A STUDY OF IMPLEMENTING SMART EDUCATION TO PROMOTE ENTREPRENEURSHIP IN THE HEI CONTEXT IN OMAN

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Abstract— Advancements in recent trends in digital technologies have opened doors to the various possibilities for the tech-immigrant generation to inculcate the latest trends in the market among young minds that are tech-native (born in the digital era). The sultanate of Oman is no different than other countries in adopting various digital technologies for advancing in the area of setting up of an entire smart city. Technology-assisted education is one of those important tools which can incorporate new ideas for career directions among the students. The current research which is in the HEI background in Oman, develops an in-depth understanding of the implementation of Entrepreneurship Education (EE), assisted by various technical tools such as digital marketing. The findings were evaluated thematically, with the results showing that the recommended EE program was followed by the Ministry of Higher Education, Research and Innovation (MoHERI) by the selected HEI. The teaching of the module, however, is hindered by a variety of reasons which are addressed here as well as suggestions for enhancing the implementation of the EE curriculum. The study recommends pedagogy to improve the standard of Entrepreneurial Education that can act as a strategic driver among graduates in all HEIs across the nation to build an entrepreneurial mind-set.

Keywords—Smart Education, Entrepreneurship Education, Self-employment, Digital marketing for start-ups

INTRODUCTION

Education technology has reached greater heights after the intervention of various e-tools and interactive media to enhance the teaching and learning experience in higher education, as said by [1]. In recent days, the importance of a collaborative learning setup improves student learning and engagement outside the class. It helps them gain the collaborative skill, a much-needed skill for a successful career, as discussed by [2-3]. The authors of [4-5] mentioned that there had been an escalation in adapting innovative teaching methodologies in the higher education sector over the past few years. Recent advancements in technology, the phenomenal increase in Internet availability, and the usage of intelligent devices unlocked various opportunities for educators to implement student-centered teaching and learning strategies. However, in reality, a country's national economy is focused on SMEs (Small and Medium Enterprises), which are the foundations, and the cornerstone of all economic

systems. One of the core ideas underlying the implementation of Entrepreneurship Education (EE) initiatives in many countries worldwide seems to be fundamental. In order to empower learners with the information and skills required to generate financial value and employment, entrepreneurship education programs are increasingly being created and expanded. In much the same manner, in order to promote student entrepreneurship, the authors of [7] consider that Business Curriculum is of vital importance. In addition, it is claimed that the growth of entrepreneurial skills plays a key role in addressing the economic challenges experienced in different societies. Studies have shown a relationship between entrepreneurship activities and the growth of the nation's economy, according to [8]. In the literature, many economic difficulties have been referred to as possible contributors for EE growth. For example, over a decade earlier, [9] illustrated the usefulness of Educational Entrepreneurship in that it is no more a given that students will obtain employment in large businesses that meet their needs as economies continue to shift. The learners of today, through smartphones from their young age, are now well linked to the digital world scenario. The only prerequisite is to refine the specific requirements by which learners grasp the logic of use and acceptable methods of execution. It is particularly difficult for professors with a lack of computing background to inculcate entrepreneurial skills in the students, because internet advertising requires a detailed understanding of all aspects of social media and other advanced technological innovations that are used today. It is therefore very important to develop a structure that complements the learners who are effort to develop in the future to integrate online marketing knowledge and skills that hold the nation's economy and business environment. The analysis aimed to grow an understanding of the justifications and how the EE initiatives in the HEIs in Oman are applied. The research also addressed suggestions about how to improve the execution of EE programs. While the research was performed on a smaller scale with the subject of Omani HEI, it is concluded that some valuable lessons will be brought to light by the issues under consideration, which can assist higher understanding of the usage of EE programs in broader subjects.

LITERATURE STUDY

Companies have been slowing down their business or making adjustments in the recent global market climate, including utilizing emerging technologies that lead to changes in labour industry requirements [10]. This highlights the need for graduates to be equipped with entrepreneurship expertise to enable them to do things differently and discover new possibilities in order to lead to economic expansion [11]. According to [12], the delivery of EE programs is focused on the premise that through numerous academic programs and policies, entrepreneurs can be created. [13] Suggested that entrepreneurship topics can be understood as behavior and a personality trait, so teaching to become an entrepreneur is more likely to improve the entrepreneurial skills, values, and attitudes of young people. The degree to which various countries react to the need to build business skills among learners varies. Although substantial improvement has been achieved in most advanced nations, the production of EE appears to be a relatively modern development in developing countries' HEIs [14]. For example, in Oman, where the present research was published, in 2015 the government developed a policy to encourage EE in HEIs. In Oman, the creation of entrepreneurs and EE is seen as a successful way to help the private industry progress in order to provide employment prospects, adjust its economy and then reduce heavy dependence on income from oil revenues [15]. However, hardly any study has been undertaken globally to examine the application and effect of the EE initiatives on the growth of entrepreneurial skills of students [16]. This dearth of studies is even more evident in the case of Oman, where while EE programs have been introduced in the country's HEIs from 2015 till today, there is a shortage of research to assess

the implementation of the initiatives. This is against such background that the present study has been carried out. As per the latest business plan and situation, the curriculum for EE needs to be redesigned. There are many advertisement and marketing companies that have published the possible business situation in the coming years, requiring frequent revisions of these documents. This one site post has been checked with a list of possible areas that need to be considered when developing learners' EE prospects so that learners get the newest information needed in today's market. Few of them are studies about interactive video-based marketing, machine learning, speech recognition search, marketing automation, and authenticity [17].

I. SMART AND INNOVATIVE APPROACHES TO ASSIST EE

The education industry is continuously updating its learning and teaching techniques with developments in smart technology. Nearly every HEI in the Sultanate of Oman has been an integral part of educational technology or ICT in education [23][24]. HEIs are spending further on pupil-based approaches to help the teaching and learning process, in addition to installing campus-wide Internet access. Below, some of them are given.

A. Case studies
One of the teacher's methods is student-centered learning. Instead of passive-viewing of faculty lectures, students are interested in being part of the actions here rather than being in the audience. This technique could be easily introduced for EE by exchanging the situation, which is also referred to as the event. Different teaching resources are supplied to students in advance. Throughout this event, it is the documents or videos of a profitable start-up by a businessman with a comprehensive described case. The materials could be exchanged through the introduction of a process of teaching administration. And then they'll be required to design and get ready for their next session in the classroom. The faculty later plays the role of

facilitator of different discussions and activities, resulting in the sharing of information among students. This way, they learn more easily. With a very high impact, this approach has proven results.

B. Digital Marketting for EE
Media digitization began several decades earlier. And over the past 2 decades, when internet access has entered every home and every palm, a very quick and efficient form of online marketing has created a new frontier. Education in social media and numerous case studies relating to productive start-ups are highly important. Internet advertising is today's most common medium in which it becomes theoretically possible in less time to reach more potential customers. Digital marketing studies are used as part of entrepreneurship training in several institutions globally. In order to facilitate business these days, multiple social media components are utilised. But the companies are undertaking a full consumer analysis and a viability review of the implementation of the new strategy before introducing any new marketing strategy. Therefore, digital marketing entails a radically different theoretical process design, and the involvement of digital marketing for businessmen includes a corresponding shift in the business model to strengthen marketing techniques.

C. E-Commerce
Online channels for enterprises are provided by electronic commerce or e-commerce. The introduction of e-commerce in SMEs (Small Medium Enterprise) has become much simpler with the presence of payment processing access points such as PayPal. The procedure was quite confusing earlier, in which the company registered would enrol with any specific bank for online transaction-related operations. But with the PayPal as an alternative, since the online banking take care of these things of operations even from a broader perspective, anybody can start a new business and include payments online. This was successfully introduced by many freelancers who began to use it without

any glitch, as it does not require disclosure of account information to either customer or business. To follow the current industry trend, EE must have a course relevant to e-commerce.

E-commerce offers the company versatility to get the payment very quickly and easily promotes their company as well. The EE coursework in which e-commerce would be introduced should have a great deal to do with different business strategies that should be pursued if these start-ups are to have online payment options allowed. In addition, different security considerations need to be addressed with the students in order to ensure that they do not face any safety concerns throughout the process.

PROPOSED FRAMEWORK

In order to enhance student performance in the context of the understanding of getting enactments when having a journey of starting their own company, the proposed EE system suggests a hierarchical order in which this could be applied in HEI. As shown in Fig.1, it begins with a prospective entrepreneur (PE), whereby students are enrolled in an entrepreneurship education class. The very first phase is to do the study of specifications.

D. Potential entrepreneurs (PE)

This includes students who took up the entrepreneurship course, as some of them will certainly use this experience for execution. For the class lectures, various brainstorming activities could be given to inspire them in order to instil value of EE affecting the economy of the country.
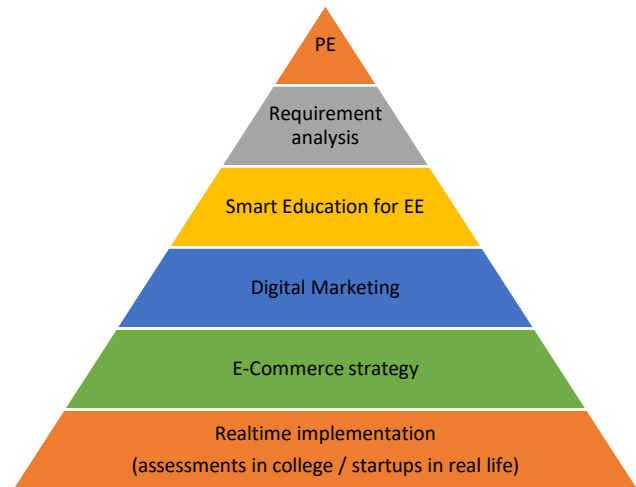

Fig 1. Proposed Framework for Smart EE

E. Requirement analysis

The teachers will now be able to evaluate the actual Cohort requirement on the basis of the first session and after multiple sessions including appropriate identities and thinking up activities in the classroom. Often the class session is very academic, such as an art and design module. In such a situation, the teacher could frame the EE scene in a way that it can be given to the students with sufficient mentorship to start their respective start-ups, such as design-based companies, which they have the ability to do websites and earn profit from now on.

On the other side, unless the workshop is intended for students in various specializations topic planning could not be implemented, and the staff would focus on different scenarios depending on their current level and nature of experience to accommodate the needs of students.

An online survey could be given to students via some resources such as Google Forms, and comments could be collected and evaluated on the basis of the feedback obtained for further changes in the class sessions. In addition, the study can also assist to recognize the different areas of enthusiasm in pupils with different business solutions.

F. Smart education for EE

It is very important for a college professor to use smart and creative teaching and learning methods as the new business scenario touch the digital horizon, otherwise, it becomes dull for the current students to get the information in a simpler and more effective way. Moreover, it becomes simpler for a college professor to illustrate the realistic application of such electronic resources when making use of smart technology in the classroom [17-22]. The above part is relevant because, without always inactive teaching and learning environments, students need effective classrooms for such sessions.

For the enhancement of the session, online discussion boards, the use of shared screens such as Padlet, etc., may be used. Not just that, but the student must also be given an examination to plan and discuss an acceptable business model. Some tools may later be used to draw and evaluate it among peers and even other specialists who have successfully set up their businesses, such as industry professionals and graduates.

G. Digital Marketing

Awareness of online advertising is mostly compulsory for SMEs to advance their company online, as discussed earlier. In various contexts, this is significant, with ease of updating and lean management. Learners are given ample computing skills to build their own company strategies and to establish online promotion campaigns on different various platforms. The media channel must be wisely selected on the basis of the essence of the market so that it can contribute to meaningful outcomes. For instance, there are many female photographers in the Sultanate of Oman who have their own companies to cover women-only events. They utilize selected online groups on social media, such as WhatsApp groups, and other platforms such as social media posts that are not openly accessible to anyone when promoting such a company.

H. E-Commerce Strategies

Students will be prepared at this stage for their business model, which is ready to carry out in the form of their own new businesses. However, if any online electronic payment is involved, one more move for the potential entrepreneur would be enhanced. All facets of e-commerce-related strategies and potential risk factors will be given to the students to prepare the mitigation management plans in advance. In certain cases, students may undertake a different extra curriculum to learn and create their own website for their company focused on e-commerce. Some protected digital payment portals such as PayPal are very helpful in reducing the difficulty of the part of online transactions, as none of the parties need to disclose online information related to their real account because online disclosure of the details may attract certain potential hazards resulting in online fraud.

REFLECTIONS AND CONCLUSION

The implementation of EE was motivated by the need to diversify Oman's economy and to make sure that pupils are motivated to see entrepreneurship as a profession other than looking for employment opportunities in developed enterprises [18-20]. EE may be improved towards the next tier with the participation of different technologies. The proposed structure covers the key facets of EE implementation, together with the latest technology in teaching. A program addressing the current business needs for small and medium-sized enterprises and entrepreneurs could provide a significant step in the direction of improved results. It will certainly initiate not only this but also different ways the students can think to have their own start-ups and advance in their own careers helpful for the nation's economy.

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