The Acceptance and Use of Mobile Learning for Kuwaiti Government Employee Training: Views from the Perspectives of UTAUT

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Abstract
With the rapid advancements of technology, Kuwait is one of the countries taking on the efforts to implement mobile learning strategies for employee training. By leveraging the Unified Theory of Technology Acceptance and Use (UTAUT), this study centers on the acceptance and use of mobile learning for Kuwaiti Government employee training. A qualitative approach was used in a case study on Kuwait's public sector personnel, focusing on the Kuwait Civil Service Commission's (KCSC) eTraining initiative since 2008, involving interviews with ten employees. The study reveals that workplace mobile learning acceptance and use are influenced by employees' digital skills, mobile learning infrastructure, resources, and workplace standards and policy. Employees obtained specialized information and abilities necessary for their job through deliberate learning activities outlined in the mobile learning standards and rules. The implementation of a comprehensive mobile learning infrastructure and the utilization of advanced hardware have significantly enhanced the efficacy of technology in the workplace. The results of the study highlighted the significance of digital skills in the workplace in relation to mobile learning aspects and job demands. This study has provided significant insights for the public sector in Kuwait, considering the scarcity of existing research on this subject matter.
Keywords: Digital Skills, Mobile Learning, Employee Training, Kuwait, Unified Theory Of Acceptance And Use Of Technology

Introduction
In light of the rapid and exponential pace of societal change, government administrations are increasingly faced with the complex task of effectively addressing staff knowledge and growth. Managers and organizations are currently striving to establish a learning framework that optimally utilizes both formal and informal learning methods. Consequently, employees

are facing an escalating need to assume greater accountability in order to sustain their knowledge, relevance, and marketability (Rana et al., 2016).

The allocation of government funds towards human resource training initiatives often leads to a notable rise in productivity levels and improved overall performance within organizations (Camilleri & Falzon, 2020; Joseph & Gaba, 2020). The utilization of mobile technology for the purpose of training and enhancing the abilities and skills of personnel within the Kuwaiti government sector has witnessed a notable rise. This particular technique is commonly referred to as mobile learning. Numerous organizations strive to differentiate themselves by incorporating mobile learning methodologies into their training strategies and plans (Noe et al., 2014).

Workplace mobile learning encompasses several forms of training, such as online or informal methods, wherein employees engage in collaborative activities utilizing mobile devices within social networks (Collins & Halverson, 2010). Mobile learning has been employed in workplace learning scenarios, encompassing both structured on-the-job training and more casual coaching and mentoring (Laouris & Eteokleous, 2005; Pimmer et al., 2010).

Mobile learning courses are commonly disseminated through many forms of media and applications. Therefore, these entities can provide a significant obstacle for mobile learning training institutions. In the context of a rapidly evolving and dynamic global landscape, organizations are compelled to reconsider the methods by which they implement employee training initiatives in order to maintain competitiveness (Ally, 2007; Omotayo, 2015; Peng et al., 2016). In addition, mobile learning may be effectively utilized to efficiently and captivatingly train personnel, eliminating the need for employees to engage in travel. Consequently, organizations are substituting conventional methods of training with mobile learning.

Literature Review
Unified Theory of Acceptance and Use of Technology (UTAUT)
The UTAUT was proposed by Venkatesh et al. (2003) following an examination of eight extensive theories pertaining to the acceptance and utilization of information technology. These theories include the Theory Of Reasoned Action (TRA), Technology Acceptance Model (TAM), Motivational Model (MM), Theory of Planned Behavior (TPB), combined TAM and TPB (C-TAM-TPB), Model of Personal Computer Utilization (MPCU), Innovation Diffusion Theory (IDT), and Social Cognitive Theory (SCT). According to (UTAUT), an individual's intention to engage in a specific behavior, known as behavior intention, plays a crucial role in influencing their decision to actually perform that behavior, referred to as use behavior. The behavioral intention is determined by the user's internal views on the perceived utility of the system (performance expectancy), the perceived effort required to utilize the system (effort expectancy), and the influence exerted by significant others (social influence). Additionally, the (UTAUT) posits that the availability of technology and organizational support, which are considered enabling conditions, has a direct impact on individuals' usage behavior and intention to engage with the technology. According to the (UTAUT), there exists a moderating effect of gender, age, experience, and voluntariness on the interactions between independent and dependent variables.

The empirical study conducted by Venkatesh et al. (2003) presented evidence that supports the superiority of the (UTAUT) over the eight previously described models. The UTAUT was shown to explain 70% of the variance in behavioral intention and 53% of the variance in actual use. Although the authors aimed to develop a comprehensive framework for the adoption of

new technology, following studies that modified the model consistently found that the (UTAUT) exhibited little explanatory capability (Al-Gahtani et al., 2007; Wang & Shih, 2009; Thomas et al., 2013). Therefore, the present study utilized the (UTAUT) to examine the various aspects that impact the adoption of mobile learning within the specific context of training Kuwaiti government personnel.

Workplace Training in Kuwait

According to the report by the Kuwaiti Civil Service Commission (CSC) in 2010, the training institutions affiliated with the CSC offer specialized training programs to government employees in Kuwait as part of the commission's duties. The national training centers and institutions offer comprehensive on-the-job training services and activities to employees in the public sector, including those from the Ministry of Finance, Public Authority for Applied Education and Training, CSC, Kuwait University, Ministry of Planning, and Central Agency for Information Technology. This information is sourced from The Higher Council of Planning and Development (2014).

According to Ali and Al-Kazemi (2006), the Kuwaiti government has identified the training of public sector employees as a crucial area for development. According to Abdalla and Al-Homoud (2012), the implementation of training-specific improvement reform approaches was deemed crucial and of great importance in Kuwait. In addition, Kuwait encompasses a private training sector. However, the efficacy of public-private institutions in providing training for Kuwaiti government employees was generally lacking, resulting in insufficient training for public organizations and their staff. In addition, it is worth noting that private training institutes often levy substantial training fees, despite the fact that the government receives little benefits from such training. This is due to the inability of public sector employees to carry out the training themselves (Abdalla & Al-Homoud, 2012).

In light of the challenges encountered in employee training within Kuwaiti public and commercial organizations, the government has made efforts to strengthen training programs with the aim of improving employee abilities. According to Ali Hamza (2011), a proposed approach involves the utilization of quality function deployment to improve the quality of training outcomes in order to meet the demands of the Kuwaiti public job market. The contemporary labor force encounters novel obstacles, including the need for a greater number and higher caliber of proficient workers, the necessity for continuous education and versatile competencies, and the demand for adaptable and flexible technical learning methods (Hamza, 2011). The identification of specific skill sets necessary for the future workforce has the potential to narrow the disparity between training outcomes and the expectations of employers.

According to Alfudalah (2014), there has been a considerable investment by Kuwaiti on-the-job training units and institutions in the distribution and differentiation of unique strengths to effectively prepare and qualify individuals seeking employment in the public sector. However, various specialized research, reports, assessment indicators, and training institutions or beneficiaries of training courses have documented unfavorable elements (Alfudalah, 2014). The research listed above encompassed pilot studies conducted on the existing organizational structures of job training units inside 45 government entities. These investigations aimed to identify the strengths and weaknesses of the training programs. In a study conducted by Alfudalah (2014), an examination was made of the current state of training organization and management within government institutions. This investigation encompassed various aspects, including the structural framework of organizational training,

the presence of training plans, the establishment of training course objectives, the job levels of trainees, incentive policies and measures to motivate trainees, the available training capacities and facilities, as well as the challenges and issues encountered in the management of training programs.

Kuwait remains committed to pursuing administrative strategies and technical methodologies in order to enhance productivity and enhance the performance and efficiency of its public sector employees (Alfudalah, 2015). The evaluation of employees' performance and efficiency is vital for fostering employee development. These evaluations play a crucial role in enabling ministries to enhance their training methodologies by incorporating diverse approaches, such as mobile learning.

In their empirical study on Kuwaiti organizations, Al-Athari and Zairi (2002) found that a minority of government organizations, specifically 7.5%, expressed the belief that evaluation was of utmost importance. A majority of the organizations that were surveyed relied on the initial stage (trainee's response) of Kirkpatrick's (1996) evaluation model in order to assess the trainees' reactions to their training and development initiatives. According to Al-Athari and Zairi (2002), the authors argue that evaluation is not considered to be the fundamental level in the majority of organisational training courses in Kuwait. According to Abdalla and Al-Homoud (1995), there was a lack of established methodologies for assessing the success of training and development programs.

According to the CSC report (2010), the Distance Training project was implemented within the CSC from 2007 to 2011 with the aim of enhancing the performance of public sector employees and fostering their creativity by means of innovative training approaches. Therefore, the implementation of distance training aims to provide training material to all employees in the public sector. This approach involves offering training courses that possess a substantial scientific component, while also reducing the time required for training and minimizing associated costs.

Factors of Mobile Learning for Workplace Training
Personalised Learning
Mobile learning can be characterized as a form of self-regulated learning. According to Brown and Mbati (2015), personal learning environments can be classified as either one-to-one or many-to-one learning contexts. For instance, a learner may have one or more teachers, and the process of learning can occur regardless of temporal and spatial constraints, allowing for customization based on the unique attributes of the learners. Mobile learning offers significant benefits to employees, mostly because to its ability to provide personalized training information. According to Gu (2016), procrastination poses a significant motivational barrier for workplace learners in the context of mobile learning. The learning needs of the majority of employees tend to be focused on specific tasks. Therefore, the process of personalization in learning involves prioritizing the organizational aspect or level in order to tailor the program and enhance its educational value for an individual employee's areas of skill deficiency, preferred learning style, and personal interests (Ryan et al., 2018).

The implementation of personalised learning in workplace training is of utmost importance, as it serves as a catalyst for motivating employees to acquire knowledge, hence enhancing their self-assurance and autonomy. However, it is necessary for learners to possess a sense of autonomy and self-control in order to effectively engage in mobile learning. According to Gu (2016), the degree to which learners exhibit independent behavior during training is influenced by their technical abilities pertaining to the learning technique, their familiarity

with the subject matter, their appraisal of their own skills as a learner, and their level of dedication to the learning process.

In the context of this study, training can be defined as the provision of suitable instructional materials that are tailored to an employee's level of knowledge, prior learning experiences, individual requirements, and other relevant personal factors (Hwang et al., 2017). The implementation of personalised learning is of utmost importance within the context of active learning, particularly in informal learning settings. The alignment of learning aims with organizational capabilities, objectives, and priorities may facilitate a more seamless connection within the realm of management. According to Zareie and Navimipour (2016), it is expected that employees will demonstrate a persistent commitment to self-paced learning and engage in rapid exploration of additional areas of interest.

Ubiquitous Learning

The concept of ubiquitous learning encompasses the notion that mobile learning is progressively becoming widespread and omnipresent, as technological instruments for learning continue to transform the process of acquiring information and the methods by which it is accessed. The concept of ubiquitous learning refers to a learning environment that enables individuals to access educational materials without constraints related to time and location. On the other hand, mobile learning emphasizes the learner's mobility through the utilization of personal electronic technologies (Cárdenas-Robledo & Peña-Ayala, 2018). However, learners may perceive mobile or ubiquitous learning as being more intricate due to the necessity of acquiring knowledge in both physical and digital environments (Abdelaziz, 2018).

The concept of ubiquitous learning enables learners to achieve a higher degree of independence, while the instructors' enhanced control facilitates learners' ability to self-regulate their learning and effectively address real-world problems. According to Bair and Stafford (2016), instructors have the ability to concentrate on their areas of specialization. The potential of ubiquitous learning is significant as a result of the widespread availability of mobile learning devices, including smartphones and tablets, which have gained popularity in numerous organizations (Dar & Bhat, 2016). Consequently, the level of autonomy in workplace learning is enhanced, resulting in the establishment of a pervasive learning environment (Dar & Bhat, 2016).

The potential of integrating wireless communication devices and mobile technology in educational settings is significant, as it enables learners to actively participate in an authentic and immersive learning experience (Peña-Ayala & Cárdenas, 2016). The utilization of mobile technologies facilitates enhanced educational opportunities. The integration of physical and virtual spaces within a workplace facilitates learning opportunities, as it allows for the expression, representation, sharing, and reflection of knowledge through the use of mobile technology (Trede et al., 2019). According to Nikou and Economides (2017), ubiquitous learning facilitates context awareness and enables practical, authentic, cooperative, adaptive, and personalized learning activities.

Employees' Characteristics

According to Karimi (2016), the utilization of mobile learning is influenced by both environmental and human factors. The author suggests that learners are more inclined to engage with mobile technologies when they demonstrate a keen interest in their surroundings, exhibit curiosity towards their environment, and derive enjoyment from it.

According to Karimi (2016), the influence of performance expectancy, which is based on logical analysis and reflection, has a positive effect on learning performance and efficiency, as well as on the adoption of self-directed learning approaches in formal educational settings. Readiness pertains to the ability to effectively adapt to opportunities that are enhanced by the utilization of electronic resources. Mobile learning readiness refers to the state of psychological and physical preparedness exhibited by employees in relation to mobile learning. It also encompasses the level of organizational readiness to adopt and implement mobile learning, as outlined by Shahroury (2016).

Establishing an effective learning environment necessitates diligent exertion. The analysis and discussion of the insufficient preparedness for mobile learning necessitates careful consideration, since the characteristics and interactions of employees in different physical and social environments have an influence on mobile learning (Al-Ismail et al., 2019). Furthermore, the learner's unique personal and social attributes within each specific setting are crucial factors that significantly impact mobile learning (Karimi, 2016). The study conducted by Karimi (2016) investigated the design and evaluation of mobile learning in terms of its effectiveness and performance under different settings. However, the study did not clearly address the crucial aspects that impact the preferences of mobile learners, particularly the effects of mobility on the utilization of mobile technology in diverse contexts.

Formal Learning
Within the context of workplace training, formal learning encompasses deliberate and structured learning endeavors aimed at facilitating the acquisition of targeted information, awareness, and abilities that contribute to effective job performance. The process of formal learning is characterized by a high level of organization, which includes a well-defined learning structure, a structured learning activity, an assigned instructor, the attainment of a recognized qualification, and the external assessment of outcomes (Manuti et al., 2015). According to Pylväs et al. (2018), educators play a crucial role in enhancing the learner's abilities through workplace activities and environments. However, it is equally important for the learner to utilize their formal education to critically analyze workplace practices, thereby effectively managing diverse forms of expertise and workplace expectations.

The inherent adaptability of mobility allows for the acquisition of knowledge in various physical spaces and social groups, hence enabling formal education within many organizational contexts (Jaldemark, 2018). According to Brown and Mbati (2015), significant learning occurs beyond the confines of traditional training rooms and institutional distance-learning settings when individuals personalize and customize their learning approaches and surroundings. The facilitation of mobile learning through informal learning opportunities often serves as a motivating factor, as it effectively bridges the perceived divide between formal and informal learning (Viberg, Andersson, & Wiklund, 2018).

Background of the Study and Methodology
In 2008, the CSC developed the eTraining project to train all public sector employees equally with a lower training budget in less time. The project was conducted until 2011 but was halted for many reasons, the first of which was the employees' lack of language proficiency as most ministries used Arabic but the courses were conducted in English. Additionally, most employers were not technologically inclined and lacked technology acceptance. Furthermore, the eTraining lacked a clear plan and strategy, which led every ministry to rely on the CSC for planning and direction. Lastly, public sector senior management did not support the project

due to the lack of plans and frameworks to present an overview of the process and results when the project ended. Contrastingly, most employees (non-senior management) used mobile technology and preferred using it in their work due to the varied mobile technologies and ease of acquisition.

In 2020, the coronavirus disease 2019 (COVID-19) pandemic led to the Kuwaiti CSC resuming eTraining. This resumption prompted the idea of exploring the acceptance and use of mobile learning to develop training programmes, which was an important project for all employees in the current situation. Therefore, this case study involved public sector employees of the Kuwaiti CSC training centre. The training centre was selected as it focused on cooperating with other ministries and had experience in implementing and using mobile learning for training.

A qualitative methodology was adopted in this study as it is typically exploratory (Kelly, 2017). As this study aimed to explore and understand complex events and contexts in-depth and in detail to answer the 'how' and 'why' of interactions between the different causes of the phenomenon studied (Gaikwad, 2017), thus, descriptive qualitative methods were used in this study to provide an overview of the critical training success factors for mobile learning in the Kuwaiti public sector.

Interviews were employed in this study as a means to obtain information in social and human sciences qualitative studies (Gaikwad, 2017). Ten public sector employees from the Ministry of Interior, Ministry of Education, Ministry of Public Works, and Ministry of Electricity and Water; all of which were under the supervision of KCSC; were interviewed with regards to mobile learning use for training. The participants were selected as they had a thorough knowledge of eTraining and were involved in implementing the eLearning courses in their training plan. The interviews were transcribed, and the transcripts were read and reread to identify the categories underframed by the UTAUT theory.

Results and Discussion
Acceptance and Use of Mobile Learning for Training
Employees' Digital Skills

Voogt and Roblin (2012) described and examined the eight skills that transcended mere software knowledge: specific communication, critical thinking, productivity, collaboration, problem-solving, creativity, digital literacy, and citizenship in Kuwait. In this context, participant P1 stated that "with e-skills, all the knowledge necessary is only digital literacy". Similarly, participant P5 stated that "being able to access the training contents without any physical barrier is of great benefit to employees. The performance expectancy of doing so eliminates barriers and makes the training process more agile".

Participant P7 stated that "employing mobile learning can positively affect my job performance and allows greater freedom in training". Similarly, participant P8 mentioned "the ability to solve cognitive tasks using ICT (information and communication technologies), skills relevant to higher-order thought processes, skills unrelated to technology, and mental abilities relevant to employees' lifelong learning", which agreed with Berger's conclusions (2019).

According to participant P9, "access to the training allows skills to developed by using mobile learning technology". The findings supported the literature on the performance expectancy of employees' digital skills for accepting and using mobile learning for training (Van Laar et al., 2017; Prezioso et al., 2020).

The business environment is highly competitive and employees' skill deficiencies create significant labour market issues across all sectors. The main elements that influence this digital skills trend are mobile and analytical technology usage indicating the requirements for employee training and professional development. Second, organisations must recreate themselves and become more agile to address challenges (Mihalcea, 2017) of using mobile technologies for training. Furthermore, digital skill development programmes represent a strategic element to attain organisational performance to develop digital workplace skills (Born & Kil Kang, 2015).

Technology use is based on evidence for digital literacy skills for performance expectancy (Greenspon, 2019; Ivanenko & Artamonova, 2020). Digital literacy skills can increase digital workplace knowledge and involvement (Ivanenko & Artamonova, 2020). Participant P3 stated that "the employment-related digital skills include basic on-the-job digital skills related to ICT". Participant P7 noted that "the digital skills for ICT professions cover the skills required and incorporate innovative and creative elements for developing new digital solutions, services, or products".

Employee training policies drive digital skill development. Participant P1 considered "employee training policies an important component of training policies for developing digital skills". Participant P8 shared P1's concern regarding training policies and stated that "ICT technical skills with training policies, learning integration, digital technology management, and supervision" should be present. These findings on employee training policy catalysis of digital skill advancement agreed with the conclusions of previous researchers (Spitzer et al., 2013; Born & Kang, 2015; Lissitsa et al., 2017; Mihalcea, 2017; van Laar et al., 2018; Arkhipova & Bozzoli, 2018; Mori et al., 2018; Manuti & de Palma, 2018; Gouda & Negm, 2019).

The aforementioned findings led to the vast knowledge of this policy among employees and the training department. As monitoring skill levels and identifying the causes of potential skill deficiencies require such policies, digital skills are necessary to guarantee employees' productivity and necessitate methods of employees' involvement to ensure that they can obtain these skills. Employees with strong digital skills have the opportunity to advance and lead intelligent technologies, whereas those who lack such skills may be side-lined.

Recent ICT advances necessitated the development of specific digital technology-relevant skills. Nevertheless, a recent study demonstrated that managers frequently did not consider developing proper digital skills and expected employees to develop their skills independently (van Laar et al., 2019a). Managers and executives engaged in skill development did not appear to have a clear view of measuring employees' skill levels (Prezioso et al., 2020). Moreover, they did not recognise the importance of digital skill training programmes (van Laar et al., 2019b). In such cases, management must prioritise increasing organisational awareness of digital skills (van Laar et al., 2019a).

Employees in the 21st century should have three essential digital skills (Prezioso et al., 2020): learning skills (critical thinking, creativity and innovation, problem-solving, and communication), literacy skills (media, ICT information, and literacy), and life skills (social and intercultural skills, productivity and responsibility, leadership and responsibility initiative, self-direction, adaptability, and flexibility). Another classification suggested the following four essential skills (Prezioso et al., 2020): thinking approaches (subskills of problem-solving and decision-making, critical thinking, learning to learn and metacognition, creativity and innovation); working methods (sub-skills of group work, communication, and collaboration); working tools (sub-skills of information technology [IT] and communication and computer

literacy); and living in the world (sub-skills of social responsibility and personal, life, and career skills).

Mobile Learning Infrastructure and Hardware

Mobile learning technological infrastructure uses mobile technologies. Smartphones with advanced memory, processors, displays, and battery capabilities that aid access to various platforms, such as mobile, web-based, or combined mobile learning environments, have recently proliferated (Oyelere et al., 2018). Mobile learning is supported by mobile device and technological infrastructure availability, low costs, and learners' interest (Oyelere et al., 2016a; Bidin & Ziden, 2013; Oyelereet al., 2016b).

An ICT implementation programme should encompass ICT infrastructure, hardware, digital learning resources, and trainers' digital skills, which all require significant investment (Policy, 2015). A balanced and holistic consideration of ICT investment should emphasise that the investment is intended to assist instructors who wish to use ICT to improve their training quality and yield related advantages (Policy, 2015).

Budiman et al. (2018) stated that the infrastructure design in mobile learning system development is divided into key components such as network availability, smartphone devices, application software, and internet protocol, where the network availability that describes is divided into the client, internet service provider (ISP), and server. Smartphone devices use a data card that supports packet data service communications networks, such as 2G (EDGE [enhanced data rates for GSM evolution], GPRS [general packet radio service]), 3G, 4G (LTE [long-term evolution]), and wireless fidelity (Wi-Fi) technologies. Furthermore, the application software for training uses special packages for each mobile operator with the same access speed standard (≥ 3.5 G), which may produce download speeds of up to 7.2 Mbps. Lastly, the server features a dynamic public internet protocol (IP) to serve data packet reception and delivery to clients.

The interviewees were unanimous about the advantages provided by the cooperation protocols of using mobile learning for training. Participant P4 stated that "employees must be trained in ICT infrastructure, hardware, digital learning resources, and digital skills". Participant P5, stating that "the infrastructure design in the development of a mobile learning system requires components, such as the availability of the network, ISP, and server to build suitable mobile learning for training".

In wireless local area network (WLAN) infrastructure design, WLAN robustness depends on a well-designed wired network backbone that is the subsequent step for investigating the WLAN requirements used for the mobile learning structure. These requirements lead to basic principles, such as coverage, capacity, and security (Tchao et al., 2017).

Device features are further classified into comfortability or usability, which refer to light and portable or convenient mobile learning devices (Economides & Nikolaou, 2008; Fakeeh, 2016). Such features enable a versatile knowledge transfer system that operates regardless of time and location. Moreover, such functional devices can provide detailed information unimpeded (Cohen, 2010; Fakeeh, 2016), which is highly advantageous when learners need to obtain specific information quickly.

Mobile learning technological infrastructure enables quicker processing of training access. Interviewee P3 stated that "wireless infrastructure design must be guided by principles, such as coverage, capacity, and security, to make mobile learning easier to access training with full internet coverage and security". The eTraining department manager (human resources, P10) stated that "knowledge transfer can be performed regardless of time and location.

Furthermore, technology devices can provide unrestricted information from applications quickly", with which participant P9 agreed with participant P10's statement. The findings revealed the conditions that facilitated mobile learning infrastructure and hardware and agreed with previous findings (Economides & Nikolaou, 2008; Cohen, 2010; Policy, 2015; Fakeeh, 2016; Sarrab et al., 2015; Tchao et al., 2017; Budiman et al., 2018).

Sarrab et al. (2015) reported that the traditional software engineering applications that cannot be applied directly to mobile devices due to the following issues limit mobile learning infrastructure. First, there are various mobile platforms, such as iOS, Android, and Windows 7. Second, there are diverse hardware manufacturers, such as HTC, Google, Samsung, and Apple. Third, mobile device user interfaces (UI) present an unexplored new mechanism for human–computer interaction, such as multi-touch interfaces, image recognition, and code scanning. Furthermore, there are no established UI guidelines.

Participant P2 stated that "the traditional software engineering applications that cannot be directly applied to mobile devices due to the diverse mobile platforms, such as iOS, Android, and Windows 7, are a limitation of mobile learning infrastructure". Analysis of the eTraining report confirmed that "the IT department discovered the limitations of the mobile learning infrastructure after the eTraining project had been stopped".

Learning Resources (Course Content) for Mobile Learning

The most perceptive approach possible to mobile learning is condensing eLearning content so that it is accessible on mobile technologies. Such efforts would have the advantages of being accessible to distant and mobile employees, for example, travelling engineers, investment bankers, and professional drivers (Pimmer & Pachler, 2014).

In this context, distance learning is an advantage for flexible training that uses much content and aids the mitigation of time and location constraints once integrated into different training groups (Almohammadi et al., 2017). As a result, the implementation of remote learning drives organizations to innovate and construct novel platforms, employing innovative methodologies and tools to provide their educational materials (El Aissaoui et al., 2019). For example, the mobile learning system developed by Jagušt and Botički (2019) used and enriched existing digital learning content by transforming it into modular course blocks to support new education in adaptation and perform actual synchronous collaboration between participants.

Mobile learning resources facilitate mobile learning; thus, the learning content is a software resource component and the most crucial unit in mobile learning. Learning content does not refer only to learning material but also involves authoring content with any commercial authoring device, assembling and storing it in a database, and delivering the content based on the user's hardware needs (Bakhsh, 2016).

Ennouamani et al. (2020) wrote that learning styles are determined using the Felder-Silverman model. The authors also stated that learners have different perception levels and means of acquiring and retaining knowledge. Consequently, a single learning styles may not be appropriate for all learners. Accordingly, mobile applications that create content based on the learner's profile and knowledge level, including the learner's interactions with the application, have been developed.

Mobile learning media contain concepts, theories, and visual animation. For example, Budiman et al. (2018) designed mobile learning media and structured data courses based on training syllabus and training material and presented visual content with animations. Correspondingly, participant P3 stated that "there are different levels of presentation content

and format, so the training is highly appropriate for all". This evidence for the facilitating conditions of learning style importance to course content for mobile learning for training agrees with that of previous studies (Dong, 2016; Bakhsh, 2016; El Guabassi et al., 2018; Budiman et al., 2018; Ennouamani et al., 2020).

Dong (2016) stated that mobile learning resource design principles should be considered the next principles: First, mobile learning content should be as condensed and intuitive as possible. Second, learning resource design should consider mobile reading habits. Third, learning resource design should create a pleasant experience, motivate study passion, and consider resource size and format. According to participant P8, "content needs to create an enjoyable experience, inspire study passion, and consider resource size and format". To optimise the course content-building results, interviewee P1 opined that "mobile learning content should be as brief and simple as possible".

Mobile learning should be implemented smoothly. Thus, mobile technology manufacturers that offer mobile learning and mobile learning resources should adhere to uniform standards to provide full-service collaborative mobile learning (Wei et al., 2016). Interviewee P3 considered that "the SCORM (Sharable Content Object Reference Model) standard has the feature of sustainability, which means that learning resources can be used for a long time and remain valid when technology is updated", which agreed with the aforementioned statement by participant P1.

The SCORM standard was established to standardise mobile learning technology standards for design and development resources (Wei et al., 2016). Yanhong (2018) described the characteristics of the SCORM standard: 1) Sustainability, in which learning resources can be utilised for a long time, is valid when with updated technology. 2) Reusability refers to unmodified learning that can be reused on various platforms and combined with other learning content according to requirements. 3) Interoperability is required as learning materials should adhere to an integrated standard, can be introduced on any standard platform, and can be altered by editing tools to adapt to the standard. 4) Availability on the platform, where learners can access the learning resource online unrestricted by time and location. Therefore, implementing standardised SCORM-based mobile learning courseware would be a significant development trend in learning (Yanhong, 2018). Nonetheless, SCORM development has become semi-stagnant over time, and technological development is poor (Lanjuan, 2017) for mobile learning training.

Standards and Policies of Mobile Learning Use in the Workplace

In 2012, the United Nations Educational, Scientific and Cultural Organisation (UNESCO) published a comprehensive report highlighting five critical circumstances for mobile learning: visionary leadership and commitment, strong technology capacity, professional development, scalability, and policies that boost and support the initiative (Crompton et al., 2016). Participant P2 noted that "visionary leadership, technological capacity, professional development, scalability for mobile learning will help develop my work". Similarly, participant P4 referred to "few mobile learning policies for all fields and specifically public sector employees. Availability of appropriate support and resources for proper technology utilisation". According to interviewee P7, "the overarching goal of the guidelines of using mobile learning for training is to outline key issues to consider and recommend policy elements that will enable mobile learning", which agreed with previous conclusions (Fritschi & Wolf, 2012; Isaacs, 2012; Lugo & Schurmann, 2012; So, 2012; Traxler & Vosloo, 2014).

Prasad (2020) indicated that training managers believed that a company policy of Bring Your Own Device (BYOD) would prevent mobile learning adoption as not all employees possessed a suitable device. Nevertheless, other managers believed that providing a uniform mobile device to all employees would boost mobile learning. The author also stated that the BYOD policy generated a high degree of stress in employees regarding mobile learning activity as the multiple devices utilised through the learning management system (LMS) content had been designed for devices entirely different from those of the employees, which caused usability issues.

From the user's perspective, a BYOD policy results in most current devices being highly user-friendly, and the advent of authoring tools supports fully responsive design. According to participant P8, "not all employees have a suitable device; therefore, the company policy would prevent the adoption of mobile learning". Thus, the findings supported the facilitating conditions for mobile learning standards and policies in the workplace (Figaro-Henry & James, 2016; Prasad, 2020).

Implications and Conclusions

The main aim of this study was to provide an understanding on the acceptance and use of workplace mobile learning for employees' training. In the current scenario of public sector employees' digital skills, supporting digital skills will improve job performance quality and be a determinant of job performance success. According to UTAUT, knowing that the public sector performed successfully through employees' digital skill maximisation could lead to other organisations imitating this behaviour.

This study presented the implications and evidence of use for implementing and developing mobile learning technologies. Although this research focused on mobile learning for employees' training, the findings can more specifically be an example to ministries that are implementing mobile learning for employees' training and facing the same challenges. The findings demonstrated that mobile learning significantly improved the users' quality of knowledge access as compared to traditional training. Therefore, the findings could benefit other training departments that wish to develop and implement mobile learning for training more successfully.

Additionally, the findings demonstrated that employees' digital skills and infrastructure and hardware prompted the ministries to change their training methods and implement new technology suitable for mobile learning. Employees' digital skills for mobile learning are a potential strategic option for performance expectancy in implementing and using the appropriate mobile learning skills. Collaboration, communication, evaluation and resolution of problems and technical operations, content and knowledge creation, sharing, ethics, and information management responsibility are all digital competencies (Greenspon, 2019). Resultantly, facilitating employees' digital skills to implement training is the correct strategy for implementing mobile learning and using technology to improve job performance. Use of the appropriate technical support and skills for mobile learning during training impacts job performance.

Mobile learning resources are a potential strategic option for facilitating conditions in implementing and building suitable training course content that led ministries to change training methods and use new technology. Standardised SCORM-based mobile learning courseware implementation will be a significant learning development trend (Yanhong, 2018). Although course content adoption required specialised human resources to develop and maintain, it was the correct long-term choice for the training department. Thus,

facilitating mobile learning resource conditions was the correct strategy for implementing mobile learning for training and increasing the availability of mobile learning technology support and training resources.

Specialised human resources and IT are required for developing and maintaining employees' digital skills and adopting, maintaining, and developing infrastructure and hardware. Despite the apparent high investment cost required, human resources may be the best long-term option for the training and IT departments. The findings demonstrated that the selection of employees' digital skills, mobile learning infrastructure and hardware, and mobile learning resources were an extrinsic motivation for other ministries to imitate the KCSC and implement this type of training in mobile learning.

Based on the findings, it is suggested that the management of the ministries to establish standards and policies for mobile learning use with employee training strategies to provide qualified mobile learning training courses. This could foster cooperation between the training or IT departments, thus yield better standards and policies. In return, it could offer a more integrated experience for all employees, easier identification of needs, and investment and training channelling.

Previous studies have found that mobile learning for training tended to increase employees' interest in testing it and learning more about its capabilities. Thus, actions to publicise mobile learning potential are essential to mobile learning acceptance and use. According to UTAUT, knowledge and technology with mobile learning use can increase mobile learning acceptance and use. It is suggested that the ministries form multidisciplinary teams to develop mobile learning potential for employee training.

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