Mapping the implementation of IT-based intervention model to increase SMEs marketing performance: Case study at Handicraft industry in Bantul Yogyakarta, Indonesia

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ABSTRACT

This study used descriptive approach by using the qualitative method as the data analysis technique and also supported with quantitative analysis. This research implemented the interactive method which consists: data reduction, data collection, data presentation, and the conclusion that can be made at the time before and during the data collection to find out the models of existing IT-based interventions for Small Medium Enterprises (SMEs) in Bantul, Yogyakarta which has been done by stakeholders of the SMEs institutions to encourage the development of IT for SMEs themselves. The discussions in this research are: a) What kind of intervention of IT which has been conducted by the stakeholders of SMEs institution. b) How effective the activities were? c) What are the positive impacts and what obstacles are encountered when applying the internet as marketing medium. d) What kind of internet models are used. All of business actors of craft industry in Bantul become the respondent by guided interview and the industry which will be analyzed are pottery craft, weaving craft, handicraft, handicraft and leather crafts. The result showed that: 1) Still about 40% SMEs using internet or IT technology to their business and the remaining about 60% are still believe on their traditional business manner, 2) The interventions are conducted by the local government, scholar and some of private company. 3) Increased marketing performance occurred by the SMEs that applying internet as their marketing medium.

Keywords: IT based, intervention, Small Medium Enterprises, marketing performance

1. BACKGROUND

The impact of the massive development of the Internet provides significant changes to human life, especially for entrepreneurs of Small and Medium Enterprises (SMEs), which are initially, run their business in a way traditional marketing then after the internet then they switch on digital marketing. The significance of traditional marketing itself defined as business activities are performed without the use of internet media or internet help to get customers, promotion and establish communication.

The importance of the impact of the Internet for SMEs is absolute, because the functions and benefits of the Internet strongly support the development of SMEs. The advantages and benefits of the internet are as follows:

1. Makes it easy for SMEs to transact online with the customer outside the city.
2. Makes it easy for businesses to market their products via the website or social media.
3. The marketing potential of the Internet offers a very wide range.
4. Business owners can conduct a campaign in a way that is easy and cheap to use the Internet than in the traditional way.

By looking at these four points advantage of the Internet, the internet presence for SMEs is essential to support the development of SMEs itself. Especially, after we know the facts that SMEs are one of the strengths for the economy of Indonesia.

Interesting phenomenon occurred in 1998, with the significant role of SMEs in providing outstanding contributions to Indonesia in an effort to revolt from the downturn after the economic crisis struck the world that also hit many countries in Southeast Asia. At that time there were 96% of SMEs survive while large companies failed. During the period of 1997-2006, the number of SMEs reached 99% of overall business unit in Indonesia. SMEs contribution to Gross Domestic Product (GDP).
Product (GDP) reached 54% -57%, and the contribution of SMEs to employment were about 96%. Based on the source of Central Statistics Agency (BPS) the growth occurred at 7.06% as it compared with large businesses which only 0.91%, the facts prove that the role of SMEs for the Indonesian economy is enormous. Currently there are major challenges ahead, with the approval of the blueprint for the ASEAN Economic Community (AEC) which is planned to take place in late 2015, will be a serious challenge for SMEs in Indonesia, because the existing SMEs will compete not only with the local SMEs alone but also businessmen from various ASEAN countries will become a new competitor.

Because the role of SMEs to the national economy is crucial, therefore, for this competition will give special emphasis to SMEs that can affect the future development of SMEs, local SMEs would be able to survive or even marginalized, then the answer lies in the efforts of SMEs themselves to improve quality and competitiveness of their products. Therefore, to provide support to SMEs in Indonesia, so it would requires the support of various parties, both from the government, academia and other institutions.

For example in Yogyakarta, according to data from the Department of Industry, Cooperatives and SMEs of Bantul (BPS), there are 1150 number of creative craft industry in Bantul, which consists of a bamboo craft, wood, handicraft/handicraft and leather crafts, and after the mini-research noted only 40% of the total industry that is already using internet-based technology and the remaining 60% still using the traditional ways of running their business, these facts indicate that the slackness of the internet is still dominant, and it is a condition that is not good for the development of SMEs themselves.

There are some significant points that should be improved according to the Ministry of Cooperatives and Small and Medium Enterprises of Republic of Indonesia in the face of the AEC 2015, one of the points that is, strengthening and improving access and transfer of technology for SMEs for the development of innovative SMEs. The point suggests, that the role of technology for SMEs is essential to face the competition, but if we refer to the reality that happened in Yogyakarta which is still very poor use of internet, it seems Indonesia is not quite ready to compete internationally including the event of AEC 2015.

Therefore, this study was to find out the models of existing IT-based interventions for SMEs in Yogyakarta. What has been done outside of the SME institutions to encourage the development of IT for SMEs themselves. In this study the authors also would take one example of craft or SME that has applied the Internet for their business, so it is known the effectiveness of their efforts before using the Internet and after using the Internet, and in the end the results of this study can contribute for SMEs to face international challenge.

2. PROBLEM
a) What kind of intervention of IT which has been conducted by the outside SMEs institution.
b) How effective the intervention was?
c) What are the positive impacts and what obstacles are encountered when applying the Internet as marketing medium?
d) What kind of Internet models is used?

3. LITERATURE REVIEW
3.1 Marketing dynamics (Kotler, 2013)
"Marketing operates in a global environment that is dynamic, every decade requires for marketing managers to refresh the objectivity and their marketing practices"

In addition, consumers today have evolved in terms of sensitivity of products, prices and quality products. This is because consumers have become smart with the presence of internet technology in their midst (Kotler, 2000).[1]

3.2 Effectiveness theory (Zulkaidi/ Sukmaniar, 2007)
Effectiveness can be used as an evaluation tool to determine whether an action is effective or not (Zulkaidi in Sukmaniar, 2007) [2] and indicators of effectiveness can be seen from:
- The ability to solve problems, it can be seen from a variety of problems faced before and after the action is carried out and how much ability to overcome them.
- The achievement of the goals, it can be seen from the results in field directly.

3.3 Internet Marketing E-Cycle (Awad EM, 2004)
Internet marketing has a life cycle that begins with the planning (business plan), and followed by four Ps (marketing mix): product, price, promotion, place (distribution or delivery).
3.4 Internet marketing

Understanding the Internet itself by an international E-Commerce consultant Anita Rosen is: "The internet is a global network made up of smaller networks, linking millions of computers worldwide through the telecommunications infrastructure" [Miles, 2004][3]

Some internet marketing meaning according to the experts is: "Marketing is the management process responsible for identifying, anticipating and satisfying customer requirements profitably." So, Internet Marketing must mean identifying, anticipating and satisfying customer requirements via the Internet. Internet marketing or internet-based marketing can be defined as the use of the Internet and related digital technologies to obtain marketing objective / marketing purposes, and to support the concept of modern marketing (Chaffey, Mayer, Johnston & Chadwick, 2003).[4]

4. RESEARCH MODEL

5. RESEARCH METHODS

The method used is descriptive method, descriptive method is a method in researching the status of a group of people, an object, and a set of conditions, a system of thought or a class of events in the present. The purpose of descriptive research itself is to create a description, illustration or conception in systematic, factual and accurate information on the facts, and the relationship between the phenomena that be investigated (Nazir, 1988)[5]

5.1 Research Design
This research uses descriptive method that is supported by quantitative analysis, descriptive approach intended to obtain detailed descriptions of reality and existing empirical facts (Warsito, 2012).[6] Other sources also stated: "Descriptive studies are also undertaken to understand the characteristics of organizations that follow certain common practice" (Sekaran, 2009).[7]

5.2 Sampling Technique
According to the source, the target population itself is clarified in accordance with the elements, geographical boundaries and time. Populations also have to be adapted to the objectivity of research and study the scope of the study. Then the populations of this study are craftsmen in Bantul Yogyakarta, Indonesia. The researchers have classified the object that will be observed are: pottery craft, weaving craft, wooden craft, leather crafts and handicraft.

5.3 Respondent

In this study the authors used a non-probability sampling method with purposive sampling to obtain the data, which is adapted to the conditions of the research object itself, which consists of several craft by utilizing only the respondents who have classified information that can be taken to obtain the data, they include: community organizer, community members, business owners, and craftsmen.

5.4 Type of Data
a. Primary data in this study obtained from the interview.
b. Secondary data in this study can be from books, journals and notes.

5.5 Data Collection Technique
a. Interview
   • Structured (guided)
   • unstructured: Observation

5.6 Process and Data Analysis
Data analysis techniques used in this research is to use descriptive analysis, in which the results of this study are not indicated by the numbers. This technique is done with an interactive method comprising data reduction, data collection, data presentation, and the conclusion that can be made at the time before and during data collection. The model of interaction can be seen in the following scheme

![Interactive Model of Analysis](source:Miles and Huberman (1992))

6. DISCUSSION
In this research, internet marketing effectiveness will be measured by looking at the results of the activity before and after the use of the internet in each group who are members of the community-based handicraft industry.

To measure the effectiveness can be seen from some of the indicators in the form of:
1) The increase in sales before and after the use of internet facilities;
2) Increasing the number of customers or new customers;
3) Effectiveness in the promotion;
4) The easiness for establishing and maintaining communication to customers.

A. An increase in sales

**Paired T-Test for sales activity**

<table>
<thead>
<tr>
<th>Paired Samples Statistics</th>
<th>Mean</th>
<th>N</th>
<th>Std Deviation</th>
<th>Std Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pair</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Soborum</td>
<td>3851.767</td>
<td>43</td>
<td>3403680.367</td>
<td>519584.4</td>
</tr>
<tr>
<td>Sevusdim</td>
<td>6821558</td>
<td>43</td>
<td>19055 4</td>
<td>1491202</td>
</tr>
</tbody>
</table>

Description: those are a pairs of variables that have been analyzed, before using internet sales and after using the internet, which includes the average (mean)

- before using the Internet 3,851.767 with Standard Deviation 3403680.367 and
- after the use of the internet known average total sales of 6,831.558 with Standard Deviation 190554

-If the count statistics > statistics table, then Ho is rejected.
-If the statistics count < statistics table, then Ho is accepted.
-The t-test output is -2.356, which is obtained from the calculation using statistical software.

Therefore t-test lies in the area of Ho is rejected, it can be concluded that the number of sales handicraft before using and after using the internet is not the same or significantly different. It means that internet marketing programs that applied succeed significantly.

B. Increasing the number of customers or new customers

**New Customers:** Customers are finding out the product and decide to make a purchase:
- consumers who get information from the internet, namely social media and website.

**Regulars customer:** Is the customer who perform repetitive transactions, consumers who have conducted transactions and are satisfied with the products or services provided will repurchase.

**A wide range for gaining customer:** Based on the interview the customer came from many countries like Malaysia, Singapore and Japan.

An increase in sales at this point indicates by several things:

- first, because the use of internet marketing is done by the community itself through for example the website batiktulisgirloyo.com
- second, an increase in sales due to the internet activities by their own private media.
- Third, an increase in sales due to the non-internet activities, for example, from mouth to mouth marketing, exhibitions and so forth.

These points can be seen from the results presented in the table interview guide questions section 6.2 II, Number 1, in each of the interviews.
C. Effectiveness in the promotion

<table>
<thead>
<tr>
<th>BEFORE USING INTERNET</th>
<th>AFTER USING INTERNET</th>
</tr>
</thead>
<tbody>
<tr>
<td>Utilizing the exhibition</td>
<td>The ease to exhibit their own product in website</td>
</tr>
<tr>
<td>printing brochures and business cards</td>
<td>No need for printing a business card and brochures in a large number</td>
</tr>
<tr>
<td>WOM/Word of Mouth</td>
<td>Still using WOM due to the massive impact of it</td>
</tr>
<tr>
<td>Utilizing the partner’s business promotion in Town</td>
<td>Create their own business promotion via online</td>
</tr>
</tbody>
</table>

D. The easiness for establishing and maintaining communication to customers

There are several points that why internet marketing in community-based handicraft industry could be categorized as a good one in communication to customer:

1) Using email and social media, each members of the industry have their own tools of promoting the product. nevertheless the community website is not really active but they can use it their own way.
2) The easiness for updating new product, there are no difficulties anymore to inform the customer about the new product because they could easily send it via email or social media.
3) Quick respond for customers who need the product information.
4) Utilizing internet as an inspiration media that could gives a feedback to create a new product.

7. CONCLUSIONS AND SUGGESTIONS

From the discussion that already described, there are some points that show us the positive impacts of internet marketing to the development of community-based handicraft industry of Giriloyo, Imogiri Bantul, those are:

1. The increase in sales before and after the use of internet facilities;
2. Increasing the number of customers or new customers;
3. Effectiveness in the promotion;
4. The easiness for establishing and maintaining communication to customers.

Nevertheless, there are many positives impacts that could we see, there are some weaknesses and obstacles that actually could triggering the future development of that community-based handicraft industry, those are:

- Internet connection
- Website Management
- Community website socialization

Suggestions

Based on the research results, the researchers suggest as follows:

1) Using the internet marketing E-cycle as the guideline to create best basic standard for establishing the foundation of internet marketing in the business.
2) Propose the plan to establish and build the internet infrastructure to create good access for internet in a rural area like Imogiri, Giriloyo Bantul.

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3) Maintaining the training for internet marketing for all generation in order to create

8. REFERENCE


the sustainability of development itself