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| **ASIA PACIFIC COLLEGE**  School of Computer Science and Information  Technology |
| A RESEARCH ON MOBILE APPLICATION DESIGN |
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| **Joshua Dimapilis**  **Thom Doniña**  **Kimberly Elizondo**  **Erika Hidalgo**  **Gino Gapay**  **Jestine Gaoaen**  **Nickolo Gonzales**  **IT 111** |
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**Ms. Rhea-Luz Valbuena**

Professor

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**INTRODUCTION**

Together with the rising use of smart phones all over the world, the proliferation of *Mobile Applications* (or Mobile Apps), have also begun to increase. Mobile apps have slowly invaded the Information Technology world, and in line with this, the proponents of this study will be conducting a research about the Design of Mobile Applications. In this study, the team will also evaluate the *Social Constructionism* of the said Mobile apps. Its relevance to significant issues at status quo, the influences that drive an individual to design or develop an application, and the forces behind its inception to its implementation. In this study, the proponents will be identifying the key-players and their involvement in the development and the designing of Mobile apps.

To further the scale of this research, the team identified a specific premise. This premise discusses that in the design and development of mobile applications, several aspects of discourse are always to be considered. To fully identify the influences and to define the involvement of the actors in the construction of Mobile Applications, the team must further break down the elements of Mobile App Design to research relevant information and to gather evidences. These factors that the team arrived with are the following: (1) *Design*, which pertains to the mobile app’s interface design (i.e. navigation, color schemes, fonts, etc.), (2) *Function*, which refers to the structure of the Mobile App (i.e. app language, platforms, features, etc.) and (3) *Trend,* which includes the involvement of the actors in the mobile apps industry, relevant issues to mobile app design (i.e. culture, power dynamics, influences) and the integration of mobile apps and its role with regard to CAMSS in the Philippines.

In line with the study, the team has come up with the following questions to be answered:

1. How does mobile application design revolutionize the way people live and how does it become an extension of a developer’s / designer’s self?
2. In developing mobile applications, how much of the developer / designer’s preferences should they take in to consideration?
3. What triggers people with different backgrounds from the society to use mobile apps? How important is culture, influence and other social issues in designing applications?

**BACKGROUND OF THE STUDY**

The group gathered the data for their findings through an online survey and through paper survey which is then analyzed and is used to attest the research done by the team that was gathered from the web. The survey is divided into two, the business that has sub categories (those who use mobile apps for work and those who don’t) who are people involved in marketing, advertising, accounting or any other business related industry and the designers who are people related to multimedia arts industry whether they are professionals or students.

The team allotted one day for the online survey and another one day for the paper survey which was distributed to an office (Union Bank of the Philippines) wherein the team used whatever connection they have to gather survey respondents in a short period of time. The online survey for designers reached 40 respondents, the business survey that does not use mobile apps has 8 respondents, the business survey that do use mobile apps has 46 respondents. For the paper survey, the business survey that do use mobile apps reached a total of 26 respondents and those who don’t has 1, as for the designer survey there were 13 respondents from the office who are designers. All in all, there were a total of 134 respondents.

Each team member is tasked to do their own research that answers the five questions and then a background of the author is researched for credibility. When the author proves to be credible for his past works, the article is then analyzed by the member who obtained the said research and matches it with the survey questions. This process is done with the other members of the group so that the team could share their findings with other members for any comments, and suggestions. Important notes that were in the articles are taken to be focused by the group; examples were factors that influenced on the designing and developing of a mobile application.

The proponents have included a Mobile App Analysis for this study. Therefore after evidences have been gathered for each aspect of Mobile App Design, the gathered evidences will be used to assess certain mobile applications developed by Filipinos. Part of the selection of these mobile apps, aside from their Filipino developers/designers-descent, is its social acceptance in the industry.

After the analysis, evaluation of the results are due. A separate section for the interpretation and analysis of the results is included in the study. This section should include a summary of the claims that may be derived from the said research. and will be represented by the data derived in the research findings section. This will be a culmination of all the results’ outcomes and their possible implications to the study.

**SCOPE AND LIMITATIONS**

An objective of the study is to delve into the design of mobile applications with regard to the 5 questions. From these questions, social constructions will be observed from the start of the development of mobile applications until the implementation. Key players or actors in the mobile app industry and the influences with regard to development of mobile applications will also be included in the study.

The team will not include any assumptions and will only use survey results and research findings to complete the study.

**RESEARCH FINDINGS**

* **Underlying Design Triggers**
* **Design Process Actors**
* **The Actors and Their Impact to the Design Process**
* **Roles of the Actors**
* **Nature of their Influences**
* **Design Process Implications**
* **Local Mobile Application Development**

After obtaining the evidences for the research, the proponents have arrived with an analysis for Mobile apps created by Filipinos in the industry. These mobile apps include:

* Streetfood Tycoon
* TARA: Theft Apprehension and Asset Recovery
* Pugo
* Bulalord Xtreme

The mentioned applications were assessed with the research criteria (design, function and trend) for the benefit of having a thorough analysis of some of the Filipino mobile apps of the present.

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| Criteria | Streetfood Tycoon | TARA | Pugo and Bulalord |
| DESIGN | * Filipino culture is present in the whole game * The UI is responsive, and may be considered as average, based on ratings | * Design is simple and is geared towards functionality | * Both incorporates designs similar to the app Flappy-bird * There are some minor revisions in each app’s U |
| FUNCTION | * In some ways, their games may be considered as *‘a rip off’* of food serving games from Y8.com | * T A R A : Theft Apprehension and Asset Recovery * If you activate the kill switch, the phone will scream *“Magnanakaw!”* non-stop. * Creating an account is as simple as registering an email account | * Pugo follows the same mechanic as Flappy Bird that lets you control a pink quail by tapping the screen to avoid obstacles. Bulalord Xtreme follows the same scheme as well |
| TREND | * Kuyimobile, the app’s developer and uploader – are embracing the industry of mobile games, by adding a theme of Filipino Pride in their app * The basis of the app’s functions are derived from Y8.com | * Unfortunately, this app is only available for MyPhone users * The culture of seeking solutions to everyday *problems* are being incorporated in this app | * The “Bulalord Extreme” and “pugo” apps are clones from its original game “Flappy Bird” and based from news that became a trend in the Filipino Social Media/Community. |

**Table 1.0 Mobile Application Analysis**

**INTERPRETATION OF RESULTS**

In line with the findings that have been obtained by the proponents, together with the Mobile App Analysis results, the following interpretations and claims have been derived:

The succeeding illustration is a visual representation of the obtained results for the Mobile App Analysis, the proponents were able to arrive with some similarities such as (1) the injection of *Filipino Characteristics,* to the concept of existing mobile apps, (2) the value of the developers / designers imparting their *beliefs, opinions and desires,* to the app that they design / develop, (3) the idea of creating their apps for their users, and (4) the apps possessing a sense of serving their *purpose*.

**Similarities:**

* + These apps’ functions and designs are influenced by existing mobile apps on the app store, but these possess **Filipino** characteristics **(eg. traits, media, solutions, etc.)**
  + Somehow these apps are an extension of the developers’ / designer’s **values, beliefs, opinions, and desires**
  + Key-players shaped the design of these apps based on **their preferences**, but for their **users**
  + Mobile apps all aim to serve their **purpose** for the Filipino – crowd (i.e. provide a solution, entertain, etc.)

**Diagram 1.1 Venn Diagram for Mobile App Analysis**

From the result of the accomplished analysis, the proponents were able to derive the following claims that may further support the constructive of the methods and the influences governing the designers’ and the developers’ way of creating mobile apps.

The claims have been separated in accordance to the category from which the ideas have been derived (Design, Function and Trend):

* **Design**
  + Personalizing UI and UX matters for this *generation* and the ***trends in designs*** are mostly derived from user feedback
  + A designer’s UI / UX are most of the time an extension of **his / her beliefs, interests**
* **Function**
  + Developers value the ***users***and ***their feedback*** of their application in deciding features to be included
  + In considering the tools, and the platform to be used, developers also take the **target audience** into consideration
  + The **desires** and **convictions** of a developer may influence his/her application
* **Trend**
  + Businesses are now considering the field of mobile application development for their **marketing strategies**
  + These trends influence companies to be involved in the industry of Mobile Apps by **having an app for themselves**
  + More and more **companies** & **government agencies** are hosting competitions in *Mobile App development & design.* 
    - This trend of conducting contests from *idea/concept building*, to long-term or short-term **development** has slowly invaded the IT and marketing strategies of most corporate entities here in the Philippines

**GLOSSARY**

**CAMSS** – Cloud, Analytics, Mobility, Social Business and Security *(Retrieved from http://www.ibm.com/ibm/clientcenter/montpellier/camss.shtml)*

**Digital Strategies –** blueprint for managing customer-facing information technology (IT) initiatives *(Retrieved from http://searchcio.techtarget.com/definition/digital-strategy)*

**International Data Corporation –** the premier global provider of market intelligence, advisory services, and events for the information technology, telecommunications and consumer technology markets. *(Retrieved from http://www.idc.com/about/about.jsp)*

**Imagine Cup –** Microsoft’s premier student technology competition *(Retrieved from https://www.imaginecup.com/)*

**Mobile Application** – a software application developed specifically for use on small, wireless computing devices, such as smartphones and tablets, rather than desktop or laptop computers. *(Retrieved from http://whatis.techtarget.com/definition/mobile-app)*

**Mobile Application Development** - set of processes and procedures involved in writing software for small, wireless computing devices such as smartphones or tablets. *(Retrieved from http://searchsoa.techtarget.com/definition/Mobile-application-development)*

**Social Constructionism -** in sociology, a school of thought pertaining to the ways social phenomena are created, institutionalized, and made into tradition by humans. *(Retrieved from http://dictionary.reference.com/browse/social+constructionism)*

**UI/User Interface –** everything designed into an information device with which a human being may interact. *(Retrieved from http://searchsoa.techtarget.com/definition/user-interface)*

**UX/ User Experience -** The overall experience of a person using a product such as a website or computer application, especially in terms of how easy or pleasing it is to use. *(Retrieved from http://www.oxforddictionaries.com/us/definition/american\_english/user-experience)*

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**APPENDIX**

**Mobile Application Sample Screenshots:**

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**Image 1.1 Streetfood Tycoon at the Android App Store**

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**Image 1.2 Streetfood Tycoon Interface**

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**Image 1.3 TARA Mobile App Poster**

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| *Screen Clipping*  **Image 1.4 Pugo Home Screen** | *Screen Clipping*  **Image 1.6 Bulalord Xtreme Screenshot** |
| *Screen Clipping*  **Image 1.5 Pugo In-game Screenshot** |