GAMIFYING ACADEMIC RESEARCH OF NEAR EXTINCT MORIBUND WORDS TO PRESERVE CULTURE AND HERITAGE ¹Normahdiah Sheik Said and ²Nadia Suboh

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ABSTRACT

Net- Gens of today are faced with a dilemma of defining their boundaries in professionalism, livelihood, self-efficacy, social wellbeing, and the appreciation of cultural and heritage in this borderless world through the presence of immersive technologies. New demands of immersiveness in technologies are enabling them not only knowing more about the world beyond the four walls to their home, but also in giving them the chance to get direct access to information, individuals, institutes and organizations playing roles as researchers, clients, informants, participants, communities, and professionals across disciplines, across societies and across nations. This present era and trends has made us rethink about the way we look at deliverables of academic research findings today. A useful approach in answering part of the question on "Is the shift to commercialization in academic research affecting the standards of quality to serve the society?" is to look at a case sample and question the possibilities and constraints the case upholds in justifying or contradicting the said statement. This paper will look at how findings from an academic language research, that in previous forms of deliverables, are as presented papers on selected academic disciplines of conferences and seminars, as online reference journals, or as printed on the shelve hard copy journals in physical knowledge management buildings like archives, resource centers and libraries could be transformed into a present deliverables much more appealing to the Net-Gens of today. The paper will describe how a gamification approach was used and discussed whether such an effort could be a current approach of academic research findings deliverables that could serve still good quality standards to the society towards the shift to commercialization. The chosen gamelike gamified form "RICEVILLE" case sample was developed from an academic research finding in the context of exploring a new effort to uplift the preservation and appreciation culture and heritage.

Keywords: Academic Research, Immersive Technology, Gamification, Game, Moribund, Language, Culture, Heritage, Commercialization, Multidiscipline

1. INTRODUCTION

The world of technology convergences have made us rethink about restructuring the way we deliver our academic research beyond presentation in conferences and publication in journals be it in e-form or conventional paper-based form. Despite that fact that information are now at their fingertips, Net- Gens of today are faced with a dilemma of defining their boundaries in professionalism, livelihood, self-efficacy, social wellbeing, and the appreciation of cultural and heritage in this borderless world through the presence of immersive technologies.

New demands of immersiveness in technologies are enabling them not only knowing more about the world beyond the four walls to their home, but also in giving them the chance to get direct access to information, individuals, institutes and organizations. With a swipe of a finger Net-gens can play roles as researchers, clients, informants, participants, communities, and professionals across disciplines, across societies and across nations.

2. NEW ERA OF DELIVERABLES

This present era has made us rethink about the way we look at deliverables of academic research findings today. This paper will look at how findings from an academic language research, that in previous forms of deliverables, are as presented papers on selected academic disciplines of conferences and seminars, as online reference journals, or as printed on the shelve

hard copy journals in physical knowledge management buildings like archives, resource centres and libraries could be transformed into a present deliverables much more appealing to the Net-Gens of today. The paper will describe how a gamification approach was used as a current approach of academic research findings deliverables. A game-like gamified form "RICEVILLE" case sample was developed from an academic research finding in the context of exploring a new effort to uplift the preservation and appreciation culture and heritage. A discussion of whether such an effort could still serve good quality standards to the society towards the shift to commercialization will be presented at the end of this paper.

3. WHAT IS GAMIFYING?

Gamifying a word coined from Gamification is a terminology used to describe a systematic and fully thought of and properly employed game-based technique to engage, inform and educate learners or audiences or users to promote learning, motivate action and solve problems (Kim (2011), Gamification (2011), Zichermann (2010) in Kapp (2012).

4. GAMIFICATION APPROACH

A gamification approach or method would mean, in this research context, designing a wellstructured goals for a game-like design technique that uses highly sequenced retrieval method to sustain meaning to a given task. By gamifying research components into learning objects with given targets per achievable levels, the message or content will enable learners gain knowledge, quality experience besides upholding learners' attention. A game-like approach was adapted as a new form of research deliverables of near extinct moribund words.

MORIBUND WORDS

According to Language (2014) Wikipedia: http://en.wikipedia.org/wiki/Language_death. moribund is referred as Language Death

"In linguistics, **language death** (also **language extinction**, **linguistic extinction** or **linguicide**, ^[1] and rarely also **glottophagy**^[2]) is a process that affects speech communities where the level of linguistic competence that speakers possess of a given language variety is decreased, eventually resulting in no native or fluent speakers of the variety. Language death may affect any language idiom, including dialects and languages".

In the context of this research, the moribund words researched upon are of near extinct words not so much better of a replacement of a new form of words but because the lack use of it by not only the Gen Y of Net-Gens but Gen X and the Baby Boomers of the digital natives of today.

RESEARCH COMPONENT

"PADDYVILLE" *A grain of rice, A drop of farmer's sweat* now renamed as "RICEVILLE" is a game about paddy production. The game was developed from data gathered from two fundamental research studies done about paddy production. Research has found that traditional processes and methods of paddy production is the forgotten art of our Gen Y youth. In fact Gen X and Baby Boomers has also admitted that they do not know and recognized some of the names and functions of instruments and processes of making padi. Research through Dewan Bahasa and Pustaka has declared that some words are already extinct. This research is not meant to discussed on the linguistic contents and implications of why these words became near extinct but to discuss on how the findings of the research done about it could be developed into a form that can help us dissimenate information about our past to preserve our culture and heritage for our future generations.

A game montage was developed from data gathered through a fundamental research over a period of two to three years.

5. RATIONAL AND PURPOSE OF DEVELOPMENT

The research has identified 19 almost extinct words and processes on padi production. The purpose of this research is to transform these words and processes about paddy production in Nor et al., (2011) and Jazuli et al., (2011), into a cultural heritage game. A cultural heritage game would be one way of preserving these information to counter on the way these processes are being displayed on museums at the moment. When the youths were interviewed about the display in museums most interviewee, about 200 of them, said that the presentations are dated and uninviting. The development "RICEVILLE" was a Proof of Concept (POC) of the engagement features in the NEMD Model (Norma™ Engagement Multimedia Design Model) Norma (2004) and Normahdiah (2007). This prototype will be able to take "History of Paddy Production" to the next level, that is, in virtual spaces.

6. WHY GAME?

Why was game chosen as a method to preserve these near extinct words and processes? Even though there are many ways to preserve these words and processes so that our Gen Y teenagers of today will not lost touch to the names and functions of instruments and processes of making padi and recognised the history of padi production, games is one way that can engage users to appreciate them. Findings from previous research, and through observations and questionaires done on visitors to museums of the Paddy Museum in some museums in Malaysia has shown that the uniquesness of this culture still attracts many foreign visitors from Singapore, Thailand and the West, etc. Except for one or two, most teenager visitors, especially the locals, find the presentation in these places boring, applaulingly bad and shameful. The way these processes are displayed on museums are dated and uninviting. Teenagers want them to be more "happening". What is more "happening" that having them presented as games. This research project has created those methods and processes into games so that a more meaningful integrated form was created to appeal the interest of the younger generation of today.

7. GAME AS AN EDUCATIONAL ADVANTAGE

Why is game an educational advantage? Literature has discovered that games can encourage interactive learning. Interactive learning environments can create a more active, dynamic form of learning as compared to that of lecture-based instructional program (Glossary of Education: Interactive Learning (Rzayev & Solano, 2011). Game can be utilized as a learning tool for specific purposes. Game can provide realistic, relevant environments and systems which allows users to explore the boundaries, options and problem space. Game can give real life situations and experiences to its users. Virtual games can improve cognitive capabilities of users far exceeding the reading text. On top of that, the crucial factors of game are enjoyment. Enjoyment will lead to active participation and deep engagement. As a result, learners will learn through play. Game can easily be adaptive to learner's need and be customized to learner's preferences. The clear outcome in game is it can guide learner to understand more. The interactive factors can enhance deep immersion of learning through 'learning by doing' and 'experiential learning' (Corti, 2006).

8. WHY PADDY PRODUCTION?

Why is paddy production choosen for this project? Since rice is a staple food in Malaysia venturing and knowing more about its production in the past could give a unifying kind of experience amongst users, the young net-geners of Malaysia. "RICEVILLE" *A grain of rice, A drop of farmer's sweat* has used NEMD engagement features Said (Norma, 2004; Normahdiah, 2007) to develop a simulation game design on virtual spaces. The six engagement features in NEMD is acronymn as GIFCES: Goals, Immediacy, Feedback, Construct,

Experience and Simulation. The simulated civilization could teach children not only to recognise near extinct words on instruments and processes of padi production used during the olden days, but able to experience ancient culture and civilization. The production could not only teach our young generation about our past and cultural heritage but also indirectly uplift a 1Malaysia spirit among young users by instilling positive moral values and cultural ethics in the design. The code of positive moral values and ethics embedded in this stimulated game-like educational story telling platform was be based on books and stories of malaysian ancient treasures through literary works of art and wisdom through sources like maxims of pantun, syair, gurindam and seloka much researched by Hashim, (2008).

Besides having "RICEVILLE" as a product, the process of development has enabled researchers, PhD and graduate students gain experience in content development of culture and heritage game. Through the process researchers, PhD and graduate students were able to identify game classification and characteristics. Researchers, PhD and graduate students were able to develop design protocols for games to make games as 'serious' and educative. This initiative has developed a game studies and gamification research culture that is still very new in UPM and Malaysia as a whole. Even though this area of immersive technology is new in Malaysia, it is an area already taken up by most developed countries like USA, UK, Japan, Korea and Singapore. Towards our vision as a developed nation in the year 2020, developing a new research culture like this could encourage youth , especially those playing games on virtual spaces, which lacked local content, to appreciate and know our culture. The game could also be used to promote Malaysia to players across the globe.

9. RESEARCH ORGANIZATION

The game was developed in two phases: content and game development phase

Phase 1 : Content Development

Since not all instruments and methods from 19 near extinct words and processes are suitable to be created as 3D and VR learning objects, this research has identified the ones most suitable for these purposes. The learning objects were then linked in the form of a storyline. A game storyboard was then be built for this game. All content development at this stage was in paper based form.

Phase 2 : Game Development

In this phase, the selected objects were transform into a 3D VR learning objects and placed in a virtual platform for a game neighbourhood. A storyline based on selected items we then integrated to form a "back in time" game named "RICEVILLE". The game was then developed into a PROTOTYPE form and is now in the stage of alpha testing on children (findings not discussed in this paper).

The game was develop to allow users to play at only one level of game goals. Further funding is needed to make a full scale game development. A montaj of the game will be presented in this conference to gain feedback and suggestions of improvement.

10. DISCUSSION AND CONCLUSION

In line with the title and the theme of this conference "Global trends in Academic Research" the present era and trends has made us rethink about the way we look at deliverables of academic research findings today. A useful approach in answering part of the question on "Is the shift to commercialization in academic research affecting the standards of quality to serve the society?" is to look at a case sample in this paper "RICEVILLE" of a game prototype development research in its alpha testing stage. The process of development has given this research an outlook to new inquiry in questioning the possibilities and constraints the case upholds in justifying or contradicting the said statement. Since there is a need to find new ways to disseminate research findings, a gamification approach deliverables could be one way of

doing it. The approach could be adapted by research academics of today so that the knowledge and information obtained by our research could help learners or users stay engaged, take proper actions and do problem solving. The most important factor in the process of development that has been revealed in this research project is gamification of the moribund words must be well design. A well designed product should contained highly systematic and well-structured gamelike design techniques to enhance a good quality research standards. The development, could help to ensure a "back to the society" product that could also accelerate the shift from research to commercialization.

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