Realizing Competitive Advantages through Enterprise Mobile Strategies

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Abstract

The purpose of this research is to compare and contrast perceived versus realized advantages of an enterprise wide mobile strategy. This research explores the history/evolution of mobile applications in addition to business benefits, values, and challenges that come with implementing a mobile solution in an enterprise. It also explores the benefits of using Performance Dashboards to show Key Performance Indicators (KPI’s) that are used for graphically representing the data in an interactive way. To achieve this, data was collected from the SAP Mobile App Store and was used to create a Performance Dashboard. These findings are hard facts and are considered the realized data for this research. Perceived data was found through literature reviews. By comparing and contrasting these findings it was possible to see whether the generally accepted, perceived view of mobile application strategies fits with our findings of the actual realize views.

Reflections

1. Describe your foundational understanding of how research is conducted in your discipline.

The research that is conducted in my discipline is heavily documented and thorough. I learned the importance of having peer reviewed articles as well as books and documents from reputable sources. The first step that I took when beginning this research was to formulate the direction. I accomplished this by gathering data from the SAP Mobile App store. Once the basis of my research was formulated I created many documents that targeted things such as Key Performance Indicators (items that I wanted my dashboard to display), potential target users and technical documentation. Once these things were complete I began to compile peer reviewed articles that supported my topic. I used these articles heavily in the literature review portion of my research. I learned that it was important to use this type of article because it supports my findings with industry and academic creditability.
2. How have you expanded your understanding of the informational resources available and how to best use these resources?

This research opportunity has greatly expanded my understanding of the informational resources available through Missouri S&T and other resources such as Google Scholar. I had not previously used either of these resources. I arranged a meeting with one of the librarians in at Missouri S&T. She taught me how to effectively lookup articles on databases such as the IEEE Digital Library and Scopus. I learned the importance of using meaningful, descriptive, short keywords to find articles that were relevant to my topic. Once I gathered all the meaningful articles, I compiled them into a large chart in Excel. This chart broke down each article by its title, research objective, methodologies, and conclusions to name a few. This gave me the ability to quickly reference specific articles and see similarities and differences that might not have been otherwise apparent.

3. Describe the knowledge you have gained regarding the fundamentals of experimental design.

I learned that experimental design can be fun. It is important to identify the factors that your research focuses on and develop them throughout its creation. It is not always apparent what direction your research is taking. However, if you follow the facts along with your initial direction you will find the results you are looking for. In addition, I had regular weekly meetings with Dr. Lea who guided me through the research process even though I was sometimes unsure how to conduct a proper research project. She was able to keep me on task and continually formulating my research. This is important because it taught me the value of teamwork, trust and collaboration. In addition the dashboard we created was a collaborative effort by Iris Russell, Ryan Roark and I. Above all else experimental design has taught me that the actual experiment part of the research is actually quite small compared to the planning, organizing and literature review that is required.

4. Describe how you have learned to interpret the results of your research project.

When the data was compiled from the SAP Mobile App Store using the Qualtrics Survey System and compiled into a dashboard, it became clear as to the direction in which I could take. Dr. Lea and I decided to evaluate perceived versus realized mobile application advantages. She also explained to me that the data must be displayed on the same axes otherwise the data will appear skewed. As a result I learned to interpret the data and manipulate it accordingly.
There was an instance where I had to convert the perceived data from the number of applications to percentages. The reason for this is that the perceived graph that was found used a lot more applications than what I had comparable data for. The manipulation of this data gave me the ability to interpret the results of my research project and lead me to a definitive conclusion for each aspect of Enterprise Mobility that I analyzed.

In conclusion, I enjoyed this research experience and given the opportunity, I would do it again. I feel that I have learned valuable lessons in making and keeping meaningful records. In addition, I learned how to evaluate and analyze the needs of mobile applications in an enterprise. As an added benefit, I really enjoyed developing the business documentation and dashboard. I would like to give Dr. Lea special recognition for always being there to push me in the right direction and support me when I was having difficulties.