The Influence Of E-Commerce On The Function Of Space And The Environment In The Home Industry Area (Case Study: Home industry in Rw.03, Kel. Cibaduyut, Bandung City)

Saldi Yulistian¹, Pol Metra²
Fakultas Sains dan Teknologi
Universitas Islam Negeri Sultan Thaha Saifuddin Jambi
saldiyulistian@uinjambi.ac.id¹, Polmetra@uinjambi.ac.id²

Abstract
Digital information technology is developing quite rapidly in Indonesia, opening up new opportunities as well as challenges in various fields of daily life, because in this era the development of digital information technology touches various aspects of life. One aspect is the cottage industry sector. The use of digital information technology in the home industry can facilitate buying and selling activities and promotions in E-Commerce stalls without having to meet face-to-face between sellers and buyers. For most business actors, production, distribution, selling, and promotion activities are carried out in the same place, namely at a home/production workshops. Activities carried out in the same place cause changes in the space and environment for both the business actors themselves and the surrounding environment. In addition, these activities will also affect socio-economic changes and changes in the spatial environment, considering that the location of this research is in a densely populated village with almost no distance between houses. The research is located in Rw. 03 Cibaduyut sub-district, Bandung City with the majority of respondents having leather-based handicraft businesses such as; shoes and sandals. This study uses a qualitative approach through direct observation, interviews, and surveys. The results of the study reveal the effect of E-Commerce on space and the environment in the cottage industry area. So that this research can be used to see the behavior of the community and the needs of industry players in structuring a dense village environment.
Introduction

The utilization of internet technology today is not only a medium of modern information and communication, but also a necessity that is used for various activities including business and trade activities. The impact of existence of internet media provides convenience in the communication process and the speed of information traffic without knowing the boundaries of space and time. The rapid development of the internet has brought about very basic changes in the order of human life. This can be reflected in the increase in activities to fulfill various needs through an internet-based trading system or e-commerce. The attractions offered by the online shopping experience for consumers include the ease of ordering, the ease of communicating with the seller, the ease of canceling an order, the ease of payment, the speed of delivery, and other supporting factors for customer service (Schmitt, 2010).

The use of the internet, especially as a medium for trading and buying and selling, both at the business-to-business or business-to-customer level, is currently one of the needs of every business actor. Digital marketing is no longer an obstacle for marketers to market goods and services by utilizing an internet connection (Dahiya & Gaytri, 2017).

Since the rapid development of the internet, especially since entering the era of the industrial revolution 4.0, many conventional entrepreneurs or shops that still use conventional systems have gone out of business because they are unable to compete with entrepreneurs who have utilized digital information technology (e-commerce). Entrepreneurs who still use conventional systems still rely on customers who are in the city, while the e-commerce system is not only in the city but also outside the city and even abroad.

The use of the internet in running a business also affects the behavior and activities that support buying and selling transactions. Buyers don’t have to come to the location to make transactions, just make transactions online by looking at samples of goods and just ordering the desired goods. Not only that for business actors, it also provides its own benefits, they no longer need to stock up too many items in advance so they don’t need a large enough warehouse, now they just need to make to order. This also has an impact on the home and environment of the
home industry entrepreneur, considering that the research location itself is in a densely populated residential area. The house and the environment in the research location are very small, both in terms of road infrastructure, the environment, and the boundaries between houses, but the house and the environment must still be required to facilitate these activities because they are the only livelihoods of the residents there. This change in activity has implications for changes in the socio-economic structure and characteristics of the building as well as its space and environment.

The purpose of the study was to determine the socio-economic, spatial, and environmental changes of home industry entrepreneurs based on a marketing system that uses both online and offline systems in the home industry area of RW.03, Cibaduyut urban village, Bandung. So that this research can be used to see the behavior of the community and the needs of industry players in structuring a dense village environment.

Literatur Review

E-commerce

E-commerce is the process of buying, selling, or exchanging goods, services, and information through computer networks including the Internet. According to Kalakota and Whinston (1997), the term e-commerce can be viewed from four different perspectives, namely (Turban, E., & King, D., 2002):

1. From a communication perspective, e-commerce is the provision of goods, services, information, or payments through computer networks or other electronic devices.
2. When viewed from the perspective of business processes, e-commerce is the application of technology to automated business transactions and the steps in carrying out work (workflow).
3. When viewed from a service perspective, e-commerce is a tool that can meet the needs of companies, consumers, and management with the aim of minimizing service costs, improving service quality to consumers, and increasing the speed of customer service.
4. From an online perspective, e-commerce will enable the process of buying and selling products and information through the Internet and other online services.

**Home Industry**

The home industry is included in the Home Based Business (UBR). According to Home Based Enterprises (HBE) (2002), the characteristics of HBE are:

1. Size and workspace; a large number of dwellings do not allocate HBE activities to separate spaces,
2. The frequency and distribution of each type of HBE has its own market conditions, requires the provision of resources, and blends in competitive conditions,
3. The profitability of income from HBE is supported by other incomes,
4. Working conditions; work is done alone because they do not have official workers,
5. Workers or perpetrators; in HBE tends to depend on the presence or absence of additional workers and are free in calculating the number of workers

Lipton in Tutuko (2004) mentions several characteristics of UBR, among others:

1. The family controls most of the capital, and involves the workers;
2. Most of the land, capital and labor owned by the family are involved; and
3. Most of UBR’s work is done by families.
Research methods

Method of collecting data

The research method used in this research is qualitative. According to Moleong (2011: 6) qualitative research is research that intends to understand the phenomena of what is experienced by research subjects such as actors, perceptions, motivations, actions, and others holistically and using of descriptions in the form of words and language, in a specific natural context and by utilizing various natural methods. This method is used to obtain sample data for cottage industries that have used e-commerce and those that are still using conventional systems. The collected data will then be analyzed and concluded to reveal changes in the function of space and the environment that occur in the house and environment in the sample.

Data were collected using survey, observation, and interview methods. Interviews were conducted with home industry business owners who were used as research samples. This research was conducted in Rw. 03 Cibaduyut Village, Bandung City, where this location is a densely populated area and has become one of the educational tourist destinations in the city of Bandung.

10 home industries are that are used as research objects. All samples are in the same environment, namely in Rw.03, Cibaduyut Village, Bandung City. Of the 10 samples, 7 of them have used e-commerce in running their business and 3 others are still using conventional systems in marketing their products.

The results of observations and surveys are in the form of comparisons of home industries after using an e-commerce marketing system using a conventional system. Interviews with respondents will
complete the data on changes in the function of space and the environment that have occurred. Research respondents are home industry entrepreneurs who are craftsmen as well as the main producers who store their products in the same place.

Data analysis method

Data analysis was carried out in this study by grouping and comparing the two types of business actors. Business actors are divided into 2, namely business actors who are already using e-commerce and business actors who are still using conventional systems. The data obtained is in the form of room conditions before and after the owner runs an e-commerce business. Furthermore, the data obtained is also the condition of the house that is still using the conventional system, from the data obtained, is then grouped based on the type of marketing carried out to find out the differences in the typology of houses/workshops between e-commerce and conventional systems. Then after comparing the two types of marketing, it was found that there were significant differences between the two types. The data will be presented in a descriptive way to explain in more detail.

Results and Discussion

Overview of Research Sites

The object of this research is Rw.03 Cibaduyut Village, Bojongloa Kidul District, Bandung City. The location is in a densely populated village, the majority of which are leather-based shoe and sandal craftsmen. This craft activity is carried out at home or what is often referred to as a home industry or home-based business. According to the respondents met, this cottage industry in rw.03 has existed since 50 years ago. At this time most craftsmen are the second generation of this craft business
Based on the data collected, there are around 50 craftsmen based in home industries in this area. For the object of this research, 10 craftsmen or home industry-based business owners were taken. The business activities carried out are selling various types of leather-based handicrafts. Respondents run this business either online or conventionally. The following is the respondent's data which is used as the object of research in Rw.03, Cibaduyut Village (table 1).

**Table 1. Respondent Data**

<table>
<thead>
<tr>
<th>No</th>
<th>Nama Pemilik</th>
<th>Jenis Usaha</th>
<th>Mulai bisnis (tahun)</th>
<th>Konvensional</th>
<th>online</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Ayi Kaswara</td>
<td>Sepatu, sandal</td>
<td>1997</td>
<td>2013</td>
<td>-</td>
</tr>
<tr>
<td>2</td>
<td>Iwan</td>
<td>Sandal</td>
<td>2000</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Yan Sofyan</td>
<td>Sepatu</td>
<td>1987</td>
<td></td>
<td>2014</td>
</tr>
<tr>
<td>4</td>
<td>Udin Samsudin</td>
<td>Dus Sepatu</td>
<td>1985</td>
<td></td>
<td>-</td>
</tr>
</tbody>
</table>
In the table above, it can be seen that the business systems carried out in rw.03 are conventional and online. Almost the average use of the internet started from 2011 until now, but business people do not necessarily leave the conventional system in running their business even though the percentage is not as much as when they started using the online system in marketing. Almost the average home industry players in rw.03 do not have a shop or permanent retail on Jalan Cibaduyut, but only market from the house where they live.

Changes in the marketing system of production results also have an impact on changes in activities that occur because when they are still using the conventional system, industry players must stock up on enough goods first so that they require a large enough capital, then they are sold conventionally, either sold to shops or sold to buyers directly who came to the house. However, since switching to an online system, industry players simply take advantage of online business platforms and online media such as Facebook, Instagram, or Twitter. Internet users make home industry players no longer need to stock up on too many items, but only make according to orders and goods that have been completed no later than 2 days, sometimes even as soon as the goods are finished, they are sent
directly via expedition services or online transportation if they are still in the city of Bandung.

The following is a pattern of transactions in detail:

![Diagram of transaction pattern difference]

**Chart 1. Transaction Pattern Difference**

(Sumber: Analisa Pribadi.2019)

conventional and online:

In the chart above, it can be seen how significant the differences are between conventional and online systems. The conventional system starts with the production of goods which will then be accommodated in the warehouse for at least one week, even according to respondents who have been found stocking goods for up to a month until there is an agreement on when the goods will be sent. Unlike the online system, which only makes models of various types of shoes and sandals. There are not too many craftsmen, enough to store models of goods on the shelves in the house or in storage boxes. Then it is documented and promoted over the internet. A significant difference is also found in the transaction, if the conventional system of transactions is carried out at the end but the online system is carried out at the beginning, it also helps home industry craftsmen so that the capital issued is quickly recovered.
Space Utilization

Since using internet media, industry players do not need a large warehouse to stock goods, just small enough as a temporary shelter before the goods are sent to buyers. The room that used to be just a warehouse is now used as a packing room for goods to be sent to buyers.

Considering the location of rw.03 is a densely populated residential area and almost the average house here is quite small for cottage industry activities. Most of them are 1-story houses, if found 2 floors according to respondents, it is a new renovation due to meet the need for a craft production place. Of all the respondents found that the workshop/production room was placed in the front room whose function was originally a living room and there were even some houses that did not have a living room due to the shift in function as a production room.

Online and Conventional Systems

Home industries that use the internet in their marketing are now becoming more organized both in business, production, and social environment.

![Image](source: Personal Documentation.2019)

Figure. 2 Environment and industry

Before using e-commerce, home industry craftsmen used terraces to produce their crafts. Given the location is on a narrow neighborhood road activities carried out outside the home more or less affect the social activities of the community's environment.
According to 7 respondents who have used the online system, since switching to the online system, craftsmen use the space in the house for craft production, both stocking, and packing. Previously, the inner room could only be used as a place to stock things.

Even though the stock of goods is not as much as it used to be, the craftsmen feel comfortable with the online system they live because they are benefited in terms of marketing. Since switching to an online system there has been no change in the space, only a change in the function of the room. Figure 3, illustrates the atmosphere of the inner room which contains goods that are ready to be packaged to be sent to consumers. In addition to using the online marketing system, craftsmen still use the conventional system for customers who are in the city of Bandung.

Almost the average craftsmen here do not have a shop, they sell their handicrafts to online shops or shops located in the city of Bandung or outside the city of Bandung. But craftsmen also serve private consumers who want to order directly from craftsmen.

**Conventional System**

As for craftsmen who have not used the internet media, they still have difficulty in developing their business, because it is difficult to compete with others. Craftsmen who still use conventional systems only rely on their regular customer network, which is still around the city of Bandung.

Although stocking goods is not as much as before, conventional marketing is still very dependent on the existence of the warehouse at
home. As seen in the picture below, craftsmen who still use conventional systems are still stocking goods, therefore craftsmen need more space.

![Figure 4. Goods Stocking Process and Goods Warehouse](source)

**Figure 4. Goods Stocking Process and Goods Warehouse**
Source: Personal Documentation (2019)

**Waste Handling**

The handling of waste produced from this home industry is very well structured, industrial business actors simply place a trash can in front of the house and there will be an officer to transport it. Then it will be paid for every single transportation. According to respondents who have used the online system they produce not too much waste but quite often

![Figure 5. Goods Stocking Process and Goods Warehouse](source)

**Figure 5. Goods Stocking Process and Goods Warehouse**
Source: Personal Documentation (2019)

Garbage accumulation occurs only when there is an order. But those who still use the conventional system that has to stock up on goods first, produce quite a lot of waste but on a scale that is not very frequent.
Conclusion

as well as influencing the development trend of home industry businesses. The development of online-based business trends can be seen from the high interest in buying people through e-commerce because it is more effective and efficient. In addition, the use of online systems also does not require large capital for business development.

Based on the reviews and analysis above, the influence of e-commerce on the function of space and the environment is as follows:

1. Changes in the function of space and environment
   Home industry players use the front room or living room as a place of production as well as a place of business. By not stocking a lot of goods, the space that used to be cramped becomes more spacious and can be converted into a packing area which will then be sent to consumers via courier services. There is no longer any use of the terrace for production activities, currently, the terrace of the house only functions as a motorbike parking area. the environment looks cleaner without being disturbed by production activities.

2. Socio-economic changes
   Business actors feel helped by the online system. In addition to the costs incurred according to the plan, the marketing system has also become more effective and efficient. The stocking of goods is planned according to order. The market network is becoming wider Which affects productivity. If orders are in large quantities, business actors usually take advantage of their neighbors as workers with a salary system for work, this has an impact on the economy of the surrounding neighbors.

Reference


https://kemenperin.go.id/artikel/1283/Mendag:-Industri-Sepatu-Cibaduyut-Miliki-Potensi-Internasional / diakses 10 Agustus 2019
