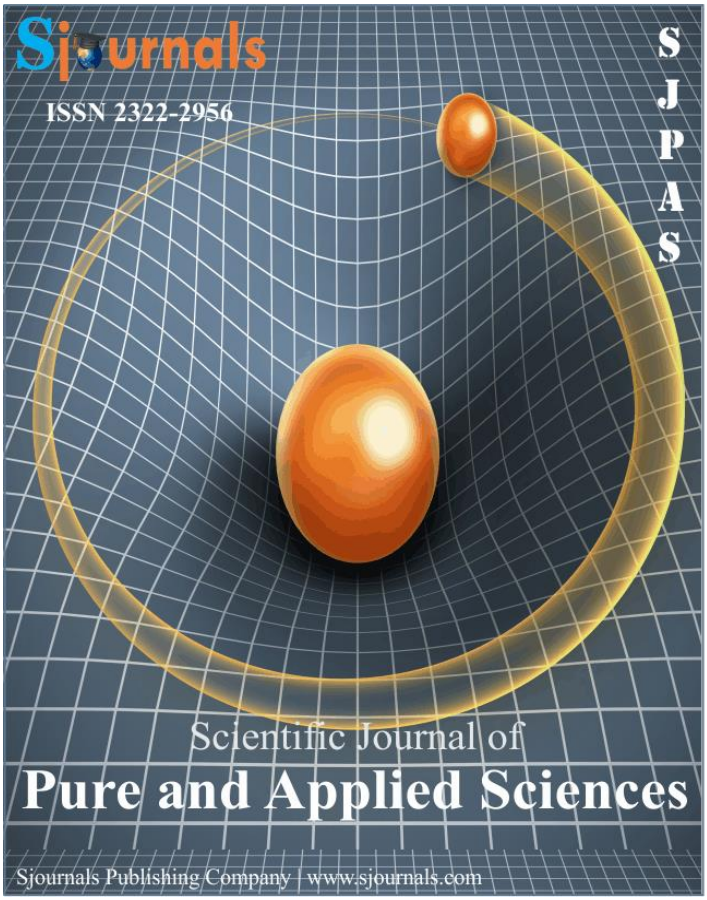

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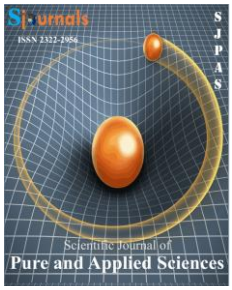

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Review article

MyVista digital platform as an Information and Computer Technology (ICT) tool for student support at Zimbabwe Open University (ZOU)

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ABSTRACT

The study explored the accessibility, usability and sustainability of MyVista digital platform as an ICT tool for supporting the teaching and learning of students at Zimbabwe Open University (ZOU). A plethora of literature points to a positive correlation between Information and Communication Technology (ICT) and open and distance learning (ODL) resulting in active, self-directed and constructive learning. Since the trajectory of using ICT as a tool for student support is a relatively new phenomenon in ODL, it is bound to be characterized by opportunities and challenges of which this study envisaged to uncover. The study is informed by the Theory of Planned Behaviour (TPB) as well as the Technology Acceptance Model (TAM) and is grounded in pragmatism. A mixed methods sequential explanatory design was adopted to collect and analyse data. Predominantly, questionnaires, face-to-face interviews and focus group interviews (FGIs) were used to collect data which were analysed using the Statistical Package for Social Sciences (SPSS) and thematic analysis. Results indicated that, while the usage of MyVista digital platform at ZOU had increased learner support initiatives, there were challenges of access, power and negative attitude in its utilization. For staff, technical challenges were experienced. These challenges were however out-weighed by the opportunities which hitherto had not been fully realised. Recommendations on training and capacity building for students and staff, improved interface and monitoring,

policy support and further research were proffered as strategies for mitigating the challenges and intensifying opportunities.

1. Introduction

Open and distance learning (ODL) is gaining overwhelming recognition as a viable route to higher education for adults who could not benefit from conventional systems due to various reasons. ODL is planned learning that occurs at a geographically different place from teaching, requiring special course designs, instructional techniques and communication through various technologies (Moore and Kearsley, 2008). Awadhiya et al. (2014) conceptualise ODL as an institutional kind of teaching and learning where learner is separated from teacher and peers. This separation between learner and tutor can create a feeling of isolation on the part of the learner and IGNOU (2009) suggests that Information and Communication Technologies (ICTs) play a vital role in bridging this gap. In effect, ICTs have significantly impacted on all educational arrangements and their advancement has increased accessibility ODL and added impetus towards digital learning (Awadhiya et al., 2014). McCarrol and Curran (2013) confirmed that second generation or Web 2.0 internet tools have emerged and are changing the educational landscape and are offering newer possibilities for student support. Research has actually long proven that ICT enabled education has significant positive impact on ODL outcomes (Marshal and Cox, 2008; Christensen, 2002). This implies that there is a desirable link between ODL and ICTs. In Zimbabwe, there is however dearth of research, if any, that has explored the link between ICT and ODL, hence the need for this study. This is because ZOU is the only recognised ODL University that has embraced online teaching and learning in the country.

1.1. Background to the study

Zimbabwe Open University (ZOU) was established as a fully-fledged University through an Act of Parliament on 1 March 1999 and its original mandate was to provide ODL education to adults who due to colonial imbalances and other reasons could not attain tertiary level education during their prime time (www.zou.ac.zw; Burge and Haughey, 2002). Its main mode of instruction has been the hard copy module. Cognisant of the geographical separation of students from their tutors and in response to the global movement towards ICT mediated ODL; ZOU in 2015 developed an ICT mediated tool for student support and termed it MyVista. MyVista is an educational Information Support System (ISS) and has become one of the main ICT and educational innovations for student support at the University. By definition, MyVista is an internet based learning management system that is meant to facilitate the teaching and learning process from wherever one is and at whatever time one wants to access a wholesome learning experience (www.zou.ac.zw). Consistent with Murali's (2009) description of an educational ISS, MyVista comprises hardware, software applications and services associated with ICTs including computing, network and security infrastructure, systems and applications software, internet service and connectivity, bandwidth and policy frameworks. These components of MyVista provide part of a student support package of which student support according to McInnis, James and Hartely (2000) is a range of services that include learning support, counselling and career services as well as facilities that cater for students' academic, emotional and self-development needs. MyVista is an adapted version of Moodle for which Moodle is a free and open-source Learning Management System (LMS) with customisable management features (Dougiamus and Taylor, 2003). Moodle was originally developed by Martin Dougiamas in 2002 to help educators create online courses that are characterised by interactive and collaborative construction of content (Dougiamus and Taylor, 2002).

MyVista is spread across the ten regional campuses across the country and one virtual campus meant for international students. The idea is that MyVista should be accessible from anywhere in the world. It is used as a platform and/or interface for registration, tutoring and learning, communication and result publication. MyVista has been adopted not as an alternative to the traditional hard copy module but as a complementary innovation to expand student support services to include several online interfaces. Kamau (2012) actually observes that ODL has undergone a paradigm shift from its dependence on print media with minimal learner support to the application of educational technologies with adequate content and learner support for distant learners. In these regards, ICT cannot be applied to education in isolation but has to be interwoven with the rest of the traditional learner support tools (Lim, 2002).

MyVista innovation by ZOU entails that, effective ODL should be anchored on computer mediated technology in order to develop, among learners, a sense of purpose and shape critical and analytical competences with respect to disciplinary knowledge (Araln and Adetimirin, 2014). Panagiotakopoulos et al. (2003) allude to a plethora of research findings demonstrating an indisputable relationship between ICT and ODL. ZOU has taken this initiative as part of its quest to fulfill her mission, *'Empowering the world through high quality open and distance learning enabled by technology'* (www.zou.ac.zw). Arko-Achemfuor (2017) reports that the continuous innovations in ICT have opened opportunities for the provision of quality ODL tertiary education that is comparable to the traditional face-to-face mode. This is because ICT offers a powerful support to the teaching and learning processes within the ODL matrix. Consequently, an institution that provides open and distance education requires a structured network with all operational nodes that are inter-connected to each other through a dedicated network so that student services could be easily accessible and student support made effective (Aralu and Adetimirin, 2014; Rahman, 2014).

Considering that Zimbabwe is a developing country and has been experiencing intensive socio-economic challenges for over two decades, it is likely that ZOU's initiative of MyVista could be characterised by gaps and constraints that need attention. These could be related to accessibility, connectivity, usability and cost as a function of inadequate funds for purchasing appropriate hardware and software and for sustaining adequate bandwidth for all the users. A study in Jordan by Mohammad and Huda (2008) concluded that adoption and acceptance of ICT innovations is low in developing countries due to some attitudinal determinants. This trend suggests that possible challenges associated with the utilisation of MyVista as an ICT tool for student support at ZOU could be hinged not only on resource variables but on attitudinal factors too.

Arko-Achemfuor (2017) acknowledges that studying through ODL can be problematic for any student but more so for rural based students due to diverse reasons. According to Mohammad and Huda (2008), poor economies, lack of resources and infrastructure and change resistance are some of the factors that affect effective utilization of ICTs in ODL in developing countries. A study by Aralu and Adetimirin (2014) in Nigeria also noted challenges of poor power supply, lack of network infrastructure, high costs, low skills levels and lack of enabling policy environments as the other possible barriers. Consequently, Awadhiya et al. (2014) propose that it is important to establish facts about ICT access among learners, their ICT usage patterns and their readiness to use ICT for educational purposes, hence the need for the current study. In effect, it is within this context that this study sought to explore the accessibility, usability and sustainability of MyVista as an ICT student support tool at ZOU. The study was fundamentally guided by the following research questions:

- How accessible is MyVista platform as an ICT tool for student support at ZOU?
- To what extent are both students and staff ready to embrace MyVista as an ICT tool for student support?
- What are the usage patterns of MyVista as an ICT tool for student support?

1.2. Rationale and significance of the study

The main rationale for conducting this study was to expose the level of accessibility and readiness in the usage of MyVista in order to recommend strategies to improve its efficacy as a student support tool. The study was also undertaken to uncover the usage patterns of MyVista in order to identify and examine the gaps, challenges and opportunities experienced by both students and staff. In these regards, the results of the study would enlighten ZOU to respond to the gaps and challenges as it moves towards its envisaged mission statement of 'empowering the world through high quality technology enabled ODL (www.zou.ac.zw). Lim (2002) confirms that studies like this are particularly critical to educational research where the object of inquiry is usable knowledge that is responsive to the current or emerging needs and ultimately to solutions of professional, technical, educational and social problems. Therefore, the results of this study are significant in that they have potential to inform policy on ICT innovations and transformation not only at ZOU but at other ODL universities in Southern Africa and beyond. In effect, the application of new technologies such as MyVista in ODL provides an appropriate starting point for delineating the knowledge base required of expert teachers and their students in today's global society (Rahman, 2014). The study would also contribute significantly to the available literature on ICT mediated ODL and would impact tremendously on change management strategies to facilitate migration from traditional to ICT mediated student support. The study will further provide baseline data for future large scale research on educational ISSs in Zimbabwe.

1.3. Theoretical framework

The study is framed on the Theory of Planned Behaviour (TPB) which was proposed by Icek Ajzen (1985) to understand how people's behaviours could be changed. The theory started as the Theory of Reasoned Action (TRA) by Fishbein and Ajzen (1980). TPB postulates that attitude toward behaviour, subjective norm and perceived behavioural control influence an individual's intention to perform a given behaviour or task (Luhamya et al., 2017; Mohammad and Huda, 2008). Although not originally intended for studying behaviours in response to ICT, the model has performed extremely well in studying such domains as engineering and ICT (Sheppard et al., 1988). It has been successfully used in a study by Tan and Teo (2000) to explore factors influencing the adoption of internet banking and is therefore relevant in studying behaviours toward any other ICT innovation such as MyVista. This study perceives that behavioural traits can either promote or hinder implementation of MyVista technology.

The study is also informed by the Technology Acceptance Model (TAM) which was proposed by Davis (1989) to study the diffusion and adoption of new technologies at individual levels and to clarify computer usage behaviour (Luhamya et al., 2017; Mohammad and Huda, 2008). TAM is characterized by two factors, namely: Perceived Usefulness (PU) and Perceived Ease of Use (PEOU). According to Davis (1989) PU is the degree to which an individual believes that using an ISS such as MyVista will enhance academic performance while PEOU entails the individual's belief that use of ISS will retard the intensity of their learning. According to the PU, after a period of time, embracing ICT innovation will result in a strong positive cohesiveness and effect on intention (Mohammad and Huda, 2008). Relative to this study, embracing MyVista technology has potential to increase the effectiveness of ODL at ZOU.

2. Methodology

This is a mixed methods study and is founded on the philosophy of pragmatism. Creswell et al. (2011) identify pragmatism as one of the central paradigms which has been used to underpin mixed methods studies and often makes explicit diverse philosophical positions that can inform research results. It boasts of dialectical stances that try to bridge post-positivist and social-constructivist world views resulting in pragmatic and greater understanding of phenomena. Unlike mono-methods, mixed methods research is seen to produce complementary strengths and non-overlapping weaknesses by utilising the benefits of both quantitative and qualitative research while minimizing on their limitations. It therefore allowed the researcher the opportunity to gain a greater, more meaningful understanding of the phenomenon and enabled answering of questions that may have been less than fully answered had mono-methods been used (Fiorini et al., 2016; Creswell et al., 2011; Johnson et al., 2007).

For this study, the researcher hoped to generate more complete answers to the research questions and to draw conclusions that were based on stronger evidence (Bleisch et al., 2010). For Imran and Yusoff (2015), mixed methods research holds potential for precise, methodologically sound investigations in social research, and hence adds rigor to data analysis through the combination of empirical and descriptive precision. This study utilised a sequential explanatory design which in terms of weighting gives more prominence to quantitative data and timing is sequential (Cresswell et al., 2007). The choice of the sequential explanatory mixed method design was premised on the conviction that the partial integration of data at the analysis stage enables inferences to be drawn across both of the methodological research stages (Bleisch et al., 2010). The research design added value to the study by increasing validity of quantitative and trustworthiness of qualitative findings. Issues that needed further clarity in the quantitative phase were pursued through in-depth interviews in the qualitative phase resulting in the first phase of the study informing the second and the second complimenting the first (McKim, 2017).

The population of the study comprised all permanent academic staff members since they were directly involved with MyVista and all students at ZOU regional campuses. A random sample of 42 staff members and 216 students was used for the quantitative phase while a convenience sample of 9 staff members and 15 students from 3 regional campuses participated in the qualitative interviews. Randomisation was used to negate the effects of researcher bias often associated with non-probability samples (Gibson, 2014; Shenton, 2004) while convenience sampling was meant to utilise participants who happened to be available near where the researcher conducted data collection (Etikan et al., 2016). This saved time. The results from the two phases of the study were ultimately integrated. Structured questionnaires were used with both sample categories in the quantitative phase while in-depth face-to-face interviews were used with staff and focus group interviews (FGIs) with students in the qualitative phase. Descriptive statistics were mainly used in the quantitative phase. Through triangulation, rigorous

data analysis as well as member checking, it was hoped that robust and compelling results (Yeasmin, 2012) would be generated despite use of a small sample. In guaranteeing the ethical conduct of the study, permission was sought from ZOU management and informed consent was secured from all the participants while confidentiality, anonymity and autonomy were maintained throughout the research process. However, the results of the study could not be generalised to other ODL universities owing to the small sample that was used.

3. Results and discussion

The variables in the quantitative phase that were pursued in the qualitative phase as major themes included accessibility, readiness and usage patterns of MyVista. In dealing with accessibility of MyVista the issue of urban versus rural dwelling became dominant during the qualitative stage. Within this context, the sub-themes that emerged included connectivity, bandwidth and availability and sustainability of power supply. From the major theme of readiness, the sub-themes involving induction, training, preference for traditional manual methods and attitude and/or resistance to change as well as preparedness of ZOU for the use of MyVista were generated. Finally, in discussing user patterns with the participants the following sub-themes emerged: marking, tutorials, communication, enrichment, research and academic advisement.

3.1. Accessibility of MyVista

On average 72.84% of the academic staff believed that My Vista was accessible. They reported that it was accessible from the library (71.4%), the computer laboratories (78.5%), and staff offices (85.7%), from home (64.3%), around the campus (64.3%) and wherever there was connectivity around the world (71.4%). However, 64.3% of the staff either doubted or reported negatively on the adequacy of bandwidth to enable the accessibility of MyVista. For the students, MyVista was accessible from the library (61.1%), the computer laboratories (65.2%), around campus (58.3%) and from wherever they were (73.6%). The fact that more students could access MyVista from wherever they were than from places within campus, attests to limited bandwidth reported by academic staff. This shows that while MyVista was accessible, connectivity was not always available within campus due to limited bandwidth. This is evident through lower than average positive response rate to the question on whether MyVista was accessible around the campus. It also appears that MyVista was less accessible to students than to staff. Eighty percent (80%) of the students who ordinarily resided in rural areas reported poor connectivity hence limited accessibility of MyVista. Descriptive statistics indicated a positive correlation between residing in rural areas and limited accessibility of MyVista. There was evidence from the SPSS output that rural-based students experienced most of the challenges of accessibility. According to qualitative data from face to face and focus group interviews (FGIs) the situation was also exacerbated by lack of electricity or power outages especially in rural areas. It emerged that some schools had no electricity at all but it was equally interesting that some very remote schools had electricity and connectivity infrastructure. During FGIs, one student based in rural areas said*, 'I only use MyVista when I come to town. Out there, network is poor and after all, my school has no electricity.'* In a one interview a lecturer insinuated*, 'MyVista is a brilliant development but poor connectivity due to limited bandwidth and persistent load shedding limits its accessibility and efficiency.'* Ideally, Aralu and Adetimirin (2014) and Rahman (2014) concur that an institution that provides open and distance education requires a structured network and dedicated network so that student services could be easily accessible and student support made effective. But the institution should be ready for the innovation.

3.2. Readiness for using MyVista

With regards to induction, 78.6% of the academic staff reported that they were adequately inducted while 71.4% said that they were effectively trained in the usage of MyVista. While it would appear that academic staff was ready for the usage of MyVista, there is evidence that a significant number felt that they were not adequately inducted (21.4%) or effectively trained (28.6%) and therefore were not overly ready for MyVista. For students, 76.4% said they were adequately inducted in the usage of MyVista, 72.2% said they received training and 62.5 % of these pointed out that the training was effective. This is evident that many students were neither inducted nor trained in the usage of MyVista. These are the students who were having difficulties utilizing the platform. Meanwhile, a significant number of those who received training were not happy with its effectiveness suggesting limited preparedness for the usage of MyVista among some students. This was confirmed during interviews. One student quipped, *'I don't know about others but I for one was never even invited for induction or training…. So I*

don't even know where to start…Therefore, each time I use MyVista I seek help from the librarians'. This was echoed by many other students. An academic staff member also commented, *'I appreciate that I attended the training but it was limited in scope and there wasn't enough time for practice.'* Similarly, while 78.5% of the academic staff believed that they were fully prepared for the usage of MyVista, 37.5% of the students said they were not. During interviews, both students and staff insinuated that even the MyVista training manual on the site was not adequately informative and therefore not user friendly.

A relatively depressed percentage (71.4%) of academic staff compared to those who had said they were fully prepared (78.5%) intimated that they were able to fully navigate MyVista and utilize all its functions. For students, 70.8% reported the same with regards to navigating MyVista and utilizing its functions. For both students and staff, it was worrisome that 21.5% could not fully utilize MyVista. It was equally worrisome that 71.4% of the academic staff members and 80.5% of the students instead of 100% preferred using MyVista to manual methods. These results suggest that a good number of both academic staff members (28.6%) and students (19.5%) still could not fully utilize the benefits of MyVista and therefore still preferred traditional manual systems. In the qualitative phase, it was generally observed that elderly students and lecturers preferred traditional methods to MyVista. One elderly senior lecturer expressed that if he had a choice he would stick to manual methods because for him My Vista was labour intensive. This could, however, be a case of resistance to change as propounded by Davis (1989) in the TAM. Another lecturer doubted even the University's readiness for the use of MyVista. She observed, 'Y*ou see, we seem to have rushed this MyVista thing! I don't think the University has put in place sufficient resources for it.'* However, the other argued that the University had no choice but to move with the times. '*We have no choice… whether we are ready or not, MyVista is here to stay. We should actually be talking ODeL not ODL by now ….'* he said.

3.3. MyVista usage patterns

Relating to usage patterns, 85.7% of the academic staff disagreed that they used MyVista only for marking assignments. This suggests that they also explored the other functions of MyVista. They also used it for communication (78.6%), online tutorials (57.1%), academic advisement (57.1%) and provision of additional reading material (78.5%). Depressed response rates affirming usage of MyVista for online tutorials and academic advisement is worrisome. The implication is that while 78.5% of academic staff were fully prepared for MyVista, many were unable to run online tutorials and other related teaching and learning activities. It was observed during interviews that academic staff mainly used MyVista for marking assignments. Many lecturers (57.1%) revealed that they used MyVista only because it was University policy otherwise they would not. This pattern is mirrored with respect to students in which 73.6% of them indicated that they used MyVista because it was more convenient than manual methods and 40.3% that they used it because it was University policy otherwise they would not. Such revelations suggest that not all academic staff and students had absolute confidence and sustained interest in the usage of MyVista as a student support tool. One student actually commented, *'We were taken by surprise, otherwise we were safer with manual because with MyVista you can never be sure whether your registration has gone through or your assignment has been submitted.'* One lecturer suggested, '*MyVista is a good innovation but it was implemented prematurely … before we were adequately trained in all its functions …'*

All students concurred that they used MyVista for registration, assignment submission and accessing feedback on assignments while 86.1% reported that they used it for accessing online modules and 57% for accessing additional reading material. Thus, many students accounting for up to 43% were not utilizing MyVista for accessing additional reading material probably because academic staff was either not posting such material or the students had technical challenges doing so. It also emerged during FGIs that one of the most popular usages of MyVista was viewing of examination results. It can, therefore, be inferred that both academic staff and students were using MyVista but were not utilising all its potential benefits. The foregoing results point to some challenges and opportunities in the usage of MyVista as a student support tool.

3.4. Challenges and opportunities of usage of MyVista

Academic staff members were faced with technical challenges but there was also evidence of technological resistance due to negative attitudes. Negative attitude was mostly exhibited by elderly staff members who were schooled before widespread use of ICT in education. It emerged during qualitative interviews that this was the category of academic staff who indicated that they preferred manual methods to MyVista. However, lack of ease of use due to lack of skill is another likely explanation. One lecturer quipped, *'Using MyVista slows down my pace.*

These computer things are not for us but for the younger generation. I'm better off using the manual methods ...' Limited computer literacy was also highlighted as a challenge mainly affecting the older staff members and students. *'I am old now…am not a computer person. This means that each time I use MyVista, I need to seek assistance which usually comes at a cost,'* said one elderly student. Lack of skills and knowledge about the diversity of MyVista functions was the other challenge which compromised its full utilisation. This was evidenced through academic staff's failure to post additional reading material for students and to organize online tutorials. Qualitative data indicated that staff members were faced with too many settings on the site which they could not handle. The site was also not timely cleaned in readiness for forthcoming semesters since the roll over process was not automatic. A senior lecturer implored, '*There are so many unexplained settings and at times the site is overcrowded with previous semester's work. It is not clear who should clean the site in preparation for the new semester.'*

Using MyVista was also seen as too laborious. One example that persistently emerged was failure to have automatic offline grading sheets. '*MyVista is a good development as we move with the digital era but it is too labour intensive and time consuming largely due to the fact that I have to manually download, complete and upload grade sheets for each course.'* The other concern, which was however not widespread, was that MyVista was corruptible as one lecturer whose format had shifted quipped, '*You see this means that MyVista is not safe from viruses.'* A programme leader actually reported during an interview that the marks for an in class test which he had uploaded the previous day had surprisingly changed. He said '*I am seized with the matter and ICT Department is investigating.'* Some academic staff were also worried that due to lack of an in-built plagiarism check system, students abused MyVista through widespread copying. Asked about the shortcomings of MyVista, a lecturer posited, '*My main worry is that MyVista encourages plagiarism. Students copy from each other or cut and paste large amounts of text without citation.'* This was echoed by other lecturers. The fact that the University could not afford a wider bandwidth suggested that MyVista was expensive and therefore was likely to be unsustainable considering the dwindling economic environment in the country.

Despite these challenges, data point to abundant opportunities for MyVista as a student support tool. The major opportunities included improved real time in providing feedback to students, convenience and lower costs of accessing University services on the part of students. *'If well implemented, MyVista has overwhelming opportunities with regards turnover time convenience and cost,'* said a lecturer. Students were no longer expected to travel long distances to register, submit assignments and get feedback on the assignments and even to access examination information. Students could do all these activities online from wherever there was connectivity. During the FGIs, the issue of convenience and cost continued to emerge. A student based in rural areas narrated, *'MyVista is the most exciting innovation by ZOU. We no longer have to always travel to campus as everything except in class tests and exams is now done online.*' This was echoed by almost all the students and academic staff. This revelation has potential for substantially increasing student enrolment at ZOU if effective marketing was undertaken. MyVista also enabled better time management, high levels of motivation on the part of students and increased responsibility and accountability for students and staff. Ultimately, MyVista would contribute significantly to improved academic performance of students and increase the credibility of ZOU qualifications. Using MyVista means that, academic staff could assess not only their immediate students but all other ZOU students they have never met before suggesting increased objectivity of assessment. During an interview, a teaching assistant asserted, *'MyVista could be used as a marketing tool for ZOU qualifications due to its potential for being the most objective student management strategy.'* Many other lecturers and students also supported this position.

4. Conclusion

This study sought to interrogate the accessibility, readiness and usage patterns of MyVista as an ICT student support tool at ZOU. In drawing conclusions from this sequential explanatory mixed methods study, qualitative results were used to confirm the quantitative results. Interestingly, some unexpected themes such as attitude, resistance to change, ease of use, computer illiteracy, acceptance and age emerged. The TPB guided the researcher in understanding the behaviours influencing accessibility and usage patterns of MyVista while the TAM was key in informing conclusions on the readiness for and acceptance of MyVista innovation. The study concluded that accessibility of MyVista was compromised through connectivity challenges which mostly affected students in rural areas as a result of poor network and power shortages and outages. However, the fact that when

connectivity was available students could access most university services without having to bear the cost of travelling to the campuses was an exciting development for students at ZOU. Staff and students at the campuses experienced challenges caused by limited bandwidth but negative attitudes due to technology resistance played a major part too. While many of the staff and students had accepted MyVista, age was established as one factor influencing non-acceptance. This is comparable to the results of the study by Mohammad and Huda (2008) in Jordan which concluded that adoption and acceptance of ICT innovations was low in developing countries due to accessibility and attitudinal determinants. The study also concluded that ongoing training was not effective because it was not needs based but preconceived. Inadequate capacity building strategies were the cause of lack of skills and knowledge for the full utilisation of MyVista. Existing strategies were not overly sustainable since they lacked policy backing. Despite these gaps, both staff and students regarded MyVista as a positive and exciting student support initiative. Therefore, the study ultimately concluded that MyVista held high potential for the future of student support services at ZOU.

Recommendations

Based on the findings, the study proffered the following recommendations for ZOU to consider:

- ✓ Intensifying ongoing needs-based training and capacity building for students and staff.
- ✓ Establishing training teams at regional campuses and simplifying the online training manual to make it amenable to self-help training.
- ✓ Adopting an in-built plagiarism check and automatic roll-over systems.
- ✓ Developing less congested grade sheets that are automatically fed when multiple feedback files are uploaded.
- ✓ Significantly increasing the bandwidth at regional campuses to a minimum of 500Mb in order to speed up complete migration from ODL to Open Distance Electronic Learning (ODeL).
- ✓ Putting in place intellectual property rights policy reforms to support the effective utilisation of MyVista.
- ✓ Pursuing large-scale studies on improving MyVista operations.

References

Achmfour-Arko, A., 2017. Student support gaps in an open distance learning context. Issues Educ. Res., 27(4), 658-676.

Ajzen, I., 1985. From intentions to actions: a theory of planned behaviour. Heidelberg: Springer.

Aralu, U., Adetimirin, A., 2014. Influence of information support system on ICT use by distance learners in university of Lagos Nigeria. J. Inform. Eng. Appl., 4(9), 31-36.

Arko-Achemfuor, A., 2017. Student support gaps in an open distance learning context. Issues Educ. Res., 27(4), 658-676.

Awadhiya, A.K., Miglani, A., Gowthaman, K., 2014. ICT usage by distance learners in India. Turk. Online J. Dist. Educ., 15(3).

Bleisch, S., Dykes, J., Nebiker, S., 2010. A mixed methods research approach for 3D geovisualization evaluation. A paper presented at the workshop on methods and techniques of use, user and usability research, 13 April 2010, London.

Burge, L., Burge, E.J., Haughey, M., 2002. Using learning technologies: international perspectives on practice. London: Routledge.

Christensen, R., 2002. Effects of technology integration education on the attitudes of teachers and students. J. Res. Technol. Educ., 34(4).

Creswell, J.W., Klassen, A.O., Plano Clark, V.L., Smith, K.C., 2011. Best practices for mixed methods in health sciences. London: Sage.

Creswell, J.W., Plano Clark, V.L., 2007. Designing and conducting mixed methods research. California: Sage.

Davis, F.D., 1989. Perceived usefulness, perceived ease-of-use, and end user acceptance of information technology. MIS Q., 13(3), 318-339.

Dougiamas, M., Taylor, P.C., 2002. Interpretive analysis of an internet-based course constructed using a new courseware tool called Moodle. Proceedings of the Higher Education Research and Development Society of Australasia (HERDSA) 2002 Conference, Perth, Western Australia.

Dougiamas, M., Taylor, P.C., 2003. Moodle: using learning communities to create an open source course management system. Proceedings of the EDMEDIA 2003 Conference, Honolulu, Hawaii.

Etikan, I., Musa, S.A., Alkassim, R.S., 2016. Comparison of convenience sampling and purposive sampling. Am. J. Theor. Appl. Stat., 5(1), 1-6.

Fiorini, L., Griffiths, A., Houdmont, J., 2016. Mixed methods research in the health sciences: A review. Malta J. Health Sci., https://www.um.edu.mt/healthsciences/mjhs

Fishbein, M., Ajzen, I., 1975. Beliefs, attitude, intention and behaviour: An introduction to theory and research. Addisson-Wesley: Reading, MA.

Gibson, W., 2014. Research methods: Theory, Method and Practicalities. London: University of London.

IGNOU, 2009. Defining distance education, ES-311: Growth and philosophy of distance education. New Delhi: Stride, IGNOU.

Imran, A., Yusoff, R.M., 2015. Empirical validation of qualitative data: A mixed methods approach. Int. J. Econ. Financ. Issues, 5(Special Issue), 389-396.

Johnson, R., Onwuegbuzie, A., Turner, L., 2007. Toward a definition of mixed methods research. J. Mix. Meth. Res., 1(2), 112-133.

Kamau, J.W., 2012. The effectiveness of learner support services to distance learners in a primary education diploma: A case study in Botswana. Unpublished Doctoral Thesis. Pretoria: University of Pretoria.

Luhamya, A., Bakkabulindi, F.E.K., Muyinda, P.B., 2017. Integration of ICT in teaching and learning: A review of theories. Makerere J. High. Educ., 9(1), 21-36.

Marshall, G., Cox, M.J., 2008. Research methods: Their design, applicability and reliability. International Handbook of Information Technology in Primary and Secondary Education. New York: Springer.

McCarroll, N., Curran, K., 2013. Social networking in education. Int. J. Innovat. Digit. Econ., 4(1), 1-15.

McInnis, C., James, R., Hartley, R., 2000. Trends in the first year experience in Australian universities (In Prebble, T. et al., 2004). Impact of Student Support Services and Academic Development Programmes on Student Outcomes in Undergraduate Tertiary Study: A Synthesis of the Research. Report to the Ministry of Education in New Zealand. 4, 51-86.

McKim, C.A., 2017. The value of mixed methods research: A mixed methods study. J. Mix. Meth. Res., 11(2), 202-222.

Mohammad, M.F.K., Huda, B.H.I., 2008. Toward an information and communication technology development in developing countries. Communications of the IBIMA. 4, 135-140.

Moore, M., Kearsley, G., 2008. Distance education: A systems view (2nd ed.). London: Thomson Wadsworth.

Murali, M.R., 2009. Web-enabled user support services system in distance learning. Proceedings of the International Conference on Interaction Sciences, Information Technology, Culture and Humans, Seoul; Korea.

Panagiotakopolous, C., Lionarakis, A., Xenos, M., 2003. Open distance learning: Tools of information and communication technologies for effective learning. Athens: Greece.

Rahman, H., 2014. The role of ICT in open distance education. Turk. J. Dist. Educ., 15(4), 162-169.

Shenton, A.K., 2004. Strategies for ensuring trustworthiness in qualitative research projects. Educ. Inform., 22, 63-75.

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Yeasmin, S., 2012. Triangulation' research method as the tool of social science research. BUP J., 1(1), 154-163.

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