

Introduction

The purpose of this project is to focus on the Usability of E-Commerce systems. Over the past three decades, E-Commerce systems have grown at a rapid rate. This has lead to many businesses creating an E-Commerce system to gain a presence on the Internet.

As more businesses used E-Commerce systems, there was a pattern of poor Usability. This project will focus on finding the common Usability errors found within E-Commerce systems.

Aim

The aim of this project is to identify the common Usability errors found within existing E-Commerce systems.

To achieve the project aim, the following objectives were set:

- Identify existing Usability errors within E-Commerce systems
- Design a mock up E-Commerce system with poor Usability
- Perform Usability test methods on the existing E-Commerce website
- Identify the Usability errors and improve the website
- Evaluate the results and outcomes of the results

Methods

In order to find out the common Usability errors in E-Commerce systems, a mock up website was created. The website was created with no Usability in mind so the test results could be accurate.

To find out the common Usability errors found within E-Commerce systems. The following testing methods were carried out:

- System Usability Scale with a group of 10 users
- Cognitive Walkthrough Testing

Testing Results

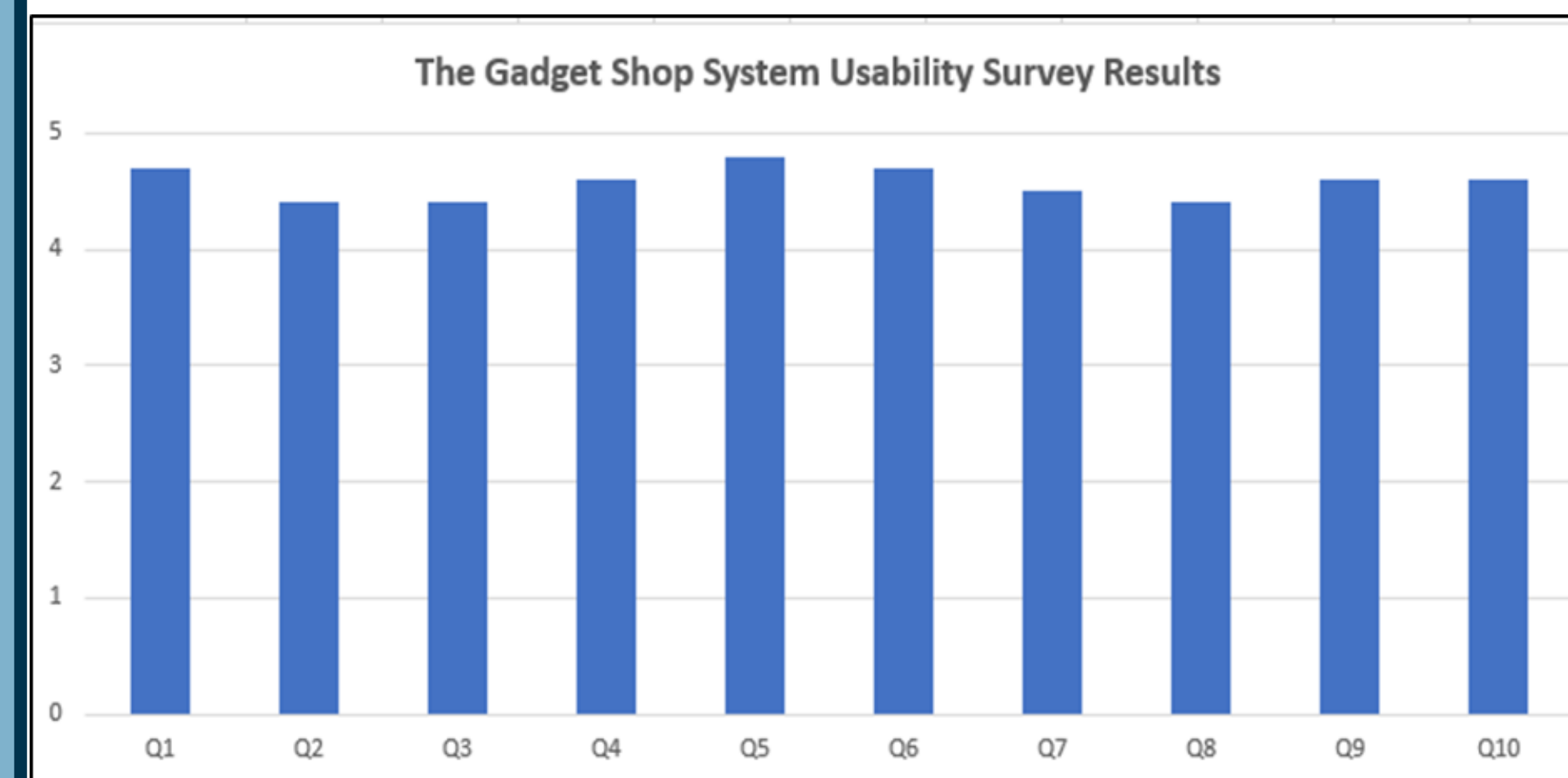
The website was tested in two waves, upon the second wave of testing the results of the tests had improved.

System Usability Scale Testing

The users were given five tasks to complete, once they completed them they was asked to complete a set of ten questions using the Likert scale.

The results was then analysed in Microsoft Excel and an average per question was generated.

Below is a bar chart of the System Usability Scale results.



Cognitive Walkthrough

The cognitive walkthrough is a test that was performed by myself. It tested every task required to complete an objective. There was three objectives set out for the test.

The initial set of testing failed on two objectives, the sub tasks that failed was:

- A button on the website being poorly designed
- The quantity of item not updating when pressed

Improvements to the Website

After the testing was completed, the improvements needed were clear. The improvements to the website were typically simple to fix.

Improvements made to the website:

- Shortening the checkout process
- Adding input masks to prevent incorrect data input
- Improving the security and privacy of the website
- Changing buttons

Conclusion

After making the amendments to the website, it was clear that the Usability of the E-Commerce system had improved. The second wave of testing also proved this.

Usability is important for E-Commerce systems as if a user has a poor experience with a website, they are likely to leave to another competitor.

Having good Usability can also save a website developer time and money, this does not apply to E-Commerce specifically. Usability should be considered at the design stage of a project as if it is left too late, then systems will have to be redesigned.

As mentioned previously, it was simple errors that caused poor Usability. The most common Usability problems within E-Commerce systems were:

- Poor form designs
- Privacy concerns
- Security concerns