L'incubatore dell'Università di Betlemme e la formazione in ambito imprenditoriale: il supporto fornito durante l'implementazione del progetto NUR

Bethlehem University Incubator and Entrepreneurial Education: Support during the NUR project

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Abstract

La necessità di creare nuove *start-up* in Palestina è vitale per lo sviluppo economico. *Start up* dove giovani creativi possano realizzare nuovi prodotti e fornire i servizi necessari al paese, per aiutare a migliorare la vita dei cittadini dal punto di vista finanziario e sociale. Il *Bethlehem Business Incubator* (BBI) è un braccio operativo della Facoltà di Economia Aziendale dell'Università di Betlemme che fornisce servizi ai giovani interessati ad avviare nuove imprese. Durante la fase di implementazione del Progetto *NUR*, l'Università di Betlemme ha investito le risorse disponibili presso il BBI per incubare cinque progetti innovativi incentrati sull'utilizzo di energie rinnovabili e pulite. Gruppi di giovani imprenditori hanno presentato le loro eccellenti idee in un *hackathon* condotto all'Università. Cinque gruppi di concorrenti sono stati selezionati per l'incubazione dopo aver esposto i loro progetti a una giuria di esperti.

The need for new start-ups in Palestine is vital for the economic development. Start-ups where creative young people can produce items and deliver needed services in the country, to help enhancing their quality of life, financially and socially. The Bethlehem Business Incubator (BBI) is an arm of the Faculty of Business Administration at Bethlehem University that provides services to young people interested in starting new businesses in the area. During the NUR project implementation stage, the Bethlehem University invested resources available at BBI to incubate five innovative projects that focus on the use of renewable and clean energy. Groups of young entrepreneurs presented their excellent ideas in a hackathon conducted at the University. A panel of judges selected five groups of contestants for incubation, after the presentation of their projects.

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Palestine is a small, fragile, low-income country with a population of 5.2 million[1] as of the end of 2020. In the year 2019, a GDP per capita of US $3,378 was reported by the PCBS[2]. Due to ongoing conflicts with Israel, the economy has been in unprecedented decline since 2000. The current political situation led to the collapse of tourism, severe constraints on the ability of Palestinians to work in Israel, and the suspension or closure of many enterprises, leading to extremely high levels of unemployment and poverty. According to the Palestinian Central Bureau of Statistics, unemployment rates in the year 2019 sat at 21.3% among male workers and 41.2% among females, averaging 25.3% in the country[3]. According to the PCBS[4], the unemployment rate among the youth (18-29 years) in Palestine reached 38% in 2019 (31% among males and 63% among females) distributed 63% in the Gaza Strip and 23% in the West

Bank. Data also showed that the higher unemployment percentage among youth related to holders of an intermediate diploma or higher, where this percentage reached 52% during 2019 (35% males and 68% females).
Unemployment rates are high although indicators of literacy and education in Palestine are among the highest in the MENA region. One of the biggest barriers to development of the private sector is the restriction to mobility on both individuals and goods, resulting from the political environment. The absence of an airport and national port system further inhibits access to markets and increases transaction costs for businesses. The weak market-economy legal framework, the uncertain business environment, and the political instability make it difficult to attract sufficient local and foreign investment to create jobs and to reduce poverty[5].
In the same report published by IDRC, it was noted that: «Palestinian women have slightly more favorable perceptions of the cultural context for entrepreneurship than men, but this does not translate into a higher level of intent to start a business in the next three years. Only 18% of women, compared to 34% of men, expressed this expectation. The lower level of intent likely relates to the finding that women are less than half as men to perceive that they have the knowledge, skills, and experience to start a business and have a higher fear of failure. The highest overall levels of intent are among 18–24-years-old, adults with a post-secondary or higher education, those in the upper-third household income group, those working part-time, and students»[6].
This said it is clear that upgrading the skill level, knowledge and sharing experiences with young men and women about successful businesses, as well as supporting these young people in making a decision about starting a business will help changing their views and might reduce the level of fear these young people are currently facing. All of the negative environmental circumstances, including high unemployment rates, restricted access to job opportunities in Palestine or in Israel due to political barriers, as well as the inability for the public and private sectors to absorb more young employees, work together in supporting the idea of starting a business.
Education was key in the early-stage entrepreneurial activity as mentioned in the report of IDRC[7]. They conducted a study and reported that in Palestine, the early-stage entrepreneurial activity rates rise progressively with the level of education. This is an excellent indicator in Palestine because about half of the adult population has a secondary education or higher. The intervention of a university is vital to shape the attitudes and skills of young people and direct them properly to the new opportunity that lies in starting up a business.
According to the UNFPA[8], it is important to increase the capacity of young people to establish and develop their own-initiatives. Universities can provide training programs that advocate for young people to enter growth sectors, giving them an edge in the labour market.

The need for new start-ups in Palestine is vital for the economic development. Start-ups where creative young people can produce items and deliver needed services in the country, to help enhancing their quality of life, financially and socially. The NUR (New Urban Resources) project is a joint effort that put together the expertise of the engineers at the Municipality of Torino and the good intentions of the people of Bethlehem, represented by the Municipality of Bethlehem, the Bethlehem University and the association of engineers in the Bethlehem Governorate in the Holy Land. The project focuses on the use of renewable energy as a clean source of sustainable energy that could also create new businesses, jobs and save a good part of the electricity bill for the beneficiaries. In addition to the direct effect of the NUR project, Bethlehem University also values the indirect effects that brought to the development of a new academic program, leading to setting up a degree in renewable energy production and management. This is developed through the collaboration of two distinct departments at the university; the departments of business and physics are working closely with the Salesian Technical School in Bethlehem to offer this program as soon as the Palestinian Ministry of Higher Education will accredit it.
Bethlehem University played an important role in the NUR project. It provided the needed space for Italian experts to meet with engineers in Bethlehem and train them on the installation and operations of renewable energy plants. What is more important is that Bethlehem University has a running and successful business incubator that attracts young people with ideas. It helps participants to develop their ideas into real products and real businesses. A great impact results from graduating successful start-ups in the country. In the last four years of operations, six new businesses were created, five are in the proto-type development stage, and another 29 other businesses either are in the last stages of registration or are finalizing their business model.
As an important business Faculty in Palestine, we have an important role to play in the economic and social development of our Palestinian community. In achieving this main objective, we became more actively engaged with various interest groups and stakeholders in the Palestinian community. In building these types of relationships, and through matching with the needs of the various interest groups, we work on enhancing the employability of our graduates. In all prior years, the Faculty of Business Administration generated so many employees to join the labor market in Palestine. It is about time to create employers rather than employees. Focusing on the importance of new start-ups and encouraging students to be creative and innovative is a goal for the Fa§culty. The Faculty, through its activity in the business incubator, implements changes that will support students in their thinking process and will facilitate their pathway to become business leaders and successful employers.

Innovation is an important aspect of the Faculty's development strategy. The incubator is an arm of the Faculty that provides services to young people interested in starting new businesses in the area. The incubator is an innovative, open hub to incubate, mentor, and support local start-ups, entrepreneurs, students and faculties, particularly women and youth. It offers various training services, workshops, mentorship, networking opportunities, and internships to help its clients receive follow-up investments and increase their chances of sustaining their businesses after leaving the incubator.

It is proven that university-based incubators are used as an effective tool that either accelerates businesses or helps in the creation of new businesses (Hassan, 2020)[9]. The definition of a university-based incubator has evolved over time as described by Robles (2017)[10]. That definition has evolved into linking technology, capital and knowledge to manage the acceleration of the growth of new companies, and to speed technology transferring. Tying that definition to a university, like in the case of Bethlehem University, creates what we call a university-based incubator, which aims at identifying the needs of young entrepreneurs and support them in starting their businesses through the mixture of the various services that the incubator provides to entrepreneurs. Studies have proved (such as Fernández Fernández et. al., 2015 and Robles, 2017)[11] that linking incubators to universities adds value to all those involved, such as the entrepreneurs, the students, the university and the community at large.

In addition to providing space and the infrastructure needed to develop a product in a collaborative work environment, the university-based incubator provides the expertise that innovative entrepreneurs look for and urgently need. Services such as making available technical equipment, managerial support, networking opportunities, and access to knowledge encourage entrepreneurs to join the incubator. These kinds of services are considered a point of attraction for young entrepreneurs to apply to the incubator, going through the competitions and contests needed as pre-requisites for incubation. The incubator is currently run as a service centre that provides the needed support to young people without applying any fees to beneficiaries. Its activities are funded through the cooperation development projects that the School of Business applies for and secures. In order to continue as a sustainable activity, new models are being evaluated. The setting up of a revolving investment fund at the university could be an option, in which the university invests in new businesses that could gradually pay some fees to guarantee the sustainability of the incubator. It would be ideal if the private sector invests parts of the funds allocated for corporate social responsibility in the setting up of the revolving investment fund.

Students and entrepreneurs present their ideas on the use of renewable energy in a hackathon conducted at the Bethlehem University in November 2019.

In addition to creating our first business incubator at the University (called Bethlehem Business Incubator or BBI), the Faculty of Business Administration also started shifting gears in the last few years to become more supportive to the development of entrepreneurial way of thinking of our students. Introducing entrepreneurial education was a major step. The Faculty offers courses that are open to university-wide students regardless of their discipline of study. The main purpose was to change attitudes from becoming job-seekers after graduation to job creators, and to help in the socio-economic development of the Palestine in general and the Bethlehem area in particular. This approach is also supported by Hofer and Potter (2010) in a report published by the OECD (LEED)[12]. This entrepreneurial education is a set of formal teaching activities that educate, inform and train individuals interested in business start-ups or the development of small enterprises (B.K. Volles et al., 2017)[13].

During the NUR project implementation stage, the Bethlehem University invested resources available at the Bethlehem Business Incubator (BBI) to incubate five innovative projects that focus on the use of renewable and clean energy. Groups of students and entrepreneurs presented their excellent ideas in a hackathon conducted at the University, and a panel of judges select five groups of contenders for incubation after the presentation of their projects (Figure 1).

Innovative ideas included the following:

1. A new technology that supports alternative energy solutions that is based on piezoelectric technology (sheets) which harvests pressure from footsteps or moving vehicles and transforms this pressure into electricity.
2. A solar water-heating system with an additional advantage over the existing competitors in the market, where a chemical substance is placed between the layers of the hot water storage tank, to preserve the heat for a longer period, and to reduce the energy needed to re-heat the water. This system can be used by households as well as large organizations and establishments that need hot water for their operations.
3. A portable charger which is a modern-life solution for the growing use of electronics where people have become more dependent on electronic equipment, ranging from mobile phones and laptops to electrical bicycles and cars. This portable charger offers a customized solar system (based on the need of each institution such as municipalities, public parks, universities, and many others) and utilizes solar energy to generate electricity with different types of outlets, where people, visitors, and other users will pay a small fee for benefiting from this service.
4. A PV thermal panel that offers a smart solution utilizing solar energy to produce electricity and at the same time hot water. The existing competition only offers one of these systems; either using solar energy for generating electricity or using it for heating water. The combination of the two systems helps in saving space and money for multiple users (individuals and institutions) where the cost of both systems separately is higher than what PV thermal panel offers.
5. A smart electrical stick (named VERENA) used by people with visual disabilities (PWVD) for commuting independently. Unlike the traditional (PWVD) sticks, VERENA offers unique support features such as sensors and communication devices which help users in their daily lives with fewer risks of accidents. VERENA is powered by solar energy (and can be powered through electrical outlets) as the major source of electricity.

Notes

[1] PCBS: http://www.pcbs.gov.ps/Downloads/book2546.pdf.

[2] PCBS: http://www.pcbs.gov.ps/statisticsIndicatorsTables.aspx?lang=ar&table_id=377.

[3] PCBS: http://www.pcbs.gov.ps/Downloads/book2515.pdf.

[4] PCBS: http://www.pcbs.gov.ps/site/512/default.aspx?lang=en&ItemID=3787#:~:text=Thus%2C%20the%20unemployment%20rate%20among,23%25%20in%20the%20West%20Bank.

[5] L. Stevenson, Y. Daoud, T. Sadeq, A. Tartir, *Global entrepreneurship monitor: GEM-MENA regional report 2009 (Middle East and North Africa)*, International Development Research Centre (IDRC), Cairo 2010, p. 117.

[6] Ibidem, p. 109

[7] Stevenson et al, *Global entrepreneurship monitor*... cit., p. 24.

[8] UNFPA, *Youth In Palestine, Policy and Program Recommendations to address Demographic Risks and Opportunities,* United Nations Population Fund (UNFPA), 2017, p. 21.

[9] N.A. Hassan, *University business incubators as a tool for accelerating entrepreneurship: theoretical perspective*, in «Review of Economics and Political Science», ahead-of-print, 2020:, p. 10 (https://doi.org/10.1108/REPS-10-2019-0142).

[10] N. Robles, *Development of university's business incubators in Panama*. Master Thesis, Riga Technical University Faculty of Engineering Economics and Management, 2017, p. 12.

[11] M.T. Fernández Fernández, F.J. Blanco Jiménez, J.R. Cuadrado Roura, *Business incubation: innovative services in an entrepreneurship ecosystem*, in «The Service Industries Journal», October 2015; N. Robles, *Development of university's business incubators in Panama*... cit.

[12] R.A. Hofer, J. Potter, *Universities and Entrepreneurship Support, Policy Issues, Good Practices and Recommendations. A Note Prepared in November 2010 for the Directing Committee of the Local Economic and Employment Development Programme of the OECD*, 2010.

[13] B.K. Volles, G. Gomes, I.R. dos Santos Parisotto, *Entrepreneurial university and transfer of knowledge and technology*, in «Electronic Journal of Administration», Vol. 23, 2017, pp. 137-155.