Understanding the Motivations of Vietnamese Millennial Mobile Gamers: A Pilot Study

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Abstract

This paper uses the results of a short online survey and several qualitative interviews to investigate the motivations for mobile gaming among Millenials in Vietnam. The findings of the study revealed some key aspects of mobile gaming in Vietnam that may be unique to the cultural context. As a result, this study offers insights that can provide a basis for future investigations into a large and growing population that has received little attention in the literature to date. Findings and implications are discussed and situated within important contexts such as gamification and education.
Keywords: Mobile, Gaming, Millennials, Gamification, Vietnam.

1. Introduction

The purpose of this investigation was to conduct a pilot study in order to understand the motivations of young Vietnamese mobile gamers. Demographically, Vietnam is a young country with 45% of its population aged thirty five years and under (World Bank, 2016). Vietnam is referred to as a mobile-first market as wide spread internet use developed through mobile devices as opposed to desktop computers in more developed nations. It has a growing connectivity to the Internet and a huge pool of enthusiastic and potential gamers (Monica, 2015). There are currently at least 20 million gamers in Vietnam and over 10,000 mobile games (the most consumed app) available in Vietnamese apps stores (Monica, 2015). Vmax (2016) estimates that currently 38% of all gaming revenue in Vietnam originates from mobile devices and that mobile gaming in Vietnam will continue to grow. There are various estimates of total revenues with Statista (2016) estimating a total revenue of USD 132.0 million in 2016 and Vmax (2016) predicting revenues from mobile gaming estimated to hit USD 161.6 million by 2017, accounting for a little over 50% of the total digital gaming revenue from the country. Gaming currently accounts for 60% of smartphone revenue in the country (Monica, 2015).

Vietnam is a developing country with a population of over 90 million. For every 100 Vietnamese people there are 145 mobile phones (Han, Thao Nguyen & Anh Nguyen, 2016). The mobile platform is ideally suited to the adoption of gaming, making it accessible to a wider range of demographics, access to worldwide content, casual usage, being both personally and socially networked, and its ability to supply applications specific to the context of the user (Feijoo et al., 2012). A key element in the accessibility of mobile gaming in a developing economy such as Vietnam is the low barriers to entry into the mobile gaming market (Lescop & Lescop, 2014) in comparison to the costs associated with a dedicated games console. Many smartphone games can be downloaded and played for free, allowing smartphone users in Vietnam a wide choice

when selecting games. Freemium apps are free to download but typically include offers to upgrade to the paid version that is ad-free and may have richer features, the option to buy game coins or points and unlock additional levels of game playing through in-app purchases (Liu et al., 2012). In fact, game developers collect 90% of their revenues through free downloads with in-app purchases (Lescop & Lescop, 2014).

Console or PC-based games costs tens of millions of dollars to produce, a similar sum to market, and can take several years of intense research and development to perfect. Mobile games can be created in mere hours, which has led to a profusion of 800,000 mobile games available at the start of 2016 (Deloitte, 2016). Mobile games are defined as always accessible, due to being ever present on a person (Hjorth & Richardson, 2009), used as entertainment to fill empty time or idle moments (Hjorth & Richardson, 2009), as a socially-connected device (Hjorth, 2011) and consisting of potentially shorter yet more frequent play episodes (Engl & Nache, 2012, Terlutter & Capella, 2013). Importantly, mobile devices allow users to play games without the constraints of time or place (Erturkoglu, et al. 2015).

Given the lack of research conducted on gaming behavior in Vietnam, the researchers sought to undertake a pilot study to provide a conceptual foundation for a larger study to be conducted at the end of 2016. To guide the pilot study a research question was asked.

Question: What behaviours and motivations for mobile gaming are potentially specific to the Vietnamese context and which of these will form the basis for a larger study?

2. Methodology
2.1. Research Design
The study was divided into two parts. Part 1 involved an online survey designed to collect basic demographic information, the types of games played and what the participant's motivations were for playing mobile games. Part 2 involved conducting a limited number (8 in total) of semi-structured interviews with gamers to gain a deeper understanding of particular aspects gaming motivations that were identified in the online survey. This type of research design where a questionnaire survey is followed by either semi-structured or in-depth interviews is often used in exploratory studies where either no or very few existing studies have been conducted on the topic and/or sample (Bryman, 2015).

2.2. Data Collection
Part 1: An online open-ended question survey was created in Vietnamese and hosted online using the Qualtircs survey software. Surveys were posted in Vietnamese mobile gaming forums on Facebook and respondents were informed that for every completed survey 20,000 VND (approx. US1dollar) would be donated to a Vietnamese children's charity. This approach is similar to Myrick (2015) who employed a similar incentive to recruit participants. Participants were asked to identify their age, gender and location, this was followed by their most frequently played mobile game from a list with an option to enter a game not on the list via text. Participants were also asked whether they made in-app purchases and whether they felt they spent too much time gaming. Lastly, participants were asked to answer three open-ended questions based on their favourite game this included: (1) why do you play this game? (2) when do you play this game? and (3) why is this your favorite game? 114 participants aged less than 35 years of age answered the questionnaire. Part 2 of the study involved undertaking a set of semi-structured interviews to gain a fuller understanding of the roll of mobile gaming plays in the lives of young people in Vietnam.

3. Analysis
Data from the open-ended questions and the semi-structured interviews were translated into English and analyzed using a 'conventional approach to qualitative content analysis (Hsieh & Shannon, 2005). Qualitative content analysis is a research method for the subjective interpretation of the content of text responses through a systematic classification process of coding and identifying themes and patterns (Hsieh & Shannon, 2005). The purpose of the analysis was to develop a number of inductive themes that broadly represented Vietnamese mobile gamers' motivations for play.

The responses were read and then re-read to gain an understanding of the gamer's motivations as a whole. Each of the responses was then read in order to highlight expressions or ideas that captured units of information that were meaningful in the participant's experiences. Labels for codes then began to emerge that came from the analysis. As a result an initial coding scheme was formed. Once the coding of all of the responses was complete, the codes were

sorted into categories based on how different codes were related and linked. Definitions/themes were then developed.

4. Results

In order to put the Vietnamese responses into relief it was decided to compare these with a Western sample of gamers who were asked the same set of questions in a previous study (McCauley, Merola & Gumbley, unpublished manuscript). See Table 1 overleaf. Reasons for gaming from the Western sample included: 'fun or entertainment', 'boredom or waiting' and 'brand loyalty to a game franchise or cultural artifact such as Star Wars'. As to when they play Western gamers tended to be more specific in their answers such as: 'evening/nighttime and in bed', 'travelling or commuting', 'when bored or waiting or while doing something else such as watching Netflix'. In comparison 50% of the Vietnamese responses noted that they game in their 'free time'.

Choice of favorite games in the Western sample stemmed from two opposing themes, a desire for 'simplicity' in their game and play while others preferred a 'challenge'. Additional themes included 'social influences', 'brand loyalty' and an unusual result, a number of the Western gamers noted the game they play the most was not necessarily their favorite game. Of 114 Vietnamese responses only one participant responded with a similar answer: "It's not my favorite one, but this is a habit that I can't get rid of. I deleted it twice, but then I got addicted and downloaded it again." A common reason amongst the Vietnamese sample for what they liked about their favourite game was 'aesthetics', this included the graphics, cute characters and beautiful imagery. The aesthetic aspects of gaming were not representative of a theme in the Western sample.

The reasons of mental stimulation, was prevalent enough in the Vietnamese sample to constitute a theme while for the Western sample this reasoning was not present enough to constitute a theme. Furthermore, no Vietnamese responses included commuting or travelling perhaps reflecting that Vietnamese infrastructure does not include a comprehensive public transport system and Vietnamese commuters tend to predominantly use motorcycles as opposed to travelling via the comfort of a car. While two of the Vietnamese responses identified being a fan of the franchise Pokemon as reasons to why they played Pokemon Shuffle, the Western sample resulted in a several instances of brand loyalty across various genres and popular culture franchises, resulting in an identifiable theme not present within Vietnamese gamers.

Table-1. Vietnamese Vs Western Motivations for Gaming

Vietnamese Themes	Western Themes
Challenge	Challenge
Simplicity of Play	Simplicity of Play
Boredom/Pass Time	Boredom/Pass Time
Social Influences	Social Influences
Routine	Travelling/Commuting
Mental Stimulation	Not Favorite Game
Aesthetic Design	While Doing Something else
	Brand Loyalty

Table-2. Vietnamese Motivations for Gaming

Theme	Description of Theme	Implications of Theme
Challenge	Players seek to challenge their own abilities through play whether by level progression or an increase in score	Any game design must allow for feedback that demonstrates progression so that players will continue to play. Optimally game design will incorporate several opportunities for varying degrees of success and allow as many players as possible to feel challenged without being frustrated in their desire to progress.
Routine	Players may play from ingrained habit, routine or a perceived addiction	Games should optimally allow for a range of play length sessions allowing players to incorporate gaming into their daily habits and lifestyles.
Mental Stimulation	Players look to stimulate their logic, critical	Game design should engage players through allowing them to experience autonomy in how

	thinking and satisfy their curiosity. Games were defined as 'interesting'.	they solve problems and solve challenges. Play approaches should optimally vary during a game to allow players to be intellectually stimulated.
Social Influences	Players adopt a game due to word of mouth or observation of others. Continued play is influenced through competition or a shared social construct.	Game design should seek to allow connection with relevant others. Social Networks such as Facebook can enable players to connect, interact and compete with others.
Simplicity of Play	Players seek games that allow them access to play easily and don't require complicated control or play schemes in order to avoid an overly intense experience.	Game design must provide an element of ease of use in terms of game play. Overly complex control schemes or game rules may prevent players from continuing play.
Boredom/Passing Time	Players use mobile games to entertain themselves when bored or lacking any alternative to fill free time.	Games must be engaging enough to motivate players to play. Games that fail to provide enough entertainment value will not be adopted or played.
Aesthetic Design	Players enjoy games that provide stimulating graphics and images.	Game design must incorporate visual and graphical appeals that reflect the current capabilities of smart mobile devices and allow users to perceive the game to be of a high standard.

Many players identified that simplicity of play was an important motivation. In terms of specific games Candy Crush players in particular were fans of simplicity with responses including; 'easy to play', 'the rules are simple and doesn't require too much skill'. One Candy Crush player played before they went to sleep as they could play while listening to music as the game is simple. Another Candy Crush player was not a game lover and rarely played, yet the simplicity of play again combined with challenge enticed them. One Blossom Blast player favored the game as it was simple yet not boring while simplicity was identified across a range of varied games such as Farmville, HayDay, Pokemon Shuffle and Temple Run. In terms of comparing games played on desktop computers and mobile devices, desktops allow for a much more complex control scheme while mobile games are restricted by screen size and touchscreen capabilities (Huang et al., 2014) so the mobile device itself may explain the desire for simplicity.

There were several survey responses as to why players played their game such as; 'to train my patience' and 'calculating skill', 'it strengthens my logical thinking' and it 'helps increase strategic and logical thinking'. One player of Alpha Bear (a Scrabble like game) responded that they liked intellectual games involving words or discovering things. While a player of Brain Wars claimed that their memory has improved significantly since they began playing. One participant identified that playing Sudoku helped their brain work and as a result they didn't feel as guilty for playing. Another played Brain Wars for two hours every day as they wanted a game that required thinking, logic and brain activation. The participant, a 26 year old gym employee viewed the game as helping him to react quickly, calculate faster and observe things better.

5. Discussion

Games can provide the need for autonomy allowing users choice and options in how they play the game, resulting in short terms boosts to psychological well-being (Ryan et al., 2006). This has previously been established as an important motivator for playing mobile games (McCauley, 2014). One participant who played 'Underworld Empire' favored the game as it provided them with autonomy. Conversely, another noted that when 'playing a game, you have to follow rules or go the way developers want you to be, so you don't ever really have control over anything'.

In terms of challenge, Ryan et al. (2006) identified that video games satisfy the need for competence providing an opportunity to meet a balanced challenge that avoided both boredom

(too easy) and anxiety (too hard). The need for competence is a key motivator for playing mobile games, which enhances psychological well-being (McCauley, 2014). The responses in this survey indicate that this holds true for Vietnamese mobile gamers, however, 'Challenge' was ranked as more important than it was in the Western sample. The need to overcome challenges within the game and progress was frequently mentioned. One participant noted: 'I played Candy Crush, I kept playing because I wanted to get to the final level'. Another articulated: 'I like the feeling of competence and achievement as well, like when you solve a puzzle in a shorter time, or when you have higher scores'. Gamers can differ in abilities and in order to satisfy a broader range of gamers, any game design must allow gamers a choice in their own personal challenge. For example one female student stated that in terms of her Sudoku play, at the beginning it's not very challenging as you are free to choose whatever level you want. But I think between the easy one and the challenging one, I like the challenging one more.

Erturkoglu et al. (2015) identified that the viral success of mobile games have can be explained by word-of-mouth, where players can influence the success of games through communicating the benefits and virtues of the game to others. The responses collected in the study indicate that this element drives adoption of mobile games in Vietnam. Survey responses as to why people play their game of choice included; my friends introduced it to me, my friend suggested it and I saw my sister playing so I played too. One interviewee played Candy Crush because they saw that their classmates played and also played games like 2048, or 1010 just to experience what their friends were playing. Another identified that a game has to be popular and many people are playing it before they will choose to play.

Lazarro (2004) identified that people play the games that their friends played even if they didn't particularly enjoy them in order to share experiences socially. One interviewee could play Clash of Clans with strangers if they chose but personally only wanted to play with their friends. This can explained by previous findings that in terms of mobile games, when many peers or others play the same game, there is a critical mass of users that enhances the enjoyment of the game (Wei & Lu, 2014). This can be reflected in that another participant likes to discuss their gaming activities with their friends through comparing their strengths and weaknesses. They divided their time equally between playing alone and playing with their friends.

The advent of advanced mobiles devices such as smartphones has led to greater innovations in mobile games resulting in greater graphics and enhanced the quality (Wei & Lu, 2014). Game design is a key element of successful games, consisting of graphics, animation, scenario, sound, and character attractiveness. Graphics have the strongest influence on the enjoyment of mobile games (Park & Kim, 2013). Factors identified by Vietnamese gamers included; nice graphics, cute visuals, cute interface, cute characters, beautiful visuals, beautiful images, colorful, lovely design and eye catching. This finding is the main difference between the Western and Vietnamese sample. This is unusual because gamers tend have lower expectations of mobile graphics when compared to traditional gaming platforms (Huang et al., 2014). Vietnamese mobile gamers have a strong preference for artful visuals and graphics.

6. Implications

Gamification is the term used to describe the application of game-design elements and game principles to non-game contexts (Zichermann & Linder, 2013). Gamification as a concept has wide ranging applications such as human resource development, crowd sourcing and marketing, with bodies of literature that support its benefits in these and other domains.

What ultimately differentiates gaming from more traditional modes of entertainment, is that it offers interactivity, which taps into the hard wired human desire for play that has featured in every documented human culture (The Economist, 2011). The use of games in learning has now become a common tool, based on principals of play that have been in practice for hundreds years (Lee, Peng & Park, 2009). In formal education gaming has been shown to have a number benefits, particularly in the way they are able to support and reinforce traditional content delivery by providing students with the opportunity to undertake a complimentary activity that is challenging, enjoyable and results in a deeper level of learning (Gee, 2003). This challenge is one that can be answered by video games with Shaffer, Squire, Halverson and Gee (2005, p. 19) stating that 'video games have the potential to change the landscape of education as we know it'.

More recently Sandberg, Maris trend de Geus (2012) have identify an emerging trend in the development of game-based mobile learning applications. Again these are based on game principles which combine play and fun elements with educational content. Connolly et al. (2012)

observed has that: players like the game-based approaches to learning, finding it motivating and enjoyable. Ni and Yu (2015) found that educational mobile games not only stimulate a child's interest in learning, they also promote and increase language development, critical thinking, emotional development, intelligence, and imagination.

In an experiment utilising a game based mobile application to promote English language learning with Dutch fifth graders, Sandberg, Maris and de Geus (2012) found that students were motivated to use games in their spare time, concluding that formal school learning can be augmented by learning in an informal context, away from school. Holden and Sykes (2012) identified the value in second language learning at a university level through development of an augmented reality game based on mobile devices. They concluded that game design, understanding of the place/location and 'student buy-in' were crucial for the success of any such game. This indicates that an understanding of the place and target audience is crucial for such games to prove successful. Mobile games based vocabulary learning can improve learner performance as well as introducing a competitive element between learners that adds further value (Yen, Chen & Huang, 2016).

Ackermann and Mariani (2015) identified that location based mobile games that incorporate the real world have incredible potential in terms of educating players in environmental concerns. There are also benefits in terms of health education, for example Baghaei et al. (2016) found that mobile games can educate diabetic children resulting in better health outcomes for children who play in terms of a healthy diet and lifestyle. There is a need in terms of health and educational outcomes, to develop new theoretical models to empirically explore the motivations for video game play (Przybylski, Rigby & Ryan, 2010).

An important point to be made here is that differences do exist across cultures in terms of employing mobile gaming for the use of learning English (Hsu, 2013). This pilot study represents a first step in understanding a growing phenomenon in Vietnam. The results of this study provide the basis for a larger study to better understand the potential for gamification in Vietnam, which so far has received little attention in the literature to date. Hingston, Congdon and Kendall (2013) advocate that mobile games are the perfect choice to develop and study in an academic environment due to their accessibility and low costs in development. We recommend that future studies should develop games or gamified applications for Vietnamese gamers that can be studied in order to develop optimal designs that can enable learning, reflection upon person attitudes and potential positive behavioral changes in areas such as health, lifestyle and societal behaviours.

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