Investigating Technology User Acceptance of Virtual Learning Environments in Higher Education Institutions in Qatar

A dissertation submitted in partial fulfilment of the requirements for the degree of Bachelor of Science (Honours) in

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Declaration

I hereby declare that this dissertation entitled Investigating Technology User Acceptance of Virtual Learning Environments in Higher Education Institutions in Qatar is entirely my own work, and it has never been submitted nor is it currently being submitted for any other degree.

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Date: April 22nd, 2016.
ABSTRACT

Since the rapid growth and development in technology, specifically in the Internet followed by the popular attitude pertaining to using computers and technology, this resulted in the birth of new gadgets and tools which would support various kinds of firms and institutions in conducting courses which are mediated by such new technologies, one such technology refers to ‘Virtual Learning Environment’ (VLE) (Belmonte & Grossi, 2010). There has been an influx of distance learning courses along with the emergence and implementation of a VLE. A VLE can be described as a kind of e-learning software which permits online interactions of different types to occur, this usually takes place between the tutor and the learner (student) (Dunn, 2003)

The fact remains that the implementation of technology used for the purpose of teaching and improving learning in higher education has shifted and in fact progressed from its embryonic experimental phase to being deeply rooted and interwoven as a basic component of numerous colleges and university curriculum in the last 10 years.

One of the most significant aspect which has modified has been aggravated by the extensive initiation and implementation of VLE e-Learning technology. Interestingly, one of the attributes of the technology refers to the fact it integrates various tools and resources in a combined system. In order to implant VLE within the context of a university curriculum is not something which simply refers to using an individual mediation, but to modify the overall experiences of teachers and pupils alike with regard to teaching and learning also referring to the senior
management of that specific institution involved. It must be noted that looking back at the previous literature published on VLEs, it has primarily focused on studies which clearly mention and conduct a comparison of system operations, defining small-scale and short-term operation or merely offering speculative theories and speculations. In fact, there has been a very limited focus laid on evaluating the impact and effects of VLEs use on the participants, specifically focusing on a large number of users in the Middle East. It is within this context, this thesis presents an assessment of the introduction, management and impact of the VLE e-learning technology within the set of universities and colleges in Qatar.

An attempt has been made to evaluate the effectiveness and user acceptance of how VLE can be managed by students and teachers, whether it contributes towards enhancing one’s learning experience. Secondly, the impact of the VLE learning on teaching and learning within the context of studying in a university. Thirdly, has the VLE-learning technology contributed in cutting down costs of the way courses are conducted or delivered. In order to answer these questions, a quantitative research method has been implemented where a survey was designed and distributed amongst Qatari students in universities in Qatar. It would be interesting to note that the change management concepts would also be implemented in this context in order to demonstrate how students have learned and the effect of such a technology on them. The purpose of this research is to emphasise on the significance of technological change within an academic institution plays an increasingly pivotal role in terms of its use and acceptance (Osadiya, 2008). The data recommends that the user acceptance of VLEs in Qatar exists within the higher educational institutions. Although based on a very small sample, the research study also recommends that pedagogical perceptions and techniques linked with networked learning is possibly emerging in the curriculum in Qatar. Furthermore, the theoretical research structure of
e-learning adoption has been featured in the literature review is based on the technology acceptance model. It is essential to emphasise that the study offers an indicator of pupils’ acceptance of e-learning along with recognizing the significant factors which are seen to be pivotal towards its successful usage. The results will cultivate the comprehension of pupils’ acceptance of e-learning and will support in its consistent application at Qatari universities and colleges.
I would like to thank my supervisor Mohamed Moustafa for his constant support, guidance and assistance during the research process of this dissertation.
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INTRODUCTION

There is no denying that there have been prominent technological modifications and transformations which have taken place in recent years, which as described by Castells (1999) as the ‘revolution in IT’ have clearly inspired all areas of human activity, this specifically refers to the educational arena. It is within this context; systems of distance education are featured with the use of tools provided by the latest technologies in a bid to arbitrate the procedure of teaching and learning. Taking this into consideration, it is significant to provide a background on the significance of this subject and why it is being conducted before we can actually proceed towards developing a theoretical framework of the respective subject.

To begin with, Qatar is an oil rich country based in the GCC (Gulf Cooperation Council) region. Whilst a small island, however Qatar has significantly progressed in the last 8 years whereby the economy has witnessed a great deal of transition in terms of building the latest buildings, shopping malls, investing abroad in countries like the U.K and others, i.e. real-estate investment and others. Furthermore, Qatar has been blessed to have a stable political structure in place along with leadership which has positively contributed towards the success of the country. Similar to U.A.E, Qatar has a short history but the degree of progress it has made is simply commendable.
Interestingly, historically speaking Qatar was once seen as one of the poorest Gulf countries, however it is now considered as one of the richest states in the GCC region. Fundamentally, Qatar relies on its huge income it earns from its huge gas reserves, which extend from regional to international aspirations. Furthermore, Qatar has been actively involved in politics and promoting peacekeeping, for instance: making efforts to accomplish an Afghan peace deal. It made news waves when it bagged the bid to host the 2022 FIFA World Cup (Qatar country profile, 2015). In addition, Qatar has an advanced diversification; it has a robust industry, tourism, infrastructure and finance. It would be rightful to state that the development in Qatar is seen to be one of the most robust in the GCC region, considering the fact Qatar is seen to be one of the best equipped states to deal with the feeble oil market. As a result of its energetic non-oil and gas market and the bounce back in gas production Qatar’s development rate is anticipated to remain high (Major Macro Economic Indicators, 2016)

Generally speaking, Qatar’s attitude towards technology adoption and implementation can be described as ‘positive’ and ‘vigorous’ since there has been a great deal of emphasis on IT (Information Technology) growth, this has typically been within the realm of infrastructure improvements. In fact, the Qatari government has been very active in bringing IT oriented schemes and IT driven changes which are infused various public and private areas. One prominent example is the development of the ‘Hakoomi’ (an internet platform) that consists information linked to ministries, authorities and councils; it includes economic information pertaining to firms and businesses, it also consists of channels for paying traffic violations and utility bills. Furthermore, the facility to apply for an online visa and several other similar initiatives. The launch of ‘Hakoomi’ can be defined as a ‘virtual government’ which acts as a gateway to various federal and public services. With such substantial evidence it clearly indicates
that Qatar is a country which is open to new challenges and is ready for taking on board technology, considering the fact it has been transformed with the launch of the implementation of updated and modern technology with the primary objective of giving more control along with the preferences offered to the users which shall assist them in improving and cultivating their learning experiences (Ordonoez de Pablos, 2010). In today’s technology oriented world, the role of technology becomes apparently significant, it is no longer limited to a certain arena of our lives, but generally speaking, it is pretty much touching the way we interact with each other for communication, conducting business and even seeking education.

Primarily, my motivation for conducting this research study has emerged from the fact there has been almost no thesis or extensive research study conducted on users’ acceptance of VLE within the context of Qatari college and university pupils. Whilst conducting the initial research on this subject, I noticed that there was plenty of information on VLEs and its implementation and user acceptance, but in other countries which did act as a stepping stone to build my knowledge on the VLE. This kind of research study will definitely help create an understanding in the pattern of usage of VLE, assessing the openness towards e-learning and technology in a country such as Qatar. Given the fact Qatar is progressive towards implementing technological changes in improving its services across different sectors, this thesis will be a good starting point which I am sure would interest researchers, academics and those who have an interest in technology.

Education and learning has certainly transformed and evolved greatly in different ways and means which has assisted people in possibly getting educated in interactive methods. In fact, if we evaluate the basics, one can observe they have certainly amended in terms of where and how people like to be educated. According to the National Strategy for Higher Education to 2030 in Ireland (DES, 2011) it has apparently explained the role of technology and emphasized the
significant role its playing within the context of the provision of teaching and accommodating the learning experience. In fact, it defines a system that needs to be receptive in order to fulfil the requirements of a significant diverse student population. The growth in technology-oriented learning consists of the significant dependency and use of virtual learning environments in order to support learning (DES, 2011)

We begin by evaluating the background for understanding the fundamentals of VLE, defining what it is all about, its characteristics, benefits and drawbacks respectively. By definition, a VLE refers to a virtual learning environment which is an online group of tools along with spaces which has handled by an institution for the purpose of utilizing in regards to assisting learning and teaching respectively. Interestingly, the VLE is password safeguarded and there are numerous privilege settings. Usually, learners are signed up for a specific course or courses which are handled and overseen by the assisting staff or the teaching faculty. As the name suggests ‘virtual’ referring to the course being conducted online which provides the learner access on a 24-hour basis and 365 days annually with only a very little inconvenience which comes down to when the system is actually undergoing some form of system update, upgrade or IT maintenance. Typically, a VLE will generally be used for distance learning courses which consists of learning, teaching along with assistance which occurs within the context of the VLE along with the conventional taught courses where the VLE is utilized to further assist the learners. In fact, the later use is known as a ‘blended approach’ (Use of VLEs with Digital Media, n.d)

There are four typical tools which are included in a VLE. Firstly, communication tools (these consist of discussion tools, chat, blogs along with wikis). Secondly, evaluation tools (this includes electronic submission and quizzes), thirdly, storage of documents (this includes digital
media) and lastly, administration (this includes grades, enrolment and tracking). Interestingly, there are some teaching tactics which use akin tools to a VLE, however external in the VLE zone. Such a technique typically uses a third party tools, for instance: Google Documents which is typically known as ‘web 2.0’ tools (Use of VLEs with Digital Media, n.d)

In terms of the functionality of VLE, this can be segmented into 5 primary areas. Firstly, information: this refers to the distribution of organizational notices, news, other information and documents, i.e. schedules, regulations, announcements and syllabi. Secondly, content: this refers to making available various electronic resources in different kinds of media, these can range from reading lists, video demos, lecture notes, hyperlinks, podcasts to all the way to external content which is hosted on the Internet in any location. Thirdly, communication; this includes online tools intensifying face to face contact via facilities, i.e. moderated discussion fora, mailing lists, wikis along with messaging. Fourthly, evaluation or assessment: this includes a combination of summative and formative evaluations which can be assisted in regards to questionnaires, assignments, course work, tests. Interestingly, feedback in this context can be offered by various techniques, media and approaches that consist of video commentaries and annotated scripts. Lastly, management: this consists of offering management tools, which are functioning at varying levels. Furthermore, they also assist in the actual planning and delivery of courses across different divisions and segments which range from course registration, student supervision and the administration of grades or marks. They also offer a solo point of online entry which is not simply limited to teaching purposes, but even for the sake of administrative context, i.e. institutional audit being one of them. In essence, the VLE is said to have the scope to offer a key emphasis for pupils and staff members in the same manner, regardless of their geographic location, assisting in consistency with regards to the learning and teaching
procedures. For instance, teachers can possibly utilize the service for the purpose of assisting in the preparation of classroom materials, saving them in a secure place and then refining them. It must be noted that VLE systems generally are embedded with scheduling facilities which make it possible for pupils to download the information and synopsis prior to a lecture, however lecture notes and slides could possibly be issued after the lecture has actually been conducted (Trafford & Shirota, 2011)

Interestingly, the application of VLE has become significant for the educational sector in the last 10 years, in fact, it would not be wrong to state that it is clearly taking advantage of a ‘real e-volution’ where the majority of schools and universities are using VLE which is seen as the focus of their teaching along with e-learning programmes, it is fairly virtual in nature (Why you should use a Virtual Learning Environment, n.d)

Hoare (2006) notes the changes taking place in technology have provided an excellent platform for distance learners who can easily access information to their respective institutions, assisting campus-based pupils to study on the go. He distinguishes distance learning and studying on campus becoming significantly phony. Given the fact, the Open University is one prominent name from the U.K who specializes in providing distance learning courses, such a university has certainly increased not only the quantity, but even the quality of face to face seminars, conventional bricks and mortar institutions who are assisting pupils in both ways; on and off the university campus via virtual learning environments (VLEs) which are based on commercial or open access platforms. According to the Joint Information Systems Committee (JISC) who clearly assists the utilization of ICT within the context of universities and colleges was noted to have said that it treated distance learning simply as ‘e-learning’. As per Dr Philip Pothen, the
communications manager at JISC, he emphasized on the fact JISC was searching for various podiums, i.e. personal digital assistants, iPods and mobile phones.

Interestingly, looking back the 80s, a group of Early Adopters initiated an experiment where they focused on e-learning solutions, nonetheless they were simply limited in their distribution and they were unable to have an important impact in modifying the way in which teaching must be conducted (Blin & Munro, 2008)

With regards to the most popular platforms which are mostly used globally, the open-source code system ‘The Modular Object Oriented Dynamic Learning Environment’ (Moodle) is said to be exceptional as a result of its ease of use, emerging from its simplicity along with user friendly interface and visa the interaction which is handled and afforded by its various tools, i.e. discussion forms, wikis, diary, etc. Such fame of VLEs is apparent in the virtual community of contributors and co-workers who are consistently working towards establishing and updating its tool, creating resources available such that Moodle can be even used on a mobile phone (Carvalho & de Oliveira, 2014)

There are other popular VLEs which are used within the educational sector, this consists of WebCT and Blackboard. In order for a pupil to gain access to a virtual room, they can either as a repetition or an extension of their actual (offline) classroom, which is an obvious benefit for learners and teachers accordingly nature (Why you should use a Virtual Learning Environment, n.d)

The creation of VLE rooms can be done definitely in any format, approach and shape. The role of enthusiasm is central here since it is considered as the key ingredient and factor with regards to the production of rooms in Fronter as sustaining the interest of the visitor which either makes
or breaks their e-experience of the school VLE. Furthermore, the significant use of the Internet has certainly created a demand and need for VLEs to be shaping the future of educational organisations and higher educational institutions. A good example is the BBC Active Video for Learning which provides licences for BBC TV programmes which are used by educational organisations for the objective of educating and providing training nature (Why you should use a Virtual Learning Environment, n.d)

O’Leary (n.d) sheds light on the significance of VLEs by pointing out there are various methods of using them, these consist of simple uses of a restricted variety of tools to assisting for face to face courses, all the way to complete online courses which create an elegant use of various VLEs facilities. On a simple level, this is considered easy to use the web in order to distribute course materials and conducting course administration. Within this context, one can refrain from logistical complexities and the technical difficulties of creating a website from the ground up. Secondly, acting as a gateway to provide extra online materials (this can possibly include of pages consisting of external links.

On the other hand, with regards to the complex side, one can note this consists of offering a means of communication between pupils, teachers and external contributors. Fourthly, providing a shell for computer assisted learning resources. Fifthly, offering extra exam practice and managing summative exams. Sixthly, offering extra assistance and practice for campus based pupils. Seventhly, acting as a podium for collective pupil projects. Lastly, delivering an entire online course with completely integrated activities, for instance: distance learning courses (O’Leary, n.d)
With respect to the framework for VLE use, we can observe that there are various methods of using VLEs to assist or deliver courses as outlined by Mason which clearly recognizes there are three models. The first model refers to content and support model: this entails pre-prepared content which is either delivered within a print version or an online one whereby the assistance is offered online. In terms of content and assistance, these are not seen as the key components to each other. Interestingly, within this context, online assistance is seen as a supplementary option and is not merged into learning activities. This is followed by the second model ‘wraparound model’ which features a combination of pre-prepared content along with online learning activities. In fact, the learning activities consist of online discussion and collective activities. Lastly, integrated model, this is probably where the majority of the learning is actually occurring through collective online activities and content which is predominantly decided by the learners, this comes down to an individual or group decision. It is within this arena that learning is oriented around a pupil and highly collective. There are other beneficial models for the purpose of conducting an assessment virtual learning environments and establishing online activities that consist of Liber and Britain (O’Leary, n.d)

As it is with any kind of technology, there are pros and cons to it, the same pretty much is applicable in the case of VLEs. It must be emphasized that individually speaking, VLEs holds no educational worth, unless they are accompanied by the educational element to it. This comes down to the way a specific online course has been formulated and conducted which can contribute towards making the course valuable and boosting its competency in making it an effective course. The first advantage pertains to the VLE being an easy online delivery of materials. Secondly, ease of use for pupils and lecturers. Thirdly, it broadens pupil access on and off campus to learning materials and resources. Fourthly, providing a resilient form of assistance
for teachers and educators who will not need to be restricted to a specific location or time in order to provide assistance and communicate with pupils. Fifthly, VLE has the prospects for developing new methods of learning and teaching, i.e. active and independent learning that makes good use of online communication, collective learning and online evaluation. On the other hand, there are certain drawbacks to VLEs; firstly, they can be seen as a dumping location for materials which are not specifically formulated to be conducted online. Secondly, copyright and IPR of materials and information needs to be taken into account. Thirdly, off campus access to hardware and networks can pose to be a problem for pupils and teachers since this clearly raises an issue of fairness. Fourthly, the requirement to plan online assistance in a cautious manner in order to refrain from any excessive load. Lastly, such independent learning still requires to be navigated and assisted. There is a requirement for relevant training and continuous assistance which is required for teachers and pupils. Interestingly, there are other issues which should also be taken into consideration, these include: interoperability, future-proof authoring and growth. In the case of interoperability, this refers to how this will function with other information systems. Also, how VLEs strength and understanding of interacting with pupil record systems. Secondly, in the case of future-proof authoring: this refers to the guidelines which are in the pipeline that permit teachers to shift content from one VLE to another. Finally, the growth of VLEs, this is something in its embryonic phase and anyone VLE is unlikely to meet all requirements (O’Leary, n.d)

Whilst the advantages of switching to VLE are seen to be apparent, there are abundant of aspects to take into consideration. Firstly, since learners of this time and age are considered as ‘digital natives’, this seems like a drawback for the educators since they end up making a comparison of their own IT skills which clearly are poorly lacking as they feel they are unable to cope with the
tough competition of the youth who are tech savvy. One cannot neglect the fact that creating VLE as creative and flexible as leading social networking websites like Twitter, Facebook and Tumblr are a tough competition for the conventional VLE. It becomes impossible for an IT expert tutor to battle with their pupils on this level. This is possibly one of the reasons why almost all VLEs are defined by teachers as ‘bulky’, ‘elemental’ and even ‘thwarting’. Unfortunately one of the major drawbacks pertaining to VLEs generally speaking is the security aspect where as a result of the security of college or university’s MIS data, users will be expected to physically log in to their VLE portal, so they will not be able to post anything in the discussions, posts or even comments at the convenience of their mobile phones, smartphones, Androids, etc., this at times is considered as a major disadvantage for pupils and even teachers nature (Why you should use a Virtual Learning Environment, n.d)
LITERATURE REVIEW

Milis, Wessa, Poemans, Doom & Bloemen (n.d) advocate the thought of promoting E-learning which interchangeably has been used with VLEs as effectively assisting social interaction, knowledge development, collective and scientific testing even if the pupil population is very huge.

In regards to the characteristics of the VLE, there are three segmentations namely; student features, designer features and tutor features (Ryan et al, 2000). Student features can be regarded as the characteristics accessible for pupils as they log on to the virtual learning environment. Usual characteristics entail course content which come in the shape of whiteboard, web pages, bulletin board, e-mail and chat which provide a shared podium of conducting communication, tests and assessments which are marked by the system, student presentation arenas, academic calendar and grading information (Keller, 2007)

Dillenbourg (2000) likes to define VLE in a very creative manner by stating he does not like to limit its description to simply websites which share their resemblance like a ‘Nintendo’ game. In fact, the demonstration of the learning environment phases ranges from text-based interfaces to the highly complicated 3D graphical output. Interestingly, the primary issue here does not refer to the actual representation per se but instead what pupils will really do with such kind of representation. He goes on to explain that representations are not impartial but they definitely inspire the way pupils work. Interestingly, he describes a VLE as a virtual space which is like a ‘virtual museum’ where the purpose of the virtual space is to duplicate physical rooms, the pupils
would discover it, room by room. Within a museum, the information space is organized by ‘painting schools’ or centuries or countries.

Risquez, McAvinia, Raftery, O’Riordan, Harding, Cograve, Logan-Phelan & Farrelly (n.d) indicate that student fulfillment with the VLE is closely connected with the educational design behind the use of tools. In regards to one of the methods where educational design embodies within a pragmatic sense which links to attendance, which according to them is seen as a primary issue which is typically raised by lecturers as a reasoning not to put material on the VLE.

Babic (n.d) notes the usability and quality of the VLE as the primary influencers on the learning outcome (referring to pupil fulfillment). In terms of the complications pertaining to the actual usage of e-learning within the context of teaching, the outcomes of the research display the gradual behavior of teachers taking e-learning onboard for teaching purpose. Furthermore, the the quality of education process is seen as a key factor which holds great responsibility for pupils accomplishing success. Developing the blended learning environment is simply a complex task since it needs tutors to re-consider the existing proficiencies and create new ones, it is within this context that during such a process it becomes necessary to comprehend the idea of the quality behind an e-education (Babic, n.d)

Within a theoretical framework and models of accepting technology and innovation, it is deeply rooted in the theory of social psychology created by Fisbein and Ajzen (1975) titled ‘Theory of Reasoned Action’ (TRA) which notes the primary factors inspiring the behavioural determination namely; attitude toward behaviour and subjective norm. It is within this context, if we observe that if users have the desire to accept technology, they will end up doing that, however this will only happen if there is a strong backing and inspiration of the actual
environment. According to Ajzen (1991), he explains in his Theory of Planned Behaviour (TPB) model the factor of anticipated behavioural control to the aspects of approach toward behaviour and subjective norm which emerges from the self-efficacy theory and is a condition for modification in one’s behaviour. Looking back at the history of the first models which accepted technology which has also been broadly used in the research context is the TAM (Technology Acceptance Model) which was created by Davis back in 1989. As per the TAM, the user’s behaviour towards technology is primary inspired by various factors. Firstly, anticipated benefits and anticipated convenience. Furthermore, he goes on to explain that anticipated benefits can be described as the potential user’s subjective possibility that using a certain application system would boost one’s performance, whereas anticipated ease of use is described as the extent to which the potential user anticipates the target system to be free of struggle (Babic, n.d)

Konrad (2003) believes there are pedagogical issues within VLES which need to be taken into consideration. Considering the fundamental and prevalent model of e-learning in the Anglophone commercial world, i.e. blended learning; where the terminology blended learning is defined as a solution which merges various delivery models, i.e. collective software, web-based courses, EPSS along with knowledge management practices. Interestingly, he goes on to emphasise that any teacher who has had experience teaching online would definitely debate that the demands on online tutors tend to vary from those of conventional ‘offline’ tutors even though the usual issues and situations they are tackling fundamentally are pretty much identical. The role of an online tutor is to handle a course, navigate and guide pupils throughout the entire learning experience, encourage them, interact with them, evaluate them and handle any potential conflict or problems which emerge.
Milis, Wessa, Poelmans, Doom & Bloemen (n.d) conducted a research on the user acceptance of VLE by evaluating the differences in the pattern of gender. As per the research design, it tested three undergraduate statistics courses with large pupil populations. Interestingly, according to the findings, it illustrates that gender does not as such play an important role in the model. On that account there are other variables, i.e. anticipated benefit, convenience along with system quality and to an insignificant extent linked learning behavior have a far better prognostic value. This clearly illustrates that as such there is no direct impact of gender on the overall level of fulfilment with the VLE. Thence, there is no pivotal impact of gender on acceptance and usability.

Dillenbourg (2000) believes students are not simply active in using VLE but even actors where they are not simply limited to consuming web information but in fact they are sharing information but contributing to information as ‘producers’, they will make their entry into the game. Interestingly, there is quite a distinction when it comes to actually drafting a critique of a book which can only be read by the teacher or which can be read by anyone. Furthermore, with web-based education, this is typically linked with distance education, however in essence and reality it is broadly used for the purpose of assisting presential learning.

Lameras, Paraskakis & Levy (n.d) used a phenomenographic research method for their research study where their pilot study findings indicate presenting interesting subjects which were capable of encouraging pupils to share their feedback was seen as significant in terms of a pedagogical strategy.

Abbad, Morris & de Nahlik (2009) refer to how the majority of the popularity of technology use has been widely researched and studied in developed countries. In fact, it is the developing
countries who can definitely gather and gain a lot from taking advantage from the Internet and the IT industry generally since they have been overshadowed within this context. In this research they focus on Jordan which tackles with an e-learning experience and evaluating the factors which are supporting student acceptance of e-learning technology. Furthermore, they explain how the primary components of learning processes are based on the interactions taking place amongst pupils, the interactions between staff members and pupils, and the partnership in learning that emerges from such interactions. Interestingly, one of the most prominent source of growths in e-learning has taken through technologies which are designed to foster and empower increased learner interaction.

Lingard (2007) notes there are various factors which have contributed towards driving and witnessing a significant boost in investing and using learning technologies and VLEs in UK universities. One of the first reasons is the development of technology in recent years. The fact remains there has been a boom in the use of ICTs across various levels in society, specifically looking at the last 16 years where the Internet has evolved rapidly.

Al Hogail & Mirza (2011) point out that the application of VLE in any higher education institution needs a very structured and clear strategy in order to have a fruitful outcome. Furthermore, the truth worth of VLE is not constrained to its capability to conduct and communicate with anyone at any given time and any location but in essence it comes down to its capability to conduct the right knowledge to the right combination of people at the right time. It is therefore right timing playing a vital role contributing towards its making or breaking. In order for this to proceed, it is essential to take into consideration a structure of change which must be developed. They believe the procedure of change management in regards to application of e-
learning within a general context has been insufficiently studied within the literature aspect and needs to be investigated in further detail.

No denying that the implementation of VLE comes with its baggage of resistance to change in any respective higher education institution, college or university where such a process if applied for the first time will create a culture of conflict. It is therefore within this context that resistance to change is something that needs to be considered and not neglected. By taking into consideration the expected resistance to change, it would enable the institution to focus on preparing on how to go about helping individuals to understand such amendments smoothly. Furthermore, individual tutors and lecturers need to be encouraged to ensure technology’s purpose and motive has been completely comprehended and delivered (Sharpe, Benfield & Francis, 2006)

The attitudes of early adopters are totally differentiated from that of later adopters within the context of personality variables. As per Rogers, they tend to have a great sense of appreciation and are possess a greater capability to handle abstractions, intellect and greater coherence along with a better capability to deal with ambiguity and danger along with a supportive behaviour toward change. Interestingly, early adopters indicate various communication pattern within the innovation decision process as compared to their later counterparts. There is an increased social engagement, more change agent contact, greater exposure to media along with interpersonal communication platforms, involved in more active information seeking and possess an extensive knowledge of the innovation. He does not limit this change to individuals adopting but even organisations. Rogers (1995) talks defines there are three kinds of organizational innovation decisions namely; optional, collective and authority decisions.
Looking back at the primitive days of learning technologies, they did not have a proper structure and lacked strategy, this is probably because ICTs were only launched by individual energetic tutors however, this trend has extended and there has been an improvement in terms of creating institutional strategies which are based by the national ones (Lingard, 2007)

Dillenbourg (2000) noted the problems associated with VLE, whereby it may not be considered as an ideal solution for e-learning and distance education. He points out that an apparent opportunity of VLE by providing an example of teachers. Teachers tend to experience that if pupils would use e-mail, they would generally end up start asking smart questions on a frequent basis. However, in reality according to the writer within the context of web-teaching, this seldom happens. In fact, the majority of the email conversation comes down to the management of learning.

Not everyone seemed to patronize the implementation of VLEs, in fact there were academics who showed their disapproval given the fact the VLE was implemented from the top without real opportunities for argument and bargaining. The resistance to change aspect is a significant issue which cannot be neglected since it poses a major challenge to the competent application of VLEs. In fact, the application plan needs to be delicate to the various requirements of divisions and users with various VLE adoption targets which departments are expected to fulfil, along with various training programs displaying the wider goals of the change management process (Beastall & Walker, 2007)

Donkor (2013) believes there are various reasons which tend to be associated to the attitudes teachers may have towards the launch of new technologies into their practices. This can possibly emerge due to the lack of confidence relating to the use of technology, to the need to compete
stringent curriculum needs within a certain time, taking into consideration the targets and their pupils are expected to accomplish. The debate in this context comes down to the fact that most of the teachers will choose what they seem to trust the most with regards to conducting the curriculum. This is possibly why some teachers may not want to use a new technology for the purpose of learning, therefore displaying a negative attitude and resistance to change which can be truly problematic in this case.

Van Raaij & Schepers (2006) observe that subjective norm impacts systems usage only in an indirect manner through anticipated benefits which clearly displays a process of internalization which occurs. The feedback of significant referents is seen to become an interwoven element of the belief structure of the participants. The internalization can be defined as a slow process and hence the longer an individual is working with a system, the less salient idiosyncratic norm becomes as a direct predictor of use.

Sharpe & Benfield (2005) explain there is more to VLEs for an individual, this refers to the actual emotional experience the VLE bring to the learner. In fact, teachers are usually more worried about the isolation aspect. These emotions are not necessarily positive, for instance: when they are positioned to work independently online, they tend to feel a sense of annoyance and irritation along with various aspects of the course which would lead them to feel in such a way.

O’Rourke, Rooney & Boylan (2015) explains not everyone strongly advocates the concept and implementation of VLEs, this includes ‘early adopters’ as well who do state that it contributes towards the improvement of teaching and learning, however the significant number of users have defined the usual VLE use as a notes bank technique.
If one imagined these changes in VLEs took place rapidly, this would be a wrong statement since these changes took place slowly over a period of time and they were definitely not radical. Also, the teaching members were usually lacking optimism and they were keen in using the ICT within their teaching arena which pertained to the support and management employees (Collins & van der Wende, 2002).

Back in 2013, O’Rourke, Rooney & Boylan (2015) conducted a research study at the Dublin Institute of Technology (DIT) where they were interested in researching on their academic employees were using the VLE within the teaching practice arena. Furthermore, they were interested in finding out whether the academics were fully familiar of such technologies and if so, how they were utilizing them. Interestingly, the results displayed the popularity of VLEs used amongst academics, they possessed a high level of interest along with familiarity with other technologies for the purpose of learning and teaching. Nonetheless, there was a minority who only limited their use to the academic arena along with high levels of their concerns pertaining to effort and time which is consumed in using such technologies completely.

Rienties, Giesbers, Lygo-Baker, Ma & Rees (2014) take into consideration the suggestions made by Teo (2010) relating to the dire need of further research required in order to take into account the correlation between the intention to establish learning via ICT, the realistic use by the teacher and how these are connected within a VLE framework.

According to several researchers (Browne et al., 2006; Kinchin, 2012; Sanchez-Franco, 2010) experts and pupils discovered it was confusing that an extraordinary body of academic employees are not completely involved with technology-enhanced learning.
Yeou & Doukkali (2016) found the popularity and success of Moodle along with various web-based learning systems in higher education was not possible if pupils did not use such systems. According to their research study set up in a Moroccan university, the data findings indicate that technology acceptance model is still a sturdy theoretical model whose validity can prolong to blended learning settings. Interestingly, the outcome notes the significance of computer self-efficacy and anticipated benefits within the accounting subject for attitude and Moodle usage.

Pirttimaa, Takala & Ladonlahi (2015) advocate the use of technology in the case of dyslexic students, they emphasise that technology is capable of motivating students who have problems with leading and writing skills. In fact, computers and different assistive technologies are capable of assisting students to exploit beyond what they have formerly accomplished.

Newland, Pavey & Boyd (n.d) recommend a VLE can be improved if it developed a dedicated discussion board and informal online support groups in order to outline issues and offer assistance to provide extra VLE based quiz exercise. Secondly, within the context of appropriate use, it would be imperative to take into account the nature of the subject which needs to be evaluated and use the kinds of questions respectively. Thirdly, strategic: within a summative evaluation, it is essential to contact institutional policy on how to go about using online evaluation. Fourthly, sharing information: motivating digital submissions of course work to increase resilience of VLE and discovering the gradebook facility within the VLE package. Lastly, interoperability: liaising with the learning and teaching support unit in order to discover the nature of third party software to improve the evaluation tools within the respective VLE.

Youretz, Fenelon & Wrench (2008) agree with the notion that not all pupils are comfortable with new technologies, whereby some non-traditional pupils would require assistance in learning
basic computer skills. They refer to the findings from the Sloan Consortium (2006) which shows after a five-year development in online learning, higher education institutions were possibly going to continue to develop virtual classes and courses. By changing a campus VLE should be seen as a natural advancement step in order to offer first-time learners advising linked information which will help them adapt pupils with an e-learning format. No doubt that within a VLE, it offers pupils with a safe environment to learn and seek guidance with the aid of the virtual classroom without any pressure of earning a mark or a grade.

Seery (2015) makes an interesting finding that VLEs are in their second decade where technology is seen to be mainstream, this refers to better or worse. He scrutinizes VLEs by explaining how their presence tends to provide an artificial hope for pupils in a bid it shall support them in learning, only to discover they (VLE) are hosting an electronic version of lecture notes. On a personal note, he believes VLEs tend to provide a universal podium for everyone.

Gorbans & Bierne (n.d) refer to the example of Moodle data log where it is creating teaching and learning process apparent, trackable and open to supervising evaluation and control as it has never previously done so. By using purposeful evaluation of log data, it is likely to reflect on course in the majority and less effective components, pupils interests and problems they experience, teacher reactions and readiness to assist learning process. Within a constructive aspect, it is seen as a beneficial tool for course content and teaching approaches optimization for reflection on existing practice.

Curtis (2013) makes an interesting observation in addressing the public blogging feature of VLEs perceived as a beneficial activity for pupils since they would be able to use their opinions
and ideas to pen down reflections. There is ample of literature which connotes that blogging must be discovered instead of pupils simply confining themselves to using the discussion tool in a VLE, i.e. Blackboard. On the other hand, there are weak areas pertaining to blogging whereby the tutor independently using it, however co-workers who are responsible for teaching delicate subjects emphasise that one to one process of writing and commenting between the pupil and tutor is seen to be imperative in order to witness fruitful outcomes of their respective units. However, there is another approach which is seen to be of great interest, this refers to writing on a public platform which does raise several eye-brows and concerns, i.e. identities of pupils along with the reputation of the college or university they belong to.

Nasser, Cherif & Romanowski (2011) evaluate the implementation of e-learning systems by taking the case of learning management systems (LMS) in Qatar in order to understand the attitude and behavior of the Qatari public in regards to usage. They refer to the ictQatar initiatives which were developed to promote ICT in schools. The results derived from such a scheme witnessed the growth of K-net as a school-based LMS for sharing, data administration, improved content delivery, data storage along, improved communication, accommodated resource accessibility along with accelerated administrative duties.

According to Pearson Education (2013) countries such as Saudi Arabia, the UAE and Qatar are seen to be at the ‘forefront’ of education technology. Considering the fact, the central theme of this thesis is based on understanding the user acceptance of pupils in Qatari colleges and universities we cannot ignore this angle. Exploring the digital education courses in the GCC region (UAE, Qatar & Saudi Arabia) have witnessed positive results on the long run on pupils as pointed out by the Regional President of Pearson. One may question why this may be the case, one of the primary reasoning is the way GCC Governments tend to spend on the educational
sector as a percentage of GDP which is said to have escalated in the last decade. During 2013, the Saudi Arabian government was said to be expecting to dedicate a whopping US$ 54 billion to education; this made it one of the top ranking countries globally within the context of education spending. This was followed by UAE and Qatar who were also working hard to invest their efforts by funding into creating a world class education system; the UAE was said to be spending almost a fifth of its overall budget on schools, whereby Qatar was doubling its education spending since the last five years in order to accomplish its estimated target of US$ 6 billion (as of 2013). It is within this context that the role of vision of these governments is imperative since it has been boosting the educational spending in order to provide the future labor force with the significant skills and qualifications in order to survive and lead in an aggressive, ambitious and global market place. In fact, it must be strongly stressed that government decision makers in the GCC region have truly understood that application of digital technology into classrooms is seen detracting to assuring today’s learners are sufficiently ready for the education and career challenges which they shall be experiencing in the coming future (Saudi, UAE and Qatar at forefront of education technology, 2013)

In 2012, Qatar’s Supreme Education Council made an announcement of a series of e-Learning programmes which would digitize the teaching and learning content in all its respective schools and ensuring every learner would be allocated with a personal learning device by the end of 2014. The UAE shares a similarity within this context because back in 2010, the UAE Government developed an initiative, in fact a new school to execute state of the art educational technology in all its public schools which would reach out to almost 295,000 pupils (Saudi, UAE and Qatar at forefront of education technology, 2013)
According to Ms Christine Ozden, Regional President of Pearson, she believes such scheme would bring various advantages to the pupils, enhancing attainment rates along with improving the overall results. Furthermore, the role of VLE or other learning platforms is seen to be significant since they are renowned for changing the way teaching and learning experiences take place in the GCC (Saudi, UAE and Qatar at forefront of education technology, 2013).

In a research funded by the Qatar National Research Fund (QNRF), Ally, Samaka, Impagliazzo and Abu Dayya (2012) designed a research to understand the use of innovative mobile technology and how it could be accommodated for training Qataris to be prepared for the new century labour force. At the heart of the project was its objective to enhance trainees’ communicative skills in English in order to sustain competent communication in the labour force. The findings show that trainees performance has clearly enhanced by 16% after the mobile training session. Furthermore, it concluded that all trainees displayed they had gained benefit from the session and the fact they cherished the innovative essence. On the other hand, in the case of Kuwaiti pupils’ acceptance of incorporating innovative technology involving mobile technology in higher education evaluated by Al Sanaa (2012). She observes the characteristics and inspirations of emerging technologies on various levels namely; social, political, economic and educational. As per the findings, they show that most of the pupils owned a mobile or mobile devices, whereas nearly 40% of pupils did not. Interestingly, half of the pupils approved the fact they were using educational mobile applications along with VLEs, i.e. Blackboard and Moodle. The findings derived from the Kuwait context was a positive one which patronises mobile learning and e-learning (Human-computer interaction: concepts, methodologies, tools and applications, 2015).
Havergal (2015) sheds light on Qatar’s openness to adopt to e-learning and VLEs by continuing its efforts to provide research funding to academics around the world. According to Abdul Sattar Al Taie, the executive director of QNRF who stated that a collective model was seen to be beneficial in contributing towards the development of Qatar’s research culture and even attracting researchers. He goes on to state that QNRF has been focusing on developing human capacity along with the model of partnership will continue since QNRF have explored this as an excellent podium for enhancing the quality of research and has put Qatar in a leading position in the GCC region.
RESEARCH PROCESS

The research approach was conducted by using a quantitative research method where a survey was designed and distributed to nearly 100 students in Qatari colleges and universities. The survey was designed with the aid of Survey Monkey since it was seen to be convenient, save time and reduce fatigue and save paper if traditional survey was distributed at college or university campuses. By opting for an online survey, it made it easy to not only construct the questions but even collate the findings in a timely manner. The survey was accompanied by an ethics consent form which indicates that all information is ‘confidential’ and ‘secure’. Participants were assured that all data gathered during the survey was anonymized and would be stored in a safe manner, they were also provided with the choice to withdraw from the survey at any given time until their anonymized information was submitted. Prior to the survey starting, participant permission was taken in order to ensure we did not face any problems in the research process of gathering the respective information. The survey only started once the permission was given. Every survey took between 10-15 minutes to complete on an average, it consisted of 9 questions which were all multiple choice questions, this made it easy for the participant to choose the appropriate answer. Such an average sized survey was designed to gain an understanding an insight into user acceptance of VLEs amongst Qatari pupils in Qatari colleges and universities.
FINDINGS

- Gender & Age Group

Interestingly, the majority of the respondents who participated in this survey were male (62%) followed by the minority, female (37%); this clearly shows that the male gender is more active in answering surveys pertaining to ICT and have an interest in such a subject. With regards to the age group, the majority of the respondents were aged 20-25 years old (56%), followed by the minority 26-40 years (31%) and finally less than 20 years (13%).

- Learning behaviour

According to the majority (63%) of the respondents, they chose a mixed learning which best defined their learning behavior; this was followed by a minority of individual learning (26%) and collaborative learning (14%).

- Chosen style of classroom

In terms of the preferable style of classroom most popularly described by the majority of the pupils to describe the structure of their class was a ‘mixed style’ (54%), followed by the minority student oriented (25%) and finally teacher oriented (20%). The fact the mixed style is seen
preferable indicates pupils feel they could definitely make use of support and guidance in a traditional classroom from teacher in order to perform better in a VLE.

- **Attitude towards VLE**

Generally speaking, the majority of the respondents (40%) expressed a ‘very positive’ attitude to using technology in order to support education. However, the minority was divided in terms of their reservations whether they were ‘rather positive; (36%), finally followed by neither positive nor negative (18%).

- **Number of courses taught**

With regards to the number of courses which were taught previously including an ea-learning platform (Facebook Groups, Blackboard, etc.)- the majority (40%) reported 2-6 courses, whereas the minority stated 6+ (30%), 1-2 (24%) with the tiniest minority opting for the ‘none’ category (6%).

- **Problems experienced with learning behavior & classroom styles**

The majority of the participants were recorded to have stated (27%) they experienced issues or problems as per this learning behavior and classroom styles. This was followed by 20% stating ‘other’ problems, followed by ‘student performance’ (18%) and finally a neck to neck equality in issues of student engagement and student motivation being problems (17%)
The popularity of Blackboard to study their respective course or module was favoured by the majority (45%) on a daily basis. Twice a week was opted by 24%, followed by occasionally by 17% and finally once a week (by 14%)

Most of the respondents accessed their modules and coursework equally between home and other places (78%), followed by ‘always off the university campus’ (15%) and finally always from the university or college campus (7%).

**DISCUSSION**

It is apparent from the findings collated in this research conducted that individual learner engagement with technology (VLE) within the context of a Qatari college or university student is a positive one. The development of the learning technology in a country such as Qatar which has a recent history of patronizing VLE and other e-learning technologies clearly indicates there is ample of room for development and innovation for VLE. The evidence from the actual use as expressed in the survey findings shows that the majority of the participants tend to have a positive attitude towards technology, these could possibly be early adopters to using VLEs like Blackboard and Moodle (popular VLEs in Qatar). Furthermore, the majority of the respondents tend to access their respective VLE on a daily basis which shows a positive sign towards taking VLE seriously and actually depending on it for updates, checking forum, posts and blogging. The commonly observed issue indicated by the majority of the participants refers to learning activities, this could possibly mean they need more exercises or something which is interactive and make them feel they can actually have a voice and provide a feedback rather than be passive listeners or participants where the majority of the hard work is done by the teacher who is
uploading the information. Interestingly, the tie between student engagement and student performance was also seen as issues which cannot be neglected, despite being in minority. Student performance can definitely be negatively impacted because if students are lacking proper guidance and assistance from the teacher this may deter them from focusing on their coursework. Furthermore, student engagement is something which is pivotal for the success of VLE and moreover for the success of a student’s performance. If students are lacking engagement amongst themselves or with the teacher on VLE, they are most likely going to feel lost, confused, frustrated and lack a sense of motivation to finish their coursework on time.

As seen with regards to the majority of the courses which are taught on VLE, 2-6 courses were the average which indicates the popularity and acceptance of VLE in Qatari universities and colleges is prevalent.

Mixed style has been chosen by the majority of the respondents to define the structure of their class; this explains that pupils are dependent on teachers for guidance and simultaneously they like to make the most of VLE because they feel at times if they are lost, confused or struck they must seek information from a teacher who is far more informed and responsible in the structuring and organization of the actual course, however this may not always be the case.

Finally, we saw that men tend to have an open mind towards technology in comparison to women in Qatar, this could possibly be for cultural reasons since men are driven to exploring new ideas and concepts and women take time to warm up and explore. The average age who took this survey were 20-25 years old; this clearly exhibits that they are the highly proactive target segment who like to be aware of the technological changes and trends taking place.
CONCLUSION

In essence, the evidence collated from the survey suggests that a majority of pupils are open to using VLEs on a frequent basis and they prefer to do so at the convenience of their homes and even outside. The use of technology in the classroom environment is seen to be present and is clearly contributing to certain problems for a pupil as aforementioned. Technology can definitely change the mindset of an individual, whether for the best or the worst. This is a challenge to encourage more students to use VLEs and changing the pedagogical models to focus more on online classrooms rather than focusing on offline classrooms. Furthermore, the participation and involvement of technology which is only possible with the aid of vision and leadership and support from teachers which would take one beyond individual lecturer’s conventional roles.

It is also apparent from the literature review that research studies evaluating the effectiveness, significance and usage of VLEs remains an important subject for the purpose of future research, especially in the context of Qatar and how it is developing it. Despite the criticism of VLE by the minority of research studies, there is no doubt that VLE is seen to be significantly popular amongst our featured participants in this research study. We also learned that early adopters are most likely to be resilient and look forward to adapt to such a new technology rather than late adopters who tend to have problems with changing, therefore resistance to change takes place. Teachers being one of the critiques in minority who tend to hold their reservations pertaining to technology and learning walking in tandem being a bad idea because they feel conventional classrooms are far better due to various reasoning and time constraints. Furthermore, there is no face to face interaction in a VLE, however, students are able to make use of the various features
and attributes, i.e. public blogging and posting being one of them. Furthermore, they can receive feedback from their tutor faster and they can interact with their classmates with the aid of VLE. The success of VLE does not come down to how it has been designed only but even the features and the fact how it is being used by the learner. If the learner is lacking motivation and does not engage with their fellow classmates and tutor through VLE, the possibility of their academic performance deteriorating or being negatively influenced is likely.

Primarily, I was expecting to gather more information in this research study by using interviews and even focus groups but unfortunately due to time constraints I was unable to do so. However, I am glad I managed to design a survey which exceeded my expectation of the feedback I received. This research has definitely helped me in understanding the role of VLEs, its theoretical background, uses, benefits, drawbacks and much more. I believe this research study from a college and university perspective would help in creating an awareness of VLEs and their importance in Qatar and contribute to the gap in literature for Qatari academics who can probably investigate and explore this area further by undertaking in the higher education institutions in the country. Finally, I believe that when a VLE is introduced to students and teachers, they should be provided with a virtual tour collectively under a single session. For instance, when the teacher is explaining how to use Moodle, this should take place in the physical classroom which would enable the student to seek any guidance and advice in case they are lost or confused and need to get back on track for further information and help.
REFERENCES


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Yeou, M. An investigation of students acceptance of Moodle in a blended learning setting using technology acceptance model [Online] Available at: <http://ets.sagepub.com/content/44/3/300.refs> [Accessed on April 7th, 2016]


ANNEXES

Appendix

1. ETHICS CONSENT FORM

Ethics approval number: 2015D0595

When undertaking a research or enterprise project, Cardiff Met staff and students are obliged to complete this form in order that the ethics implications of that project may be considered.

If the project requires ethics approval from an external agency (e.g., NHS), you will not need to seek additional ethics approval from Cardiff Met. You should however complete Part One of this form and attach a copy of your ethics letter(s) of approval in order that your School has a record of the project.

The document Ethics application guidance notes will help you complete this form. It is available from the Cardiff Met website. The School or Unit in which you are based may also have produced some guidance documents, please consult your supervisor or School Ethics Coordinator.

Once you have completed the form, sign the declaration and forward to the appropriate person(s) in your School or Unit.

PLEASE NOTE:
Participant recruitment or data collection MUST NOT commence until ethics approval has been obtained.

PART ONE

<table>
<thead>
<tr>
<th>Name of applicant:</th>
<th>Abdulaziz Mesned A A Almohannadi</th>
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<tbody>
<tr>
<td>Supervisor (if student project):</td>
<td>Mohamed Mostafa</td>
</tr>
<tr>
<td>School / Unit:</td>
<td>CSM</td>
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<tr>
<td>Student number (if applicable):</td>
<td>20090630</td>
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<tr>
<td>Programme enrolled on (if applicable):</td>
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<tr>
<td>Project Title:</td>
<td>Investigating Technology User Acceptance of Virtual Learning Environments in Higher Education Institutions in Qatar</td>
</tr>
<tr>
<td>Expected start date of data collection:</td>
<td>1-3-2016</td>
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<tr>
<td>Approximate duration of data collection:</td>
<td>14 days</td>
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Different higher education institutions in Qatar have started using Virtual Learning Environments (VLE) to support their students and their learning process. This study is investigating the adoption of VLEs in these institutions. This study will use scientific technology acceptance models to understand how the end users are reacting to this technology.

There are different technology acceptance models (TAM) in the literature. These models help study the user acceptance based on different factors such as user behaviour and intentions. However, most of these models are built and applied in developed countries. This study will first analyse the available TAMs and will understand their implementation context. After comparing the Qatari context with UK context for example from different perspectives. A suitable TAM will be adopted that is suitable for the Qatari context. The survey will be designed and built based on the selected TAM.

After collecting the data, the results will be analysed and will be compared with the selected model. This will help to provide recommendations for these institutions and other stakeholders in Qatar to boost the adoption of VLEs.

If the time allows, the extracted recommendations will be offered to different types of stakeholders.
in Qatar to provide feedback that will be analysed and factored in as well.

**DECLARATION:**
I confirm that this project conforms with the Cardiff Met Research Governance Framework

I confirm that I will abide by the Cardiff Met requirements regarding confidentiality and anonymity when conducting this project.

STUDENTS: I confirm that I will not disseminate any material produced as a result of this project without the prior approval of my supervisor.

| Signature of the applicant: | Date: 20/04/2016 |

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<th>FOR STUDENT PROJECTS ONLY</th>
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<tr>
<td>Name of supervisor:</td>
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<td>Date: 20/04/2016</td>
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| Signature of supervisor: |

**Research Ethics Committee use only**

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<td>Project approved</td>
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<td>Project approved in principle</td>
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<td>Decision deferred</td>
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| Signature: |

Details of any conditions upon which approval is dependant:
Click here to enter text.

**PART TWO**

**A RESEARCH DESIGN**

A1 Will you be using an approved protocol in your project? No
A2 If yes, please state the name and code of the approved protocol to be used\(^1\)

Not applicable

A3 Describe the research design to be used in your project

The proposed research philosophy for this research work is an interpretive research which will be ideal for this research since we will be able to study the natural environment where students study and understand whether they are impacted, benefitting from the VLE in their educational environment.

In terms of the research strategy, it will be a deductive approach. Furthermore, the data analysis technique is the descriptive statistics.

With regards to the research methodology, this will use primary research method where the quantitative method is ideal as an instrument for the purpose of gathering information. Questionnaires will be designed for the purpose of gathering primary data and will be developed from the analysis of current literature within the given domain. The questionnaire will be distributed to students, teachers and stakeholders to gain quantitative information on how their current and possible use (n=40). The results will then be analysed using excel to gain descriptive information for discussion.

The questions will be a combination of open and closed style questions that will enable us to gather a variety of opinions which could be fixed statistically or uncertain answers which will give the participant an opportunity to express their ideas. The sample type will be purposive.

Also, participants will have an opportunity to withdraw their participation without any penalty.

All information collated will be done on the basis of anonymity.

A quantitative data analysis method is used because it will be searching for evidence to either assist or contradict our central theme. There will be data confidentiality and security maintained which will ensure that all information will be protected and no information will be leaked at all. All participants will have their information untraceable to specific people since they are not saved under their names. All data will be saved in a secure manner in a password protected computer software and even maintained printed version under a secure folder.

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<tr>
<td>A4 Will the project involve deceptive or covert research?</td>
<td>No</td>
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<td>A5 If yes, give a rationale for the use of deceptive or covert research</td>
<td>Not applicable</td>
</tr>
<tr>
<td>A6 Will the project have security sensitive implications?</td>
<td>No</td>
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\(^1\) An Approved Protocol is one which has been approved by Cardiff Met to be used under supervision of designated members of staff; a list of approved protocols can be found on the Cardiff Met website here.
A7 If yes, please explain what they are and the measures that are proposed to address them

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<tr>
<th>B PREVIOUS EXPERIENCE</th>
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<tr>
<td>B1 What previous experience of research involving human participants relevant to this project do you have?</td>
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<tr>
<td>None</td>
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<td>B2 Student project only</td>
</tr>
<tr>
<td>What previous experience of research involving human participants relevant to this project does your supervisor have?</td>
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<tr>
<td>Mohamed Mostafa has 3 years of experience research involving human participants at undergraduate and postgraduate levels in the Bsc discipline.</td>
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<th>C POTENTIAL RISKS</th>
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<tr>
<td>C1 What potential risks do you foresee?</td>
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<tr>
<td>1. Participant may not take the questionnaires seriously</td>
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<td>2. Participant will need to understand more about the experiment</td>
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<td>3. Participant will be worried about his identity</td>
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<tr>
<td>4. <strong>Won’t be able to meet the deadlines.</strong></td>
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<td>5. Data security and storage</td>
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<tr>
<th>C2 How will you deal with the potential risks?</th>
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<tr>
<td>1. Design the question to be user friendly</td>
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<td>2. Completion of the questionnaire is taken as consent and will be stated at the beginning.</td>
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<tr>
<td>3. The questionnaire will not contain any questions that reveal the identity of the contributor and will insure contributor’s anonymity throughout. If participants feel uncomfortable during any part of the research gathering process withdrawal from the process can be immediate.</td>
</tr>
<tr>
<td>4. <strong>Every effort will be made to complete the research phases in accordance with the anticipated research deadlines.</strong></td>
</tr>
<tr>
<td>5. All data will be held on a secure password protected external hard drive and paper copies will be kept in a locked cupboard. Access to the data will be restricted to the contributor and supervisor. Questionnaires will have no trace back to the contributor.</td>
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When submitting your application you **MUST** attach a copy of the following:
- All information sheets
- Consent/assent form(s)

An exemplar information sheet and participant consent form are available from the Research section of the Cardiff Met website.
2. QUESTIONNAIRE

Factors influencing Tourism and Hospitality University Instructors’ Intention to use E-learning:  
An Extension of the Technology Acceptance Model

I am a final year student at the Cardiff School of Management. The aim of my research is to  
investigate the adoption of VLEs in these institutions. The research shall use scientific  
technology acceptance models to understand how the end users are reacting to this  
technology. Please complete each question by either putting your answer in the space provided  
or circling the appropriate response. At the end of the questionnaire you will be asked to  
submit your responses. Submission will be taken as voluntary informed consent. All your  
responses are confidential and will only be used for the purposes of this research. Thank you in  
advance for taking the time to complete this survey.

Abdulaziz Mesned A A AlMohannadi  
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Cardiff Metropolitan University  
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Supervisor  
Mohamed Mostafa  
Lecturer in Computer Science  
Cardiff Metropolitan University  
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Participant Information Sheet
Section One: Background questions

1) From your experience, what type of learning could best define your learning behaviour?

- □ Individual learning
- □ Collaborative learning
- □ Mixed

2) Gender: □ Female □ Male

3) Age:

- □ Less than 20 years
- □ 20 to 25 years
- □ 26 to 40 years
- □ Above 40 years

4) Which style of classroom can be used to describe the structure of your class?

- □ Student oriented
- □ Teacher oriented
- □ Mixed style

5) What is your general attitude to using technology to support education?

- □ Very negative
- □ Rather negative
- □ Neither positive nor negative
- □ Rather positive
- □ Very positive

6) Number of courses taught previously including an e-learning platform (e.g. Blackboard, Facebook Groups, etc.):

- □ 1-2
- □ 2-6
- □ 6+
- □ None
7) Have you experienced any issues of problems according to this learning behaviour & classroom styles?

☐ Student engagement
☐ Student performance
☐ Student motivation
☐ Learning activities
☐ Other

8) How often do you access Blackboard to study this module?

☐ daily
☐ twice a week
☐ once a week
☐ occasionally

9) From where did you usually access your modules and coursework?

☐ always off the university/college campus (e.g. at home)
☐ equally between home and university campus
☐ always from the University/college Campus

Thank you for taking the time to complete this survey

PARTICIPANT INFORMATION SHEET
Investigating technology user acceptance of virtual learning environments in high education institutions in Qatar

Cardiff Metropolitan University Protocol Number:

Project summary

The purpose of this research project to evaluate the popularity and impact of VLEs (virtual learning environments) on students (user acceptance) in a higher educational institution, i.e. university and college in Qatar.

Your participation will be important for my research as it shall enable the collection of data which will form part of a study being undertaken at Cardiff Metropolitan University.

Why have you been asked to participate?
You have been asked to participate because you fit the profile of the population being studied; that is, you are between the ages of 18 and 30 and be provided with a questionnaire to answer

During the focus groups you will be asked about your experience of using VLEs within the context of your higher education institution.

You will only be required to fill out a questionnaire form.

Project risks

The research involves the completion of a questionnaire for later analysis. We are not seeking to collect any sensitive data on you; this study is only concerned with user acceptance and usage of VLEs amongst students in higher education institution in Qatar. We do not think that there are any significant risks associated with this study. However, if you do feel that any of the questions are inappropriate then you can stop at any time. Furthermore, you can change your mind and withdraw from the study at any time – we will completely respect your decision.
How we protect your privacy

All the information you provide will be held in confidence. We have taken careful steps to make sure that you cannot be directly identified from the questionnaire form; there is no information on these questionnaires that will identify you. Your personal details (e.g. signature on the consent form) and your questionnaire will be kept in secure locations by the research team. When we have finished the study and analysed all the information, all the documentation used to gather the data will be destroyed.

YOU WILL BE OFFERED A COPY OF THIS INFORMATION SHEET TO KEEP

If you require any further information about this project, then please contact:

Abdulaziz Mesnad A A Al Mohannadi, Cardiff Metropolitan University Tel: [None], CMU email: st20090630@cardiffmet.ac.uk

Supervisor: Mohamed Mustafa, email: momostafa@cardiffmet.ac.uk
PARTICIPANT CONSENT FORM

Cardiff Metropolitan University Ethics Reference Number:

Participant name or Study ID Number:

Title of Project: Investigating Technology User Acceptance of Virtual Learning Environments in Higher Education Institution in Qatar

Name of Researcher: Abdulaziz Mesned A A Al Mohannadi

Participant to complete this section: Please initial each box.

1. I confirm that I have read and understand the information sheet for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily.

2. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason.

3. I agree to take part in the above study.

Signature of Participant: ___________________________ Date: ___________________________

Name of person taking consent: ___________________________ Date: ___________________________

Signature of person taking consent: ___________________________