Investigating the most effective methods of Mobile First design within the Motor Vehicle Retail industry

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1) Introduction

The online world is continuously expanding and changing. Have you ever stopped to think about how much you use your phone for the internet compared to your old trust desktop anymore? Well web developers and businesses have. Back in 2016, the first glimpse of the viewing shift occurred when mobile browsing overtook desktop browsing briefly [1], and this shift was then more cemented in 2019 when 60% of all browsing came from small screen devices [2]. Due to this shift, and initiative by the name of the Mobile First Initiative was created which became a set of rules web developers were and advised to follow to provide a good viewing experience for all of the new users

2) Aim

•To be able to create a website for a Car Dealer that follows mobile first standards for the business Castle Garages

3) Objectives

•Research and learn about the Mobile First Initiative and its techniques for small screen devices

•Perform case studies on existing Car Dealership websites, examine pros and cons.

•Interview people on a Car Dealership website for their opinions from a customer POV.

•Using interview answers Develop requirements and a prototype.

•Once the project timeline has been formed, begin development on website.

•Conduct testing on developed website to ensure full functionality and design.

•Complete a website suitable for a Car Dealership following mobile first standards.

4) Methodology

For this project, the Positivism philosophy was used. As positivism is used to describe projects based around experiments and designs, it is suited what the project was aiming to do with the experimentation of web design/mobile first techniques and designing of a website. Positivism also used qualitative data, which makes it a bit more accurate and trustworthy as it deals with specific data.

5) Interviews

Interviews were performed on the current existing Castle Garages website to get a users POV on the website. The overall reception to the website was overwhelmingly negative. Users spotted errors all over the site and found it ugly. Using the feedback on the website, design requirements were able to be formed.

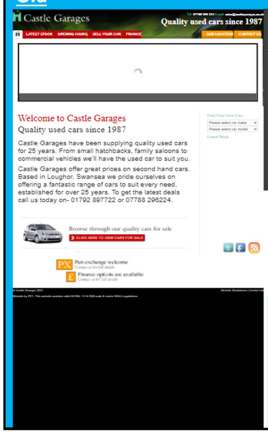
6) Design and Implementation

Initial designs were created for the website. I created the initial designs using the Wireframe and Prototyping methods, and created them inside Adobe XD.

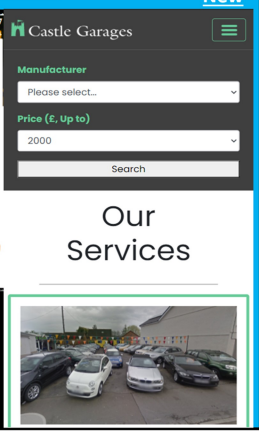
The actual website was coding using the software Visual Studio, and I followed the waterfall development model to stick to task and get the development done. I used the mobile first initiative to guide my work, along with using the responsive web design method.

7) Comparison

Old

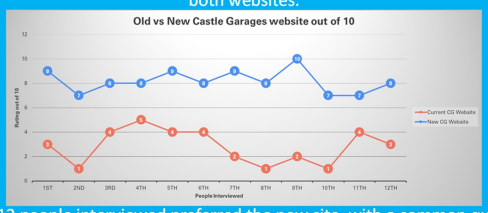


New



8) Results

Interviews were done again on the new website, and using ratings out of 10 a graph was able to be created to display the difference in opinion on both websites.



All 12 people interviewed preferred the new site, with a common quote stating it looked more user friendly. Also, all 12 had said that the site was compatible for mobile devices, unlike the old website.

A few interviewees had said that by having the website usable on their mobile devices, that it would increase the likelihood of them using the website.

9) Conclusion & Future Work

It is clear and obvious to see that users prefer a site that they can use on the go. The mobile first initiative is evidently helpful going forward for web developers to follow.

I would recommend the responsive web design method for any web developer creating a site in future opposed to Dynamic Serving and Separate URLs due to its ease of use, and cost benefits for smaller businesses.

If this project was to be done again, I'd advise the next person to delve more into lesser known methods of design, as their maybe a hidden gem that I was unable to find.

10) References

•[1] E. Enge, "Mobile vs. Desktop Usage in 2019," Perficient, 2019.

•[2] E. Marcotte, Responsive Web Design, New York: Jeffrey Zeldman, 2010.