**Chapter 2**

E-commerce (electronic commerce) is the buying and selling of goods and services, or the transmitting of funds or data, over an electronic network, primarily the internet [1]. This chapter will be divided into 2 sections. The first section is background. In this section, the general features of the e-commerce platforms will be interpreted. The second section concerns with the related work of the project. The comparison made between JD.com [2] and Amazon [3] will be illustrated in this section.

**Section 2.1 Background**

Generally speaking, an e-commerce platform establishes an online market consisting of different kinds of stores. So, the primary feature of the platforms is buying and selling. Different stores sell their distinctive products. Customers can search for the desired products or stores by simply typing their names into the search engine. After searching, customers are capable of using the filter to select more satisfying products. In the end, all the desired products can be checked out at one time. Here the shopping cart plays an important role. The platform provides a shopping cart where you can put satisfying products through different stores. In addition, payment is also a crucial feature of e-commerce platforms. Customers need to pay for the selected items and they can go through this process in several types. After the payment, the platform will store the information about the shipping process for a while until the order is completed. And the previous orders are all stored on the platform. Moreover, after the order is completed, the user can comment on the product and upload pictures, which can help other users to choose the product.

**Section 2.2 Related work**

With the development of Internet technology, more and more people choose online shopping, and online shopping is realized through e-commerce websites. When we talk about e-commerce sites, you must have used or heard of JD.com and Amazon. Recently, our group plans to design a system for an e-commerce website. Next, we will compare some features of the website we plan to design with these two websites.

First of all, our website has the basic features of a shopping website, such as product management, online payment, order management, product filtering, customer review, etc. Although our website has these basic features, there are still many details that we need to pay attention to. For example, in terms of product filtering, our website needs to classify products logically, just like Amazon and JD.com. First, these two websites have a general classification for the products. The product is classified by the department. Second, it will be classified according to the different types of products in each department. Finally, you can filter the products you want by selecting price, brand, etc.

After comparing our website with Amazon and JD.com, there are some other features that our planned website doesn’t have, and we think they are also very important.

**Discount Coupon**

JD.com takes advantage of discount coupons, which can be used within a range of specific product types and can play a role when the total price of the products reaches a certain amount. This feature can encourage consumers to consume.

**Gift Card**

Besides discount coupons, another feature which is similar to the traditional marketing approach is gift card on both JD.com and Amazon. Gift cards can be given to others as holiday gifts, or used by yourself. Therefore, gift card will also be applied to our website due to convenience.

**Q&A**

Both JD.com and Amazon have this feature. Unlike the customer review, the Q&A feature allows potential purchasers to post questions, and purchased users or merchants to answer them. This can give non-purchasing users a better understanding of whether a product fits their buying needs.

**Personalized Recommendation**

Personalized recommendations feature emerges on both Amazon and JD.com. After the customer browses the product, the website will recommend related products for the customer in the "Recommend for you" module. This feature will increase the probability of the customers’ purchase.

**Display The Shopping Cart in the Sidebar**

In addition, the special design of the shopping cart on Amazon has enlightened us. On JD.com, when we click the "Add to Cart" button, it jumps to another page to show that the item has been added to the cart, which is very inconvenient if we want to continue browsing the items. However, the shopping cart is displayed in the sidebar along with its content on Amazon. This helps customers continue to browse items while viewing their shopping carts, which can be an optimal choice for our design.

In conclusion, we will add more useful functions to our e-commerce website based on guaranteeing these basic functions, just like the features we mentioned above. We will also change some features to make them easier to use or more suitable for our products.

# References

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| [2] | JD.com. [Online]. Available: https://www.jd.com/. |
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