also called a normal link.



Picture 5 Parameter Link

b) *Automatic Link*

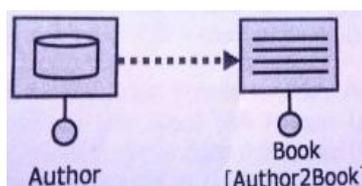
This link is automatically generated along with the original element without user intervention. Users can replace the destination of the link with the anchor.



Picture 6 Automatic Link

c) *Transport Link*

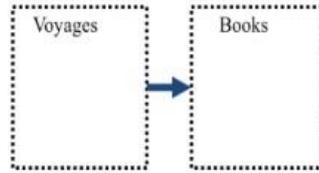
Transport Links are also automatically generated without user intervention. But the user cannot change the purpose of the link. This link is usually depicted with a dotted line.



Picture 7 Transport Link

b. *Non-contextual link*

Transport Links are also automatically generated without user intervention. But the user cannot change the purpose of the link. This link is usually depicted with a dotted line.



Picture 9 Non-Contextual Link

METHODOLOGY

This research is library research that is research conducted by examining literature materials or secondary materials that are following the problems studied. While judging from its nature, this study is descriptive. Where there is a detailed analysis of each problem that contains the subject of discussion. Under the type of literature research, the source of data in this study comes from the literature in the library. The data source is clarified into the primary material in the form of books related to the creative economy, development economy. Secondary material in the form of literature discussed by other thinkers concerned with the discussion of this research. And tertiary materials in the form of materials that provide clues and explanations to primary and secondary materials, for example, dictionaries, knowledge, cumulative index of papers, internet, and so on. So that the latest information is obtained and closely related to the problem, then the literature sought and selected must be relevant (Yulida Army Nurcahya, 2019).

RESULTS AND DISCUSSION

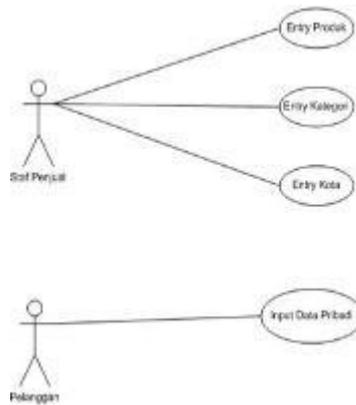
Here are the results of e-commerce along with the resulting output display:

a. Planning

In boutiques for e-commerce, design is made based on the current system that has been done, for the sale of products made by customers is to choose the product to be purchased then submit the product to the sales staff to check the stock, if the stock is there then the sales staff writes a sales note after that gives the purchased product and a sales note to the customer, the customer makes payment by handing it to the sales staff (HELMALIA & AFRINAWATI, 2018).

The sale of goods made with e-commerce has the flow that customers do first is to register, choose the product to be purchased, and then press the finished button. Goods spending transactions can be done if the customer can already log in with the registered account. Customers can choose the desired product and put it in the shopping cart along with the number of products ordered, after which it generates customer data and shipping city-data. When ordering with the system will send a notification of the product order (Sugiarti, Yenny., 2020).

Based on business processes the system runs and is converted into an e-commerce system, it can be described the relationship between actors and the process by using a use case diagram, as seen in Figure 9 below.



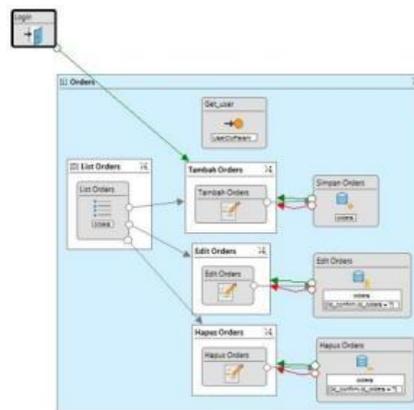
Picture 10 Use Case Relationship between Actor and Process

To design using the web model currently used is the Web Modeling Language (Web ML) seen in figure 6, which describes the relationship between city elements in customers, customers on orders, orders on confirmed customers and order_detail, categories on products, products on order_detail.

b. E-Commerce Design

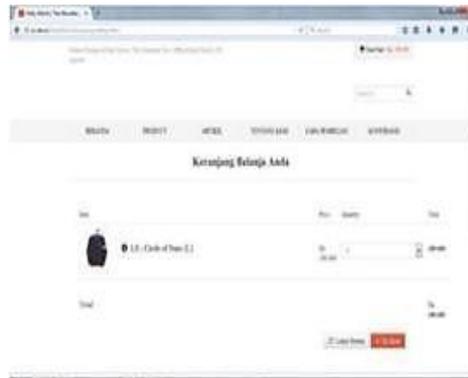
Modeling e-commerce applications use hypertext models and operation models that are one part of Web ML that describes the relationships between the displays used. In Figure 6 Describing the entire page of this e-commerce web, it is seen that there is a relationship on each page of the site.

The process of ordering the product by the way the for customer, chooses the desired product and puts it in the shopping cart along with the number of products ordered, after which login or register a new account then checkout, input customer data, and the delivery city. When placing a successful order then the system will provide a product order notification. For depictions with Web ML as seen in Figure 11 Here:



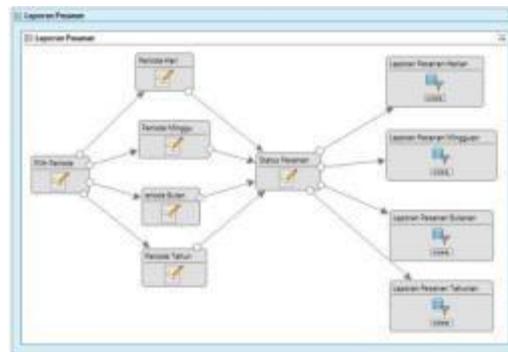
Picture 11 Product Ordering Process

E-Commerce view has a menu consisting of Home, Product, Article, About Us, How to Buy and Confirm, on the page if you have completed the selection of products then selected the cashier button that is red as seen in The Picture. 12 below:



Picture 12 Transaction View

Creation of a booking report based on a specific period based on the status of the booking so that the required reports can be described with Web ML as seen in Figure 13



Picture 13 Booking Report Creation

In its implementation, a report is needed that can provide information about all transactions made online. In e-commerce for order, reporting accessed five fields namely Id Orders, Customer Name, Order Number, Order Date, and Total, so that management can evaluate it.



Picture 14 Order Report View

The selection of the five fields with the consideration, that the resulting report can provide accurate data about online sales activities.

CONCLUSION

E-Commerce has not fully covered all elements, such as shipping that cannot be listed because it involves third parties. For further research, it is recommended that you can build E-Commerce from the creation of customer logins, orders, payments, notifications, reports to the condition of goods delivered can be informed to customers, to provide complete service. And can provide reviews of goods that have been received as input to sellers who use E-Commerce, so that customer loyalty can continue to be maintained.

REFERENCE

- Andriyanto, I. (2018). Penguatan Daya Saing Usaha Mikro Kecil Menengah Melalui E-Commerce. *Opinion*, 6(2), 87–100.
- Alika, Risky. (2020). "Survei ILO: 70% UMKM di Indonesia Setop Produksi Akibat Covid-19", Accessed June 12, 2021. <https://katadata.co.id>
- Azizah, N., Mahendra, D., & Lofian, B. (2019). Pemanfaatan E-Commerce untuk Peningkatan Strategi Promosi dan Penjualan UMKM Tas di Kabupaten Kudus. *E-Dimas: Jurnal Pengabdian Kepada Masyarakat*, 10(1), 96. <https://doi.org/10.26877/e-dimas.v10i1.3555>
- Cicik Harini dan SB Handayani. (2019). Pemasaran Kewirausahaan Melalui E-Commerce Untuk Meningkatkan Kinerja Umkm. *Derivatif Jurnal Manajemen*, 3(2252), 58–66.
- Cahyani, Dewi Rina. (2020). *47 Persen UMKM Bangkrut Akibat Pandemi Corona*. Accessed June 12, 2021. <https://bisnis.tempo.co/read>
- Ceri S. (2012). "Kaufman M." Designing Data-Intensive Web Applications. Accessed June 11, 2021 <http://www.webml.org/webml>
- Daariy, A. (2021). *How Home-Based Teleworking During Covid-19 Pandemic Affects Employee ' S Stress and Job Performance*. 5(2), 1–10.
- Firmansyah, K., Fadhli, K., Novianady, I. A., & Rini, S. (2020). Pengenalan Media Sosial dan E-Commerce sebagai Media Pemasaran serta Pengemasan Frozen Food. *Jumat Ekonomi: Jurnal Pengabdian Masyarakat*, 1(1), 43–48.
- Gata, Grace, et Al. (2015). Penggunaan E-Commerce Dalam Meningkatkan Penjualan Usaha Ritel Distro. *Jurnal Teknik Informatika*, Vol. 8 No. 2, pp.1-7
- HELMALIA, H., & AFRINAWATI, A. (2018). Pengaruh E-Commerce Terhadap Peningkatan Pendapatan Usaha Mikro Kecil Dan Menengah Di Kota Padang. *JEBI (Jurnal Ekonomi Dan Bisnis Islam)*, 3(2), 237. <https://doi.org/10.15548/jebi.v3i2.182>
- Irawan, P. L. T., Kestrilia Rega Prilianti, & Melany. (2020). Pemberdayaan Usaha Kecil Menengah (UKM) Melalui Implementasi E-Commerce di Kelurahan Tlogomas. *Jurnal SOLMA*, 9(1), 33–44. <https://doi.org/10.29405/solma.v9i1.4347>
- Kementerian Koperasi dan UMKM. (2020). Transformasi Koperasi Indonesia Accessed June 12, 2021 <https://kominfo.go.id/>
- Mc Leod, Pearson. (2008). *Sistem Informasi Manajemen*. Jakarta: Salemba.
- Milano. (2013) Poltecnico in The Web Modeling Language. Accessed June 12, 2021 <http://webml.org>.
- Nugroho, Adi. (2014). *E-Commerce Memahami Perdagangan Modern di Dunia Maya*. Bandung: Informatika.
- Pancasasti, R., Arthawati, S. N., & Mulyani, A. S. (2021). *Analysis of Policy Models in Improving Effectiveness of HR Leadership for Educators at Senior High Schools in Banten Province*. 5(2), 32–43.
- Paryadi, D. (2018). Pengawasan E Commerce Dalam Undang-Undang Perdagangan Dan Undang-Undang Perlindungan Konsumen. *Jurnal Hukum & Pembangunan*, 48(3), 652. <https://doi.org/10.21143/jhp.vol48.no3.1750>
- Rustandi, A. A., Harniati, & Kusnadi, D. (2020). Jurnal Inovasi Penelitian. *Jurnal Inovasi*

Penelitian, 1(3), 599–597.

- Saputra, P. D. (2021). *Pemanfaatan E-Commerce Business to Consumer (B2C) Marketplace Untuk Pengembangan Usaha Mikro, Kecil, dan Menengah (UMKM)* (p. 453).
- Setiawan, B. (2018). Edukasi E-Commerce Pada Pelaku Usaha Mikro, Kecil Dan Menengah (Umkm) Di Kota Palembang. *Jurnal Abdimas Mandiri, 2(2), 106–110.*
<https://doi.org/10.36982/jam.v2i2.531>
- Sugiarti, Yenny., U. S. (2020). Pengaruh E-Commerce Terhadap Keputusan Pembelian Pada Belanja Online Shopee. *Jurnal Pengabdian Kepada Masyarakat, Vol. 3, 298–309.*
- Tunnufus, Zakiyya, Wulandari, A. (2019). Pengaruh Harga Dan Jenis Media Promosi Terhadap Keputusan Pembelian Online Pada E-Commerce Shopee Di Kabupaten Lebak. *The Asia Pacific; Journal of Management Studies, 6(1), 29–40.*
- Wong, Jony. (2010). *Internet Marketer for Beginner*. Jakarta: PT. Elex Media Komputindo.
- Yulida Army Nurcahya, R. P. D. (2019). ANALISIS PENGARUH PERKEMBANGAN FINTECH DAN E-COMMERCE TERHADAP PEREKONOMIAN MASYARAKAT. *JAB, 4(1), 245–247.*