Building Web-based Game Online

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Abstract. The purpose of the research is to investigate the design of a website-based online store with the game content. Therefore, this website will be designed specifically for gaming enthusiasts. The website will be divided into two views, the first view for the admin and the second display for consumers. In view of the admin page can only be accessed by the web admin. While the consumer display can be accessed by the admin and the consumer. The data analysis was conducted on the website from both admin and consumer. The result indicated that the successful of game online is highly affected by its website design. In the future, the design of website itself should be analyzed and studied further by more specific application to make the data more comprehensive.

1. Introduction
The online store business that is from a business model that offers a multitude of different goods and services digitally with global reach is not just limited to the same area with other words that are infinite or very broad. It can even participate in the growth of small-medium enterprises nationwide [1]. The presence of positive and significant impact implications for greatly improving economic welfare also greatly increases the rate of economic growth. Having a significant competitiveness is one element of the online store business, because it is easy to adjust to the target market conditions. Online business stores are also easy to establish cooperative relationships between business partners in procurement and direct distribution of goods and services without intermediaries. This fact will obviously lower operating costs and increase business margins [2]. Such a time should be utilized every level of society in including offering services and goods through business ownership of online business store. Just by giving a photo of the merchandise to describe the details of the goods or services, then customer can easily recognize or understand the product to be sold or offered. That is one of the business utilization in the era of digitalization. The Internet has changed the transactional paradigm in which business-to-business marketers operate. Business to business marketers who take advantage of operational efficiencies and the effectiveness that comes from exploiting the Internet in transactions outperform companies that use traditional transactional processes [3].

Sales is the company's main activity in generating revenue, both for large companies and small companies. Sales is the ultimate goal of marketing activity, because in this section there are pricing, negotiation and acceptance agreements, as well as agreements on payment methods agreed upon by both parties, to reach the point of satisfaction [4]. One way to sell is to use web-based [5]. Web-sales can increase profits [6]. Running an online store business can build customer relationships with customers so that getting closer, combative and service becomes more interrelated
Electronic commerce applications such as online store business are the most common business models. The creation of an online store has no effect on consumer purchase decisions, which have transactional support that can attract the attention of traditional customers with various conveniences such as maintaining customer loyalty [8]. Although online stores have become business channels in developed countries, such as America, and other European countries. However, for a developing country sedan is still at the stage of innovation and is a very promising banner [9].

The existence of online store business can provide assurance to customers in an interactive and intensive manner, so as to increase the customer, in this case, the values of satisfaction. It is true that the online store business has a very high level of competence, even some research done, and it is true. The smooth and mechanical ease with which transactions in the online store business can provide an opportunity to grow global market goals [10]. The purpose of this study is to investigate the design of a website-based online store with the game content. Therefore, this website will be designed specifically for gaming enthusiasts.

2. Methods

Data analysis method is a series of activities, systematic grouping, interpretation and verification of data to become a phenomenon with social, academic, and scientific value.

The purpose of the use of data analysis tools is to translate data into a form that is easier to read and understand in accordance with established research objectives at the outset. The next step is to determine the flow of website design of this online store first, so that the final results of this design can be in accordance with what has been planned from the beginning. And the point is here researchers take the general concept or standard concept on the website that has often been used by web developers that is by using the method "Waterfall"(Figure 1) Consisting of:

- Analysis
- Design
- Implementation
- Verification
- Maintenance

![Waterfall Diagram](image)

**Figure 1. Waterfall**

In general, this waterfall method consists of various aspects or stages, but here researchers only use the aspects as in the picture above. This is accrued the writing of this scientific paper is still in the theme
of his website design course. So here I do not explain or describe the source code of the program used. Here are the steps in the waterfall method that will be used in the design of this website:

2.1. Analysis
At this stage I have to perform data analysis from start of consumer or customer data to market strategy data. In the process of designing the website of this online store the process of analysis is done gradually, starting from the process of collecting materials to process the needs of this online store website. Then we analyze the marketing system in today's era, so we can align our online store with other online stores. The design of this online store is made as simple as possible with the aim that consumers or customers can use this online store website easily. And of course I also see advances in information technology today so this online store will not be outdated, because using a method that can be quite modern. So I can conclude that this research is done by qualitative method with aim to give experience designing or designing an online store website with purpose to expand marketing.

2.2. Design
At this design stage has several modeling such as design model and physical design. For model design I will use system modeling as:

2.2.1. Design
- Flow Chart
- Context Diagram
- Data Flow Diagram

These three models will be a contributing factor to this design process, and the modeling will be described or drawn from the end of this description. And the second is:

2.2.2. Physical design
- Design Technology. This stage I as the author will mebuat or design a technology design that will be adopted or used by this online store website that includes computer technology that diantranya composed of software, hardware, user and computer network technology or internet network.
- Website Design. This stage is the process of making a layout of a website, the process of making the layout of this online gaming gear store will be explained at a glance on the implementation process. Only the picture will be explained.

And for the next is about a simple but classy design pattern. Why is that, because the author wants to make a website-based online store without a large enough cost. With sufficient costs we can utilize these cost estimates to design an online store website with the concept of modernization business. Additional methods to design this website using flowchart, context diagram and last DFD. These three methods of analysis will assist in the process of depiction of this website system. However, in this study I just make the framework or website design course, it aims to add knowledge and creativity in online business. Therefore I do not describe how the process of making this website, but only drawing a series of its design process only. Here is the process than the website design of this online store will be depicted with 3 analytical tools that is Flow Chart, Context Diagram, DFD. Picture flow diagram showing the flow of a report and form in an algorithm that states the direction of the program flow. Here is the flowchart of this website design process (Figure 2).
2.3. Context Diagram
Context diagram is a diagram that describes a scope of the system. Context diagram is the highest level or initial level of Data Flow Diagram (DFD) which describes the overall input and output of a system. Here is a context diagram of this website creation (Figure 3).

2.4. Data Flow Diagram (DFD)
Data Flow Diagram is one graphical description which is where its use to show the flow or flow of data of a system with the aim to be more easily understood logically, tersetruktur and clear. Below is an overview of the Data Flow Diagram diagram in this website-based online shop design (Figure 4).
2.5. Implementation

In the implementation phase of this website is done by using layout design that has been created by the author with the aim to be able to explain what the contents of this website and what the content contained in this website solely and not as a whole. In this part of the implementation will be divided into 2 page views of this website, the first initial view for administrators / admin and the second view for consumers or user users. Here is the layout view of this website based gaming gear shop (Figure 5).

Figure 5. Admin Page Layout

Here we explain first about the description of the layout. For admin form when the website is accessed or opened then the view that will appear first is the display login form for admin. There is a Username and Password field where the admin / owner of this website already has a special account to login. And the second is the display for consumers or customers, the following layout design of the display form for consumers / customers (Figure 6).
It may look like different page layout for consumers, which where when the website is accessed then he will directly display the main form of this gaming gear website without having to login first. In this view there is a button or menu that can be accessed, sure menu Home, Home, Category. The third menu button we will design it using an additional style from css to display the buttons of the menu is interesting. And not only that button here I designed the search feature also with the aim to make it easier for consumers when looking for items needed.

To process goods transactions or purchases of goods on this Gear Online Gaming Store, consumers are required to have a google account, because for me google account is a simple and easy way to register an online store account. But here I have not added a feature for the automatic registration of this google account. Maybe if the website is really beanr built then it could be a consideration or a new idea to increase the quality of the website that I designed this. The logo should be logged to google account is not like that, but I make it just for the picture only.

2.6. Verification
This verification stage is done to make the system in accordance with what is determined, so the need for a verification stage in the process of designing this website. With the verification of possible deficiencies that can occur can be fixed. Verification is done not only on the data side alone, but on the design or layout of this website based gaming gear shop.

The purpose of this verification is as one of the prevention or backups when there is a system is still not running normally or the system has problems. In order for the efforts of the design of online stores based on this website can be realized in a real and feasible to use. Prior to the development process, at the verification stage I added a little process of managing this website in order to more clearly the purpose of manufacture as well as any software needed.

This step is divided into two types:

2.6.1. Content Web Managing. In arranging a content rather than a website then done in 2 ways, namely documentation and observation of other online stores. From the above way in can be some data collected are:

- Info amount, the goal to know the number of stock items that are still available and already sold.
- Info consumer data, to know the consumer data that will order goods, and to maintain talisilaturahmi with consumers.
- Info specification, to enable consumers to know the specifications of goods they will buy.
- Info pricing, very clear purpose to know the amount of price of goods they will buy and they compare.
- **Customer service** information, the goal is to facilitate the customer if there is a problem in the transaction process, or the process of returning goods that are damaged technically.
- Payment information, to tell how the payment process is done on this online gaming gear shop.

2.6.2. **Application Web Managing**

At this stage of the process a data or application used in mebangun website this online store, stored in a folder, to facilitate the process of making this website, need to prepare the needs below:

- Xammp, apache web server software is available and support php programming.
- Sublime Text, is a text editor for creating programs.
- Microsoft Word, used to design the layout of the website to be designed.

2.6.3. **Development**

Development stage is the most important stage. This is because every system must have a gap or there leak, so it is highly recommended if the development or maintenance phase is done on a scheduled basis. In order to minimize system leaks that will occur. This development is done not only to solve the problems that exist, but this development is done to increase the performance or features of an online store system is to look more cool and the same as the competitors of other online stores.

Tight competition between online stores in the current era, it is necessary to note any changes that occur in the online market. Various kinds of problems will surely come to the online stores, starting from customer complaints, damaged goods purchased, old orders to dll. So we have to prepare everything that will happen to this online store.

3. **Results and Discussion**

In terms of the process of designing the website of this online shop the author only makes the design of the system only, then translated into the diagrams, layouts and images of the system that will be used later. The design is done in stages and detailed, with the aim to mature the results later. And for additional software or module we will design it by using some software also as mentioned in summary above. And the making of this website takes a long time, it is diakrenakan limited time and cost. The design of website-based gaming gear shop aims to increase the experience and also become one of the final task of the course that I am taking. Certainly there are many shortcomings that occur in this design process.

But I hope this online store website can be a competitor of other online stores in the online business world. Display of this website will have 2 pieces of view, the display for the form admin and display for the form of consumers or customers. With a little extra from css make this online store website to look more attractive views. And for the transaction process on this website can only be done by consumers who have created an account only, therefore if you want to buy goods, then please first register using google account. For me google account one of the easiest things to register as a member of an online store.

The contents or content contained in the online gaming gear shop is only the tools or can be said part-part for gaming only, and sold officially and warranty. And for the payment process we provide a bank transfer method where almost as young as a bank can transfer. And for the process of delivery of goods using some goods delivery services, such as JNE, J & T, POS INDONESIA, and other couriers. Please note that we do not have an official office yet. So just a storefront, or a workshop with additional features of the process of selling goods via the website.

4. **Conclusions**

From the results of research conducted, mengahasilkan an online gaming gear store application with the main target of supporting and greatly expand the marketing area in growing the competitiveness of global markets. Reintroducing the online gaming gear itself by having a navigation feature that makes it easy for users on websites that have been built. By leveraging the opportunities of the online age that will make efficiency in terms of marketing, not only will be seen by local consumers but also by
consumers globally. Using developments alone is not enough, we have also explained the mechanism of how this online store-based implementation will work, this mechanism will make the existing system will continue to run optimally so that it will get the right consumer targets and profits with potential that can be maximized by paying attention periodic renewal due to rapid change of time requires adaptation of rapid system changes, thus the system will continue to evolve and not only develop but also survive in order not to be destroyed by the times.

References
[1] Susianawati H, Tjandrarini A B, and Wulandari S H E 2017 Design of Web-Based Sales Information System at CV Gemilang Indonesia Jurnal JSIKA 6(1) pp. 1-10
[2] Bryan A G 2005 Konsep belanja E-Commerce
[3] Liang T P, Ho Y T, Li Y W and Turban E 2011 What drives social commerce: The role of social support and relationship quality Int. 13(4) pp.1-10
[4] Liang T P, and Turban E 2011 Introduction to the special issue social commerce: a research framework for social commerce International Journal of electronic commerce 16(2) pp.5-14
[5] Sharma A 2002 Trends in Internet-based business-to-business marketing. Industrial marketing management 31(2) pp.77-84
[6] Acheson K 1977 Revenue vs protection: the pricing of wine by the Liquor Control Board of Ontario Canadian Journal of Economics 10(2) pp. 246-262
[7] Arwiedya M R and Sugiarto S 2011 Analisis Pengaruh Harga, Jenis Media Promosi, Resiko Kinerja, dan Keragaman Produk Terhadap Keputusan Pembelian Via Internet Pada Toko Online (Studi Kasus Pada Konsumen Toko Fashion Online yang bertindak sebagai Reseller yang ada di Indonesia) (Doctoral dissertation, Universitas Diponegoro). International Jurnal Sciences. 16(4), pp.1-10.
[8] Linda S L A I 2010. Social commerce–e-commerce in social media context World Academy of Science. Engineering and Technology 72(4) pp.39-44
[9] Culnan M J, McHugh P J and Zubillaga J I 2010 How large US companies can use Twitter and other social media to gain business value MIS Quarterly Executive 9(4) pp.12-18
[10] Cho V 2014 An Integrative Framework For Customizations On Staisfication: The Case Of An Online Jewerly Business In China. Journal Of Service And Management 7(5) pp.165-181