# Factors that influence academics' intention to use mobile-based assessment in Higher Education in South Pacific

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***Abstract*—This Research Full paper presents finding of factors influencing the use of mobile-based assessments in higher education. With the growing popularity of mobile learning in higher education, there exists a potential of using mobile devices to deliver various types of assessments. The study aimed to find out factors influencing the adoption of mobile-based assessments, perspectives on types of assessments suitable to deliver such assessments and challenges faced by academics and students in South Pacific in using these assessments. An online survey was created using the case study approach with a blend of quantitative and qualitative questions assisted by Technology acceptance (TAM) and unified theory of acceptance and use of technology (UTAUT) models. The factors from TAM and UTAUT considered for this study were perceived usefulness, behavioral intension to use, perceived trust and attitude by introducing output quality and social influence as external variables. The participants (n = 35) comprised of science, business and economics, arts, law, education and technical and further education academics from a higher education institute in the South Pacific. The study revealed that focusing on mobile assessment quality design and trust are the important factors for academics to accept mobile-based assessments in higher education. Furthermore, game-based, self-and peer, classroom polling, formative, adaptive and personalized assessments were the types of assessment preferred by academics to be delivered through the mobile devices. The major challenges identified for academics were connectivity, lack of skills in designing effective mobile-based assessments, lack of e-teaching pedagogy and student cheating issues. For students' the major challenges identified by academics were internet connectivity, device availability, distractions and device competency, readability and disability issues.**

***Keywords—M-learning, Technology Acceptance Models, Mobile based Assessments***

## I. INTRODUCTION

The rapid advancement of mobile devices and wireless technologies has resulted in Higher Education Institutes (HEI) around the globe adopting mobile learning. While mobile learning has been firmly established in the developed countries in the past decade, it has slowly permeated in the developing countries which are leveraging on it to deliver quality education to a wider community within their shoestring budgets [1] [2] [3] [4]. In addition, learning is progressively available everywhere, including low income areas and countries [5] [6] [7]. With emerging trend in the context of Bring Your Own Device movement and studies revealing evidence that mobile devices have potential to be used as learning tool [8] [9], the HEI are increasingly investing in mobile learning. This is through devices, tailored curriculum and programs, new assessments and pedagogies which accommodate the needs of 21st century learners and are also in line with Sustainable Development Goals (SDG) [2] [3] [10] [11].

An effective implementation of any information system depends significantly on users' acceptance [12]. As a consequence, acceptance and more recently adoption of mobile learning has become a fast growing research area. Researchers have investigated the acceptance of mobile learning from students' [13] [14] [15] [16] [17] and teachers' [18] [19] [20] perspectives. A successful implementation of Mobile Based Assessments (MBA) requires investigations of adoption from both students' and teachers' perspectives. There have been two recent studies capturing students' [21] and teachers' [22] point of view on MBA. Motivation of this study comes from a review paper [23] on MBA which highlighted that MBA studies focused on formative assessments mostly in elementary schools and in STEM subject areas. The research gaps highlighted in [23] and the wider literature were issues and concerns related to negative perceptions against MBA. Therefore, such research gaps have become the focus of this paper where we investigate factors' influencing the use of MBA followed by garnering issues and concerns related to challenges of using MBA from academics' point of view and possible types of assessments they would prefer to use for MBA.

Overall, this research paper aims to address the factors that influence academics intentions to use MBA and also garner potential challenges of using MBA in the South Pacific context. The case study comprises of academics from The University of the South Pacific (USP). Given the aforementioned aim of this study, three main research questions guide this research:

RQ1: What are the influencing factors' of using MBA through the aid of TAM and UTAUT constructs?
RQ2: What are the potential challenges students' and academics' likely to face, if MBA is implemented?

RQ3: What type of assessments are preferred for MBA by academics' as a potential approach to facilitate the assessment of the 21st century skills?

The main contribution of this study, in the context of the South Pacific, are the identification of: the major challenges faced by students and academics with the use of MBA, the factors contributing to the acceptance of MBA, and the types of MBA preferred by HEI academics.

In the remaining sections of this paper, section II provides a literature review of MBA, followed by description of present study in section III. Section IV outlines research methodology, followed by section V with data analysis and results, then section VI outlining discussion and VII conclusions. Finally, we end the paper with limitations and future directions.

## II. LITERATURE REVIEW

### A. Mobile-based Assessment

The journey of education does not start at primary schools and end at tertiary institutions; it is a lifelong and life-wide learning process. Whether it is a driving test, or outcome of interview and even professional development programs at workplace, the need to gauge learning is evident and this is only possible through assessment. Assessment is a process used to measure and support student learning in education. As defined in [24], assessment is a process of measuring and/or collecting and using evidence about the outcomes of students' learning. Assessments can be either summative or formative. Summative assessment takes place at the end of learning cycle and measures student learning i.e. assessment of learning whereas formative assessment takes place throughout the learning cycle providing teachers evidence of learning and students feedback information to improve learning i.e. assessment for learning [25]. According to P21 framework for 21st century learning [26], assessment is one of the critical components of education which determines the skills, knowledge and expertise students should master in order to be successful in 21st century working sectors. This leads to rethinking from educators that traditional assessment practices may not always be appropriate to evaluate higher-level skills comprising of critical thinking, creativity and teamwork which are of great importance in 21st century [27]. Researchers have also agreed that there is a need to redesign assessment practices based on modern theories of learning and use of technologies. With positive experiences of using mobile learning, new opportunities have been created in developing assessments, which can be delivered through mobile devices such as smartphones and tablets as a new assessment mode. Mobile technologies have the potential to support 21st century learning and assessments, where mobile devices provide new opportunities and functionalities to assess learning, such as ubiquity, interactivity, communication, personalization and collaboration among learners [1] [16] [23] [28]. Mobile devices can support a wide range of assessment practices such as classroom polling [29] [30], self-peer assessments [31] [32] and game-based assessments [33]. There is also a huge potential to implement this new tool in assessments tailored for emergency remote teaching situations created by emergencies and crisis such as COVID-19.

### B. Technology Acceptance Model

User acceptance for any information system is a critical factor for success in any organization. The Technology Acceptance Model (TAM) [12] is a well-known valid and robust model widely used to assess how users accept and use a technology or digital tool. TAM has already been used to successfully predict adoption of mobile learning from students' [34] and teachers' [15] perspectives. Unified theory of acceptance and use of technology (UTAUT) [35] model is successor of TAM model that considers performance expectancy, social influence and facilitating conditions as determinants for intention and usage of technology. The moderating factors used to assess influence of these four determinants are gender, experience, age, voluntariness of use.

### C. Academics' Acceptance of Mobile learning and Mobile - based assessments

Academics and educators are the main drivers of technologies in HEI and their acceptance of new technology also influence students' perceptions towards the use of these technologies [36]. It is not only the case in the developed countries but equally applicable in the developing countries [3] [16]. Therefore, it is imperative that investigations of academics' and students' acceptance and perception of MBA be conducted in the South Pacific. There are very limited studies conducted on MBA [22] [23] [21], these studies provide the motivation for the current study, where the primary focus is on factors that influence acceptance of MBA in South Pacific, and challenges academics' and students' are likely to face and the type of assessments preferred by the academics.

## III. PRESENT STUDY

M-learning has emerged and has been well researched in the South Pacific [1] [3] [13] [28]; however, the perception and intention of academics towards m-learning, especially related to MBA has been missing. To fill this gap in existing literature this study proposes and tests technology acceptance of mobile-based assessments model based on well-established constructs of perceived usefulness (PU), behavioral intentions to use (BIU), attitude (AUT) from TAM [12]. Motivated by Nikou in 2017 [21] and 2018 [22], extra constructs such as social influence (SI) as social construct, output quality (OQ) as instructional design and perceived trust (PT) as user profile factor from UTAUT model [37] have been included in this research study.

In TAM literature [12] [38], Perceived usefulness (PU) positively affects behavioral intentions to use (BIU). As studies have shown that users perceiving a new technology as useful are more likely to adopt it [39], this also exists for mobile learning adoption [14] [15]. Perceived trust (PT) is defined as individuals' perceptions about reliability, stability, creditability and security of an Information System has positive effect on PU and BIU it [40] [41]. PT is believed to be an important factor for successful use of online assessment tools [42] [43]. Social Influence (SI) was initially introduced in UTAUT model [37] and defined as the "degree to which an individual perceives that important others believe he or she should use the new system". Studies have shown that SI positively affects PU [34]. Output Quality (OQ) is defined as "the degree to which an individual believes that the system performs his or her job task well" [35]. In this study on MBA, Output Quality (OQ) is considered as enhanced assessment opportunities. Prior studies have shown that OQ positively

affects PU [35]. Finally, two robust constructs behavioural intentions to use (BIU) and attitude (AUT) always have a positive relationship [38] [37].

We have developed the following hypotheses to test the effects of the proposed variables.

**H1**: Perceived Usefulness (PU) has a positive effect on Behavioral Intention to Use (BIU).
**H2a**: Perceived Trust (PT) has a positive effect on Perceived Usefulness (PU).
**H2b**: Perceived Trust (PT) has a positive effect on Behavioral Intention to Use (BIU).
**H3**: Social Influence (SI) has a positive effect on Perceived Usefulness (PU).
**H4**: Output Quality (OQ) has a positive effect on Perceived Usefulness (PU).
**H5**: Behavioral Intention to Use (BIU) has a positive effect on Attitude (AUT).

## IV. METHODOLOGY

A mixed method design approach was applied with a blend of quantitative and qualitative online survey to investigate factors that affect academics' intention to use MBA in The University of the South Pacific (USP). The qualitative data included responses to a structured online questionnaire whereas quantitative data were responses to well established constructs of technology acceptance models as highlighted in Table 1. The mixed method design allows the researcher to get rich information that could not be obtained and compensate for the fundamental weakness that are linked with only using quantitative or qualitative study designs [42] [44].

### *A. Background*

The study was conducted at the USP, which is a regional multi-campus higher education institution operating since 1968, with student population of more than 32,043 populating its 14 major campuses in 2019 [44] [45]. The university is owned by its 12 member countries with its main campus based in Fiji. Fig 1, shows the geographical location of 14 campuses.

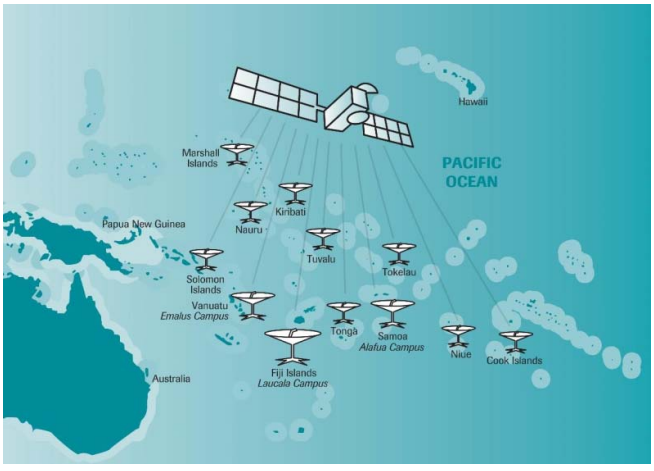


Fig. 1. Member Countries of USP connected through USPNet [46].

With the latest development in technologies and continuous improvement in the structure of network (USPNet), USP is now offering online, blended and face to face courses to students in 12 countries and 14 campuses. USPNet is wide area network with a 5MHz IP satellite based technology to deliver flexible learning and administrative services to its member countries. The teaching and learning services help students connect with their lecturers' through video conferencing and satellite tutorials, and also access all e-learning services such as lecture capture recorded videos, Moodle, e-mentoring, Turnitn and Mahara at a steady speed from their respective campuses. To better take advantage of these technologies, USP has ventured into m-learning, cohort based teaching in the member countries and has carried out a number of projects to support student learning [1] [13] [16].

### *B. Survey Procedure and Participants*

An online survey through the use of Google forms was created and survey link was sent to academics from science, business and economics, arts, law and education and technical and further education sections of the university. In total, out of 65 academics who were selected using convenience sampling method, 35 willingly participated in the study, representing a 54% response rate.

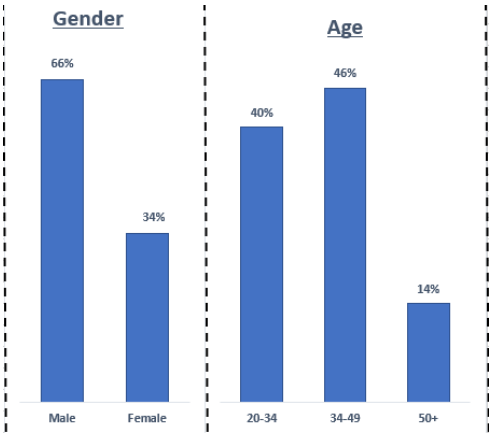


Fig. 2. Demographic distribution by gender and age of participants.

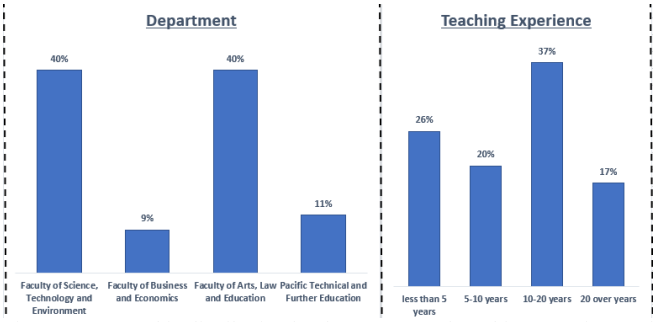


Fig. 3. Demographic distribution by department and teaching experience of participants

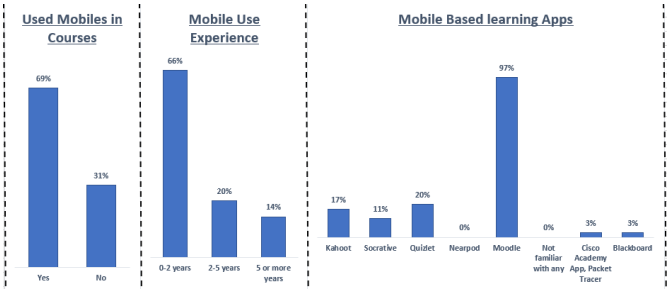


Fig. 4. Demographic distribution by used mobiles in courses, mobile use experience and familiarity with mobile-based learning apps.

The demographics of 35 participants are provided in Fig 2, 3 and 4 that contain distribution by gender, age, department, teaching experience, mobile in courses, mobile use experience and participants familiar with mobile based learning apps. Majority of the participants were male 66% compared to 34% female. The participants' age ranged from 20 to 50 plus years old. It is noted that 46% of participants were from 34 to 49 years category while 40% from 20 to 34 years followed by 14% from 50 plus category. The highest percentage of participants were from Science, Technology, Engineering, and Mathematics (STEM) disciplines, and this is not surprising since digital technology usage such as mobiles in STEM courses are significantly higher than in the non-STEM courses. Teaching experience at higher education institute of participants were 37% for 10-20 years, 26% less than 5 years, 20% for 5-10 years and 17% with over 20 years. A dominant 69% of participants had used mobiles in courses compared to 31% who had not used mobiles in courses. Furthermore, 66% of participants had 2 years of mobile use experience i.e. they know how to use the mobile device in normal life, 20% with 2 to 5 years followed by 14% with more than 5 years' experience. Finally, a staggering 97% of participants' were familiar with Moodle mobile app, 20% quizlet, 17% Kahoot and 11% Socrative, followed by 3% who are familiar with Cisco academy and Blackboard.

### C. Instrument

An online survey questionnaire was designed using constructs, which had been tested and successfully used in prior studies as shown in Table 1. The survey comprised of 3 sections, the first section captured demographic data, second section had 20 items capturing factors influencing acceptance of MBA while the third section had open-ended questions on challenges students' and academics' would face and their views on MBA as an alternative form of assessment to facilitate 21st century learning skills followed by type of assessments academics would prefer using MBA.

The survey questionnaire was developed in English language and all items for quantitative sections were measured on a five point Likert-type scale with 1 corresponding to "strongly disagree" and 5 to "strongly agree". Reliability analysis for quantitative data indicated in Table II, revealed that the instrument has strong internal consistency since Cronbach's alpha values ranged from 0.70 to 0.94, which meant good to excellent internal consistency [47].

TABLE I. SHOWS TAM MODEL CONSTRUCTS USED IN THE STUDY

| *Constructs* | *Items* | *Descriptions* | *Sources* |
|---|---|---|---|
| Behavioural Intension to Use | BIU1 | I intend to use MBA in the future. | [37] [12] |
| | BIU2 | I plan to use MBA in the future. | |
| | BIU3 | I predict I would use MBA in the future. | |
| Social Influence | SI1 | People who influence my behaviour think that I should use MBA. | [37] [12] |
| | SI2 | People who are important to me think that I should use MBA. | |
| | SI3 | School management has been helpful in the use of MBA. | |
| | SI4 | In general, my educational institution policy has supported the use of MBA. | |
| Perceived usefulness | PU1 | Using MBA enhances my effectiveness. | [37] [12] |
| | PU2 | MBA is useful for my teaching. | |
| | PU3 | Using MBA increases my productivity. | |
| Output Quality | OQ1 | The quality of the output I get from MBA is high. | [35] |
| | OQ2 | Mobile devices enhance assessment output by offering administrative benefits. | |
| | OQ3 | Mobile devices enhance assessment output by promoting new assessment opportunities. | |
| | OQ4 | I have no problem with the quality of the MBA output. | |
| Attitude | AUT1 | I think that using the MBA would be good idea. | [37] [12] |
| | AUT2 | I like the idea of using MBA. | |
| | AUT3 | Using MBA is positive idea. | |
| Perceived Trust | PU1 | I think that Mobile based assessments would be reliable in identifying examinee's identities. | [48] [49] [41] [40] [43] |
| | PU2 | I think evaluations of my learning outcomes through Mobile based assessments would be fair. | |
| | PU3 | Overall, I think that Mobile based assessments would be trustworthy to me. | |

## V. DATA ANALYSIS AND RESULTS

The data analysis was carried out in two phases, where quantitative data was analyzed with SPSS – 25 using an array of statistical analyses comprising of normality test, correlation analysis and hypothesis testing, whereas qualitative data (N=30 responses) were analyzed using Atlas.ti – 7.

For N=35, $r_s > 0.496$ of each construct shown in Table IV at 5% significance level indicating a strong relationship between constructs with p-value for all relationship <0.05, which further confirms the construct has strong relationships.

TABLE II. DESCRIPTIVE STATISTICS AND RESULTS OF RELIABILITY TESTING

| **Constructs (N=35)** | ***Mean (SD)*** | ***Cronbach's alpha (>0.70)*** |
|---|---|---|
| Behavioural Intensions to Use (BIU) | 3.94 (0.96) | 0.735 |
| Social Influence (SI) | 3.31 (1.03) | 0.700 |
| Perceived Usefulness (PU) | 3.89 (0.82) | 0.900 |
| Output Quality (OQ) | 3.69 (0.87) | 0.871 |
| Attitude (AUT) | 4.05 (0.67) | 0.946 |
| Perceived Trust (PT) | 3.65 (1.04) | 0.875 |

TABLE III. TEST OF NORMALITY

| Constructs (N=35) | Kolmogorov-Smirnov | | | Shapiro-Wilk | | |
|---|---|---|---|---|---|---|
| | *Statistic* | *df* | *Sig.* | *Statistic* | *df* | *Sig.* |
| BIU | .270 | 35 | .000 | .850 | 35 | .000 |
| SI | .249 | 35 | .000 | .849 | 35 | .000 |
| PU | .305 | 35 | .000 | .832 | 35 | .000 |
| OQ | .215 | 35 | .000 | .853 | 35 | .000 |
| AUT | .287 | 35 | .000 | .812 | 35 | .000 |
| PT | .259 | 35 | .000 | .868 | 35 | .001 |

TABLE IV. CORRELATION BETWEEN VARIABLES – SPEARMAN'S RHO

| | BIU | SI | PU | OQ | AUT | PT |
|---|---|---|---|---|---|---|
| BIU | 1.000 | .516** | **.743**** | .595** | .638** | .496** |
| Sig.(2-tailed) | - | .002 | .000 | .000 | .000 | .002 |
| SI | .516** | 1.000 | .633** | .581** | .482** | **.645**** |
| Sig.(2-tailed) | .002 | - | .000 | .000 | .003 | .000 |
| PU | .743** | .633** | 1.000 | **.775**** | .645** | .605** |
| Sig.(2-tailed) | .000 | .000 | - | .000 | .000 | .000 |
| OQ | .595** | .581** | .775** | 1.000 | .587** | **.758**** |
| Sig.(2-tailed) | .000 | .000 | .000 | - | .000 | .000 |
| AUT | .638** | .482** | **.645**** | .587** | 1.000 | .598** |
| Sig.(2-tailed) | .000 | .003 | .000 | .000 | - | .000 |
| PT | .496** | .645** | .605** | **.758**** | .598** | 1.000 |
| Sig.(2-tailed) | .002 | .000 | .000 | .000 | .000 | - |

**CORRELATION IS SIGNIFICANT AT THE 0.01 LEVEL (2-TAILED)

TABLE V. HYPOTHESIS TESTING RESULTS AT P<0.05

| Hypothesis | Path | Path Coefficient | t Value | p-value | Results |
|---|---|---|---|---|---|
| H1 | PU →BIU | 0.720 | 5.960 | 0.000 | Supported |
| H2a | PT→PU | 0.495 | 3.277 | 0.002 | Supported |
| H2b | PT→BIU | 0.474 | 3.097 | 0.004 | Supported |
| H3 | SI→PU | 0.553 | 3.816 | 0.001 | Supported |
| H4 | OQ→PU | 0.712 | 5.821 | 0.000 | Supported |
| H5 | BIU→AUT | 0.608 | 4.400 | 0.000 | Supported |
| H6 | PU→AUT | 0.648 | 4.884 | 0.000 | Supported |
| H7 | PT→AUT | 0.560 | 3.882 | 0.000 | Supported |

Normality test conducted using Kolmogorov-Smirnov and the Shapiro-Wilk tests revealed in Table III, that the data were not normally distributed (p=0.000<0.05). Each of the hypotheses was tested at 0.05 confidence level and Table V showed that the statistical significance of the relations in each model was positive and supported.

The qualitative data had three questions, Q1- students' challenges, Q2 - academics' challenges and Q3- preferred type of assessment suitable for MBA for 21st century learners. Fig. 5 and 6 show the likely challenges students' and academics' would face respectively, if MBA is implemented. It can be noted that under student challenges the dominant issues are internet connectivity, mobile device usage and expensive mobile devices. The minor challenges pointed out by academics were device competency, readability and disability issues and distractions.

Moreover, under academic challenges, the major issues were internet connectivity, technology and design knowledge of MBA tools, pedagogies and student cheating. In addition, some minor challenges such as low faculty support, mobile device issues, reduction in face-to-face interactions for students and academics, student knowledge of MBA and time constraints and workload were also recorded. The acceptance of different types of assessment for MBA is game-based (80%), self & peer assessments (71.40%), classroom polling (65.70%), formative assessments (57.10%), adaptive and personalized assessments (57.10%). Followed by simulations and dissemination environments and selective formative assessments with (2.9%) respectively as shown in Fig. 7.

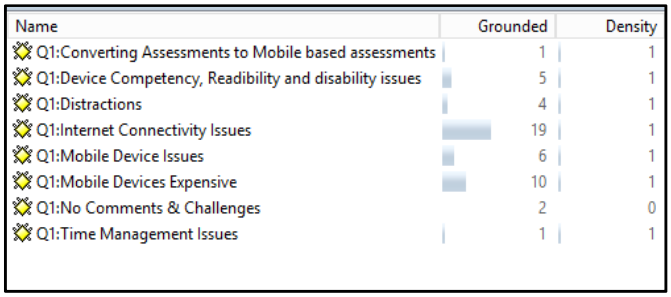


Fig. 5. Student challenges

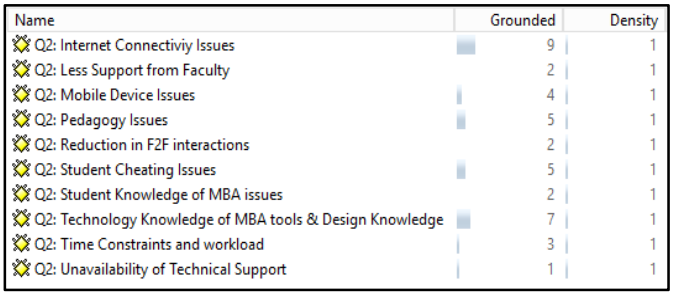


Fig. 6. Academic challenges

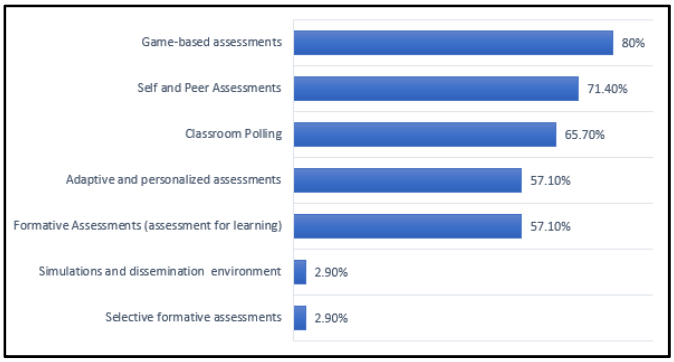


Fig. 7. Acceptance of different types of assessments

## VI. DISCUSSION

The purpose of this study was to investigate the factors that influence the acceptance of MBA at HEI in the South Pacific followed by challenges that students' and academics would likely face if MBA was implemented. Finally, the study considered the types of assessments preferred by academics for MBA as a 21st century assessment alternative. As academics' role is important in the acceptance of mobile learning and assessment at HEIs, three research questions with hypotheses guided this study.

*RQ1: What are the influencing factors' of using MBA through the aid of TAM and UTAUT constructs?*

The study proposes a simplified MBA model, incorporating valid and well established constructs of TAM and UTAUT

models to predict academics' acceptance of MBA in the South Pacific. Overall, perceived usefulness (PU), behavioral intentions to use (BIU), perceived trust (PT) and attitude as endogenous variables while, erogenous were social influence (SI) and output quality (OQ) accounts for 52% of the variance in behavioral intentions to use MBA. The findings of the current study are in line with previous studies [12] [22] [21] [23] [37]. As seen in Table V, the study confirms the influence of all selected constructs on MBA acceptance in South Pacific context. While the constructs of TAM and UTAUT models are continuously studied, the social influence, output quality and perceived trust constructs need more attention. Our study reveals that perceived trust has a major influence on intentions to use and attitude of academics' in accepting MBA. The current study is first of its kind in South Pacific and contributes to the current literature on mobile learning and assessment in two ways. First, it investigates the current understanding of mobile learning acceptance by exploring the use of MBA from academics' perspectives. Secondly, it examines the use of MBA at HEIs and provides a simplified model. However, it should not be ignored that MBA is bound to affect the learning approach of students, as such it determines how successful students will be in classroom [50]. These issues and concerns should be considered while considering use of MBA at HEIs.

*RQ2: What are the potential challenges students' and academics' likely to face, if MBA is implemented?*

Since there is a need for research on negative perceptions of academics and students as outlined [23], the findings of this RQ contribute to current gaps in the literature on negative perceptions from academics' point of view. Major challenges highlighted were internet connectivity and mobile device compatibility issues for students, and academics use of MBA. Other major issues highlighted in (Fig. 5) under students' challenges were social media, distractions through games while participating in MBA and not catering for students with disabilities.

The main challenges for academics highlighted in Fig. 6 were technology and design knowledge of MBA, time and workload issues, student cheating and design pedagogy considerations.

*RQ3: What type of assessments are preferred for MBA by academics' as a potential approach to facilitate the assessment of the 21st century skills?*

As shown in Fig. 7, the dominant type of assessment preferred was game-based assessments [33] as it helps to actively engage the learners in multiple platforms. Furthermore, recent studies have emerged on the success of peer assessment studies in the South Pacific, as such self and peer assessments [31] [32] were also considered by academics as a form of MBA. The findings are in line with current literature on types of assessments preferred for MBA [29] [30] [31] [33].

The participants had a mixed response on having MBA as 21st century assessment with the use of mobile devices. The participants' qualitative responses are denoted by (P). Positive responses were as follows:

P2: "it should be promoted"

P3: "It's a great idea, and particularly necessary within a context like Fiji"

P4: "Has potential as students all have a mobile phone basically"

P7: "I like the idea of mobiles used for in class activity and for student engagement"

P12: "Mobile based assessments will be easily accessible your students and it will be available at any location"

P14: "Students are tech-savvy in this digital age, mobile based assessments might be a preference"

P25: "I believe mobile based assessment is the way forward in future as it reduces green effects"

P26: "I think it's good, but we need to have a system in place to ensure that students do not do other students assessments. Maybe a face or finger print concept. Facilitators need training too. If done properly I believe it will be very successful."

P30: "I believe students nowadays, in this generation, will find it very easy to adapt to this version of assessment and in some ways will help them to improve their critical thinking, communication, teamwork and creativity skills as a build up from the technological skills that they already possess.

Developers, IT personnel and academics need to work together design the development and implementation of educational technologies, pedagogy and assessment tasks as the combination of all these will determine the effectiveness of mobile-based assessment in facilitating these various important skills."

Whereas negative responses were as follows:

P5: "Serious validity issues will arise through MAN"

P7: "I would not trust the use of mobiles for actual assessed work though"

P8: "It can be useful but face to face teaching should not be abandoned totally"

P10: "Very critical. It should be used as an aid to teaching and not a replacement"

P11: This would indeed depend on how well the assessment is designed hence the reason why one would need a team of Learning Designers, Instructional Designers, educational technologists and then the subject matter experts (lecturers) working together.

P13: "Strong possibility but many challenges. I prefer f2f to discuss this"

P17: "It might seem like it as any digital device is centered around these 21st century new skills but practically I'm not sure it's a good idea: students in the region (with less internet) and students struggling financially won't necessarily be able to use smart phones for assessments, For staff (and maybe students too), having to constantly familiarize ourselves with new tech is time-consuming and not motivating. I rather have less devices/apps etc., slow pace technically, and more face-to-face interaction for a more holistic learning experience."

## VII. Conclusion

The research paper aimed to find out factors influencing the adoption of MBA, perspectives on types of assessments suitable to deliver such assessments and challenges faced by academics and students in the South Pacific when using these assessments. Overall, perceived usefulness (PU), behavioral intentions to use (BIU), perceived trust (PT) and attitude as endogenous variables while, erogenous were social influence

(SI) and output quality (OQ) accounts for 52% of the variance in behavioral intentions to use MBA at HEI. Moreover, the potential challenges students and academics are bound to encounter have been seen to be internet connectivity and mobile device compatibility issues for students, and academics use of MBA. As such possible solutions need to be proposed before implementing MBA, therefore pointing in to the direction of designing a standard framework, contextualized and customized to South Pacific. The is more important now keeping in mind the growing importance of emergency remote teaching. Furthermore, the various types of assessments preferred have also been outlined, and these will help academics and HEI management to make better choices with types of assessments suitable for MBA.

One limitation of the current study is the limited sample, therefore, the findings cannot be generalized but merely used as a catalyst for further investigation through a large scale study on students' and academics' perspectives on the actual use of MBA in order to furnish generalizations.

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