INNOVATIVE JORDAN: Progress for Prosperity
TABLE OF CONTENTS

Unlocking Innovation 3
The Building Blocks of Innovation 5
Jordanians Innovate 10
10 Information & Communications Technology
18 Energy
26 Healthcare
34 Education
42 Tourism
50 Film
What’s On? 58
Jordan at a Glance 62
UNLOCKING INNOVATION

The buzzword of the decade, innovation has captured the interest of businesses, governments, educational institutes and organizations worldwide. It is an undeniable driver of growth, opportunities and prosperity.

In simple terms, innovation is the generation of new ideas that, when executed well, improve people’s lives. By innovating a process, product or service, people throughout history have been able to spin challenges into opportunities, adapting to changes and coming up with solutions to satisfy their needs and wants.

To move forward is to innovate

In a highly competitive and dynamic world, businesses must rely on one of their most important non-tangible assets: Ingenuity. The need for innovators is at an all-time high, capable of arming businesses with the knowledge and tools to not only compete on the global stage, but also keep pace with accelerating digitalization. Technology and innovation are also closely linked to the future of employment, helping countries speed up their growth trajectory by increasing access to markets and investors.
The Question Is:
What does innovation mean to you?

The Building Blocks of Innovation

In the face of regional socioeconomic pressures, Jordan has realized the acute need to counter the current situation by placing innovation – particularly youth-led innovation – at the core of its endeavors to help shape the country’s future.

In Jordan, innovation is budding and vibrant. Because of its limited natural resources, the nation has traditionally leaned on its people’s innovation and creative ideation to keep the economic wheels spinning. This innovation ethos is deeply rooted in Jordanian culture, dating back to earlier civilizations that pioneered the sickle blades and eyed bone needles using inventive designs that have endured till today. Thousands of years later, the Nabataeans would also excel at developing water-harvesting techniques that served agricultural purposes. Nowadays, Jordan continues to build on this heritage of innovation, positioning itself as a champion of modernization as well as a gateway to the region with a commitment to serving as an innovation hub in which out-of-the-box ideas can thrive.

Zooming out, nations that supercharge innovation have been known to enjoy considerable economic growth, high standards of living and more readily available resources. At the end of the day, it is continuous improvement and creative thinking that allows you to be ahead of the curve while ensuring sustained growth and excellence in the long run.

The Ideas Driving Progress

The beauty of innovation lies in its versatility. It is accepting of people of all backgrounds and is not confined to the parameters of industrial sectors. Innovation can be realized via a bottom-up approach just as much as it can from a top-down approach. Social innovation has emerged because disadvantaged individuals and communities were able to build on the areas in which they were advantaged to seek solutions to their problems. Often, these innovative ideas have gone on to be translated into successful entrepreneurial enterprises.

Entrepreneurs are continuously set on finding their competitive advantage in the marketplace. In the fierce business landscape, only entrepreneurs with innovative ideas that progressively or disruptively create or turn something for the better will stand out and thrive.

Today more than ever before, the Middle East and North Africa (MENA) region – at the heart of which lies Jordan – is in dire need of passionate dreamers and successful innovators. Worldwide, nations, businesses and individuals are living the consequences of globalization, digitalization, socio-political instability, economic reforms, migrations, climate change threats and generational transformation. Innovation is crucial to improving the quality of life in these uncertain times. There is no formula for successful innovation; it is up to each person’s unique experience.
In the World Economic Forum’s 2017 Global Competitiveness Index, Jordan was ranked first among Arab oil-importing economies, reaffirming the country’s resilience and ability to make its mark around the world. Standing as a safe haven for creativity, Jordan’s security and rule of law ensure that it will continue to offer a welcoming environment for everyone, including innovators and change-makers.

**JORDAN’S INNOVATION-ENABLING ECOSYSTEM STANDS ON FOUR MAJOR PILLARS:**

**A Young, Tech-Savvy Population**
With 55 percent of Jordanians currently 24 years of age or younger, the majority of the nation’s population has grown up in the midst of an unprecedented burst of technological advancement. While older generations might be reluctant to experiment with new technologies, Jordanian youth embrace them, eager to learn the ins and outs of every new app, device and means to interact with the world around them. They are more connected, informed and globally conscious than any generation of Jordanians before them, equipped to usher in a new era of digitalization.

In 2030 – just 13 short years away – Jordan is projected to enter what is known as a ‘demographic window’, in which its working age population will be at its peak, while its dependent populations, consisting of children and the elderly, will be relatively small. Jordan is investing in its burgeoning youth population to ensure that these digital natives will be able to lead the nation during what is expected to be a 20-year opportunity for boosted productivity, increased savings and a rising gross domestic product (GDP).

**Education**
The people of Jordan are the nation’s greatest asset, and its educational system has been essential in building the foundation upon which local pioneers and thought leaders stand. When it comes to the basics, Jordan is ahead of the pack, boasting one of the highest literacy rate in the Arab world at 91 percent, as well as a 95 percent enrollment rate for Jordanian children between the ages of 6 and 15. Within its institutions of higher learning, Jordan is a competitive education destination across the region, with foreign students accounting for almost 21 percent of enrollments at the undergraduate level.

As the importance of constant evolution becomes ever clearer, Jordan has turned its attention toward developing young people’s entrepreneurial spirit, as well as stressing the importance of learning the skills that are most needed in the workplace. Under the National Strategy for Human Resources Development, Jordan is taking steps to boost teacher training, update curricula and improve classroom environments, contributing to the development of youth who are ready and able to carry the nation forward. As His Majesty King Abdullah II stated in his Seventh Discussion Paper, “We want Jordan to lead the way in modernizing education in the Arab world, encouraging others to follow in its footsteps towards a knowledge-based society.”
Working to help young men and women become job creators instead of employees, accelerators, incubators and other initiatives led by NGOs and the private sector have emerged to foster young, innovative entrepreneurs in Jordan. This revolution began in earnest in 2010 with the launch of Oasis500, the country’s first startup accelerator, but has since grown into a community of entities committed to bolstering the greatest business ideas in Jordan. Meanwhile, social innovation labs, fabrication labs (FabLabs) and 3D printing houses have made strong debuts, revolutionizing the production process and providing young innovators with new tools, software and opportunities to transform their ideas into tangible realities and competitive products.

Infrastructure
In the modern world, connectivity is a crucial piece of the innovation puzzle. Jordan got an early start by liberalizing its telecommunications sector in 1999, as well as by launching its first ICT strategy in 2000. Today, the country’s major telecommunications operators have not only extended 3G and 4G services to every corner of the country, but have also begun integrating the Internet of Things into the sector, providing monitoring and security solutions to homes and businesses, among other valuable services.

Alongside these strides in ICT readiness, entrepreneurs also benefit from the country’s small size and resultant close-knit networks. Under REACH 2025, Jordan’s 10-year ICT action plan, public-private partnerships continue to grow in number, accelerating progress in the field of e-payments as well as the digitalization of governmental processes. This hyper-connectivity, through both technology and the ‘Internet of Humanity’, has set the stage for entrepreneurs of all backgrounds to launch and grow their businesses from Jordan.

Startup Support
Innovation is the lifeblood of the Jordanian economy, as evidenced by the small- and medium-sized enterprises (SMEs) that account for 95 percent of the country’s economic activity. With approximately 300 startups and counting in Jordan, several entities have stepped up their support of entrepreneurial enterprises, ensuring that the resultant culture of innovation not only takes root, but blossoms on Jordanian soil.
Jordan has one of the highest concentrations of technology companies in the Arab world. The ICT sector’s revenue has grown by 28%. The ICT sector contributes 12% to the country’s GDP. REACH 2025: In 2016, Jordan launched REACH 2025 to accelerate the digitizing of the entire Jordanian economy. Jordan is the leading source of Arabic content creation on the internet. Amman is the 10th best place to start an IT company in the world.

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<td>Women make up 30% of Jordan’s tech labor force</td>
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<td>At 90%, Jordan ranked first globally in 2016 in terms of social media</td>
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Innovation distinguishes between a leader and a follower. —Steve Jobs
AMMAN THE REGIONAL TECHNOLOGY CAPITAL FOR STARTUPS

- Jordan has the most competitive wages for highly-skilled IT specialists
- Through its free trade agreements, Jordan offers a gateway to over 1 billion consumers worldwide
- Around 22% of total graduates specialize in ICT/engineering

SUCCESSFUL ICT STARTUPS THAT EMERGED FROM JORDAN:

- **Maktoob**: Acquired by Yahoo in 2009
- **Jamalon**: Largest online bookstore in the Middle East
- **Opensooq**: Largest online marketplace in the Middle East
- **Rubicon Group Holding**: Global transmedia company

JORDAN IS WITNESSING A GROWING PRODUCT DEVELOPMENT PRESENCE:

- Microsoft
- Oracle
- Amazon.com
- HP
- Expedia

ICT IN JORDAN

VENTURE CAPITAL FIRMS

- Silicon Badia
- Intel Capital
- iMena
- Wamda
- AcceleratorTech
- Mena Venture
- Dash Ventures
- DAMA Ventures
- Grofin
- Cairo Amman Bank
- Ahli Microfinance
- Hikma Ventures
- National Microfinance Bank
- Jordan Enterprise Development Corporation (JEDCO)
- Development and Employment Fund

INCUBATORS

- Zain Innovation Campus (ZINC)
- The Tank By Umniah
- iPark
- King Hussein Business Park - GROW
- Queen Rania Center for Entrepreneurship

ACCELERATORS

- Oasis500
- ZMission
- BIG Program by Orange Jordan
- Mena Apps

ASSOCIATIONS & NETWORKS

- King Abdullah II Fund for Development
- Endeavor Jordan
- ICT Association of Jordan - inf@j
- Startup Grind Amman
- The Gaming Lab
- Jordan Gaming Task Force
- Microsoft’s Imagine Cup
- Trip to Innovation
- Amman Tech Tuesday

CO-WORKING SPACES

- FORSA Space
- V Business Center
- MindHub Amman

JORDAN IS THE REGIONAL TECHNOLOGY CAPITAL FOR STARTUPS
space. By considering user factors such as demographics, interests, online behavior, and even current location, Audiogram’s algorithm produces a personalized weighted score for all available informative audio content in real time when the user initiates a call.

The first-of-its-kind application then plays the most relevant audio clip (in the form of songs, upcoming events nearby, ads, public service announcements, health tips, language lessons, and much more) in lieu of the default RingBack Tone, making this experience more enjoyable and personalized.

How were you able to promote and fund your business idea? We applied to Oasis500 and, after several months of refining our business model, secured a pre-seed fund in September 2016. Since integrating with a telecom operator is a prerequisite for our product, we reached out to Zain Jordan, which was extremely receptive to our idea. After winning several local startup competitions, we closed a deal with ZMission, a joint venture led by Zain Jordan and Manaseer Group, allowing us to integrate and test our product with Zain Jordan.

What does innovation mean to you? Innovation is often misconstrued as a result of doing something for the first time. In my view, it is the continuous process of taking risks others would not take, learning from failures others will never experience and adjusting your trajectory towards goals that only you can achieve.

In your opinion, what goes into the making of an innovation-enabling ecosystem? I think an innovation-enabling ecosystem is made up of two components: Role models and culture.

After Ahmad Abu Ghaush won the Olympic gold medal,
In your opinion, how has the ICT sector elevated the national economy and helped to create new job opportunities?
I am probably biased on this subject, but I believe that the tech industry is what will keep our economy moving forward in the decades to come. The fact that you can build something amazing with just a laptop and internet connection means that the entire population can participate and innovate on a national and global scale. The disruptive nature of tech means it will constantly improve the economy, hone the skills of existing labor and create new opportunities in unexpected areas.

What opportunities exist for further innovative growth in the sector?
EduTech is going to be one of the most intriguing opportunities in the next few years. In light of the refugee crisis, there is a major need for brilliance in educational technology solutions that can help us put children back in the classroom – even if the classroom doesn’t physically exist. With the upcoming need for mass rebuilding in Syria and Iraq, any creative innovations in construction technology that allow for retooling, lower construction costs, and automation in building infrastructure will also see a hike in demand in the next few years.

What is your outlook for the ICT sector?
When I think about the future of ICT in Jordan, I’m very optimistic. My biggest concern, however, is Jordanian talents migrating away in search of better opportunities. I believe the only way to keep hold of our talent is to prove our ability to succeed. If we want to build the ICT sector into a regional powerhouse, increase the pay scale and create an environment and culture that revels in innovation, we must ensure that our national talent remains here. This should be our highest priority today.

What skills should the next generation have to spur growth in the Jordanian ICT sector?
The biggest weakness I see in our current generation is an inability to translate a vision into a convincing argument for investors. If we are to grow the ICT sector, we will need to attract foreign investments and convince them to bet on our young innovators. Being able to pitch an idea is critical to getting funding, attracting skilled talent to your team and being able to sell your product or service on an international level.

What competitive advantages does the Jordanian ICT sector offer investors as well as startups?
We have a growing talent pool of Jordanians with a high aptitude for entrepreneurship. You can recruit talent and market your product for significantly lower costs than most other places in the region. Startups in the tech sector receive additional government benefits, as do companies located at the King Hussein Business Park. Together, these factors make Jordan a great testing ground for any startup.

With such a youth-centric population, there is a high percentage of tech-savvy early adopters who provide valuable feedback for any product. These factors, coupled with the ease-of-access to top-level management in any company, make Jordan extremely appealing to startups and investors at various stages.

In your opinion, how many Jordanian kids do you think signed up for taekwondo? Similarly, having role models within the innovation community sets an example for prospective entrepreneurs. Secondly, you need a culture that celebrates risk-taking and accepts failure. If we create an environment where failure is embraced as a positive learning experience rather than a result, we will see a much lower drop-off rate in innovation.
Jordan is the second most attractive environment for renewable energy and energy efficiency investments in the region\(^1\) 

By 2025, renewable energy will constitute 15\% of Jordan's total energy production\(^4\) 

Women make up 16\% of Jordan's workforce in the clean technology and renewable energy field, 53\% of whom are engineers\(^5\) 

More than 365 companies operate in the clean technology and renewable energy field, generating 12,913 job opportunities\(^6\) 

Jordan is ranked second in the Arab world with regards to renewable energy generation\(^2\) 

Since 2015, renewable energy’s contribution to the total energy mix has grown from 0\% to 6\%\(^3\) 

Elon Musk

We have this handy fusion reactor in the sky, called the sun; you don’t have to do anything, it just works. It shows up every day.
ENERGY IN JORDAN

The Largest Power Generation Projects Using Alternative Energy in Jordan:

**SHAMS MA’AN POWER GENERATION:**
- The largest privately-owned solar photovoltaic power plant in Jordan and the Middle East
- Capacity: 52.5 MW
- Production: 160 GWh/year

**TAFILA WIND FARM PROJECT:**
- The largest wind farm project in the MENA region and the second largest in the world
- Capacity: 117 MW
- Production: 400 GWh/year

**ATARAT OIL SHALE-FIRED POWER PLANT:**
Jordan’s first oil shale-fired power plant which is expected to be complete in 2020, making it the largest plant of its kind in the world after Estonia.

**INVESTMENTS IN JORDAN’S ENERGY SECTOR:**
- Total: USD 5 billion
- Renewable Energy: USD 2 billion

- Located within the world’s solar belt, Jordan enjoys one of the highest global radiation values with more than 300 sunny days a year
- Jordan is a regional leader in incentivizing efficient energy consumption through hybrid and electrical vehicles

**NUCLEAR POWER IN JORDAN:**
- The country’s projected nuclear power plant, to be built and operated in partnership with the government of Russia, will be operational in 2025
- The power plant will include two nuclear reactors, with a capacity of 1,000 MW each
- Upon the plant’s completion, Jordan aims to produce 48% of its electricity using nuclear power
How did you come up with the idea behind Taqetna?

I first got the idea around seven years ago when the energy crisis hit Jordan and electricity prices were soaring. It was then that I decided to come up with an Efficient Vertical Wind Turbine for low wind speed areas. After two years of research, development and continuous experimentation, the first prototype of a wind turbine called ‘T-Reyah’ was produced. Using advanced aerodynamic technology, ‘T-Reyah’ was able to generate power at low wind speeds efficiently. In 2012, I was able to obtain initial funding, and the company was officially launched. In the hopes of making renewable energy sources available to various segments of society, and because we believe renewable energy belongs to everyone, we named the company Taqetna (Arabic for Our Energy). Since then, more than 210 projects have been implemented, providing electricity to a number of remote areas. Our services are currently offered in Jordan, Saudi Arabia, Kuwait and Palestine.

What impact does Taqetna have on Jordan’s economic and social development?

Taqetna’s impact can be felt in various ways, beginning with the increasing reliance on local energy sources. The project also promotes the use of renewable energy sources, and reduces our need to import energy, which can significantly increase the GDP and support our economy as a whole. We are currently working on manufacturing and developing several solutions and products locally, exporting part of them to the GCC, and, in doing so, contributing to Jordan’s foreign exchange reserves.

When we talk about the impact of any national entrepreneurial project, it often lies in creating jobs for our highly skilled professionals. Keeping Jordanian talents in the country is what we are mainly trying to do through Taqetna.
Does innovation require significant financial resources? What are the most important factors of success in this sector?

Innovation needs, above all, motivation. It needs success stories that encourage innovative entrepreneurs to take risks. Next come training and guidance, which can be received through relevant institutes, colleges and universities. In my opinion, financial resources come in third place, for capital is available and successful entrepreneurs with bright ideas can navigate their way to it. As for the government’s role in promoting innovation, it is manifested in the facilitations it offers for the establishment of small entrepreneurial projects, boosting Jordanian entrepreneurs’ confidence in the local investment environment.

How would you describe Jordan’s innovation environment in general?

The environment of innovation and entrepreneurship in Jordan has improved significantly since 2012, when a large number of private incubators were set up. Taqetna was actually one of the projects to be taken in at the Meydan Incubator, through which we were able to receive our first project funding.

You give specialized training courses for school and university students. Do you think community awareness can significantly impact further progress in the energy sector?

At Taqetna, we believe that the renewable energy sector’s key driver is to build a generation of influential industry professionals who believe in a common vision and mission to facilitate everyone’s access to renewable energy sources. We have already trained more than 1,600 energy engineers, investors and professionals, most of whom view Taqetna and its products as an important reference in the energy sector and as a gateway to innovation in this promising sector.
He who has health, has hope; and he who has hope, has everything.

— Thomas Carlyle

**Healthcare**

- **Medical tourism income in Jordan** is estimated at about USD 1.2 billion annually.
- Jordan is ranked among the top 10 countries in medical tourism worldwide.
- **80%** of Jordanian medicines are exported to Arab markets, while others have reached developed countries such as the UK and the USA.
- The number of doctors registered with the Jordan Medical Association reached 28,000 in 2016.
- **28K**
- The therapeutics and medical sector includes 123 factories, 108 of which are in Jordan. Jordanians account for over 99% of this sector’s labor force.
- **99%**
- **1.8 M**
- Between 2012 and 2016, Jordanian public health facilities assisted around 1.8 million Syrian refugees.

Launched in 2009 by Electronic Health Solutions (EHS), Hakeem is the first national initiative of its kind to automate the public healthcare sector in Jordan. To accommodate growing regional demand for health IT services, EHS established EHS International to target the Middle Eastern healthcare market.
IN 2015, FOR EVERY 10,000 JORDANIANS, THERE WERE ON AVERAGE:

- 22 doctors
- 7 dentists
- 14 pharmacists
- 36 nurses

TOTAL NUMBER OF HOSPITAL BEDS IN JORDAN AS OF 2015:
- 5,077 at Ministry of Health hospitals
- 2,551 at Royal Medical Services hospitals
- 599 at University of Jordan Hospital
- 538 at King Abdullah University Hospital
- 4,350 in private hospitals

King Hussein Cancer Center is one of the leading cancer centers in the Middle East that treats both adults and children.

Owing to the effectiveness and success of EHS’ Hakeem program, EHS International was founded to implement the program in regional countries interested in developing their healthcare services.

Al Hussein Medical Centre’s National Centre for the Rehabilitation of Amputees is the only facility in the region to introduce the ‘multi-movement’ upper prosthetic limb. It also developed the industry of state-of-the-art, ‘smart’ prosthetic limbs and chiropractic devices engineered with the use of computer-aided design and manufacturing technology.
What prompted you to set up this website? What need has this project met that the market lacked?
The idea for this project first came from the Arabic medical dictionary that my father worked on as a reference for non-specialists on medical information. Back then, this was a need because the public lacked general health education. Later, many factors emerged, which created a number of obstacles related to the increasing demand for health services. These included Arab countries’ huge population growth, which resulted in high demand for the right medical information, accompanied by a rise in medical consultation fees. That is why we turned the project into a medical website that aims to provide immediate, around-the-clock access to doctors for a small subscription fee that allows for an unlimited number of phone calls.

Since the launch of the website in 2008, the number of visitors has increased from 5 million to 87 million last year. Our service covers seven Arab countries: Jordan, Saudi Arabia, the UAE, Egypt, Palestine, Iraq and Qatar, and we look forward to reaching the entire Arab world soon.

What challenges have you faced during this project? How did you overcome them?
Challenges are part of any journey, from gaining the required capital and creating a cohesive and confident team who believes in the project’s mission to expanding into other countries. Overcoming them lies in our belief in our abilities.

Continuing the journey that his father Dr. Abdulaziz Al Labadi embarked on, Jalil Al Labadi is on a path that all began with the lack of Arabic medical and health terminology sources. This challenge was overcome with the development of the first Arabic-Arabic medical dictionary, which provided medical information to those interested in this field. After years of hard work, this project was further developed into a website that offers medical information in an easy and accessible way, in addition to swift, over-the-phone access to doctors, 24 hours a day, seven days a week.
What opportunities are available in the medical tourism sector? How can innovation be promoted in Jordan’s health and medical sector?

There are many great opportunities available in the medical tourism sector, including attracting patients from high-income Arab countries that still lack an integrated medical system such as that found in Jordan. There are huge opportunities to build new, world-class hospitals, which, in addition to therapeutic services, provide the requirements of medical tourism for patients and their families alike. But for them to grow well, successive governments must regulate these opportunities and provide the laws to govern them.

As for developing the innovation process in the health sector, we can achieve this by encouraging risk investments that include venture capital funds, considering that the sector has a slow growth rate and is low risk in nature because of the various laws and regulations governing human life. Despite the importance of these laws in, for example, regulating the medical profession, they also limit the possibility of moving freely in contrast to other sectors, such as trade. This is normal for this sector, and this is what various countries have to deal with.

What does innovation mean to you? How does it contribute to the advancement of the national economy?

Innovation is an ongoing process that is embedded in our daily work through regular reviews of our performance for the sake of nonstop improvement. Innovation begins by encouraging open dialogue on all ideas and balancing them in relation to the desired goal. Innovation is certainly important for every company and institution, governmental or private. Governments must even prioritize its teaching from as early as primary school, for innovation is the starting point for companies’ projects which, in turn, promote growth and expansion.

What do venture capital firms, and investors in general, consider before taking part in the launch and implementation of innovative projects?

Venture capital firms are looking for projects that have the potential to grow. They look to obtain a much greater return on investment than that of financial markets or other investments. For this reason, they are prepared to take greater risks and take on innovative projects to penetrate markets and grow rapidly.
Jordan's 91% literacy rate is among the highest in the region.

Jordan has one of the highest female literacy rates in the region at 95.2%.

Jordan is home to Edraak, the leading Arab online learning platform with over 1 million Arab learners.

SESAME, the Middle East’s first major international research center for science application research, is scheduled to open in Jordan in May 2017.

Jordan is a regional pioneer in nuclear research and innovation, generating insights from the Jordan Research and Training Reactor at the Jordan University of Science and Technology.

In Jordan, there are 2,000 researchers per 1 million people, while the average among members of the Organization of Islamic Cooperation is 500 researchers per 1 million people.

In 2016, students in scientific specialties constituted around 40% of total graduates from Jordanian institutions of higher education.

Knowledge, innovation and technology are key ingredients to the success of any country, and we are no exception.

Her Majesty Queen Rania Al Abdullah
**THE OBJECTIVES OF THE NATIONAL STRATEGY FOR HUMAN RESOURCES DEVELOPMENT, TO BE ACHIEVED BY 2025, INCLUDE:**

- Universalize kindergarten access to promote school readiness
- Establish a National Center for Curriculum Development that prepares students for an ever-changing world
- Build a comprehensive system for teachers’ professional development and licensing
- Design vocational and technical pathways to boost employment
- Ensure fair access to affordable, relevant and quality university education opportunities

**EDUCATION IN JORDAN**

- **125,000** Syrian refugee children are currently enrolled in Jordanian public schools
- Jordan has one of the highest rates of per capita spending on R&D within the 57 members of the Organization of Islamic Cooperation
- The total number of Jordanian university graduates is expected to reach **450,000** by 2025
- There are 10 public universities, 40 community colleges and 44 vocational training centers
- **125,000** Syrian refugee children are currently enrolled in Jordanian public schools
- The total number of Jordanian university graduates is expected to reach **450,000** by 2025
- There are 10 public universities, 40 community colleges and 44 vocational training centers

**SESAME Center, the first light-source laboratory in the Middle East, will advance innovative scientific and technological research in fields including:**

- Biology
- Archeology
- Medical sciences
- Physics
- Chemistry
- Material science
- Life sciences

**ABOUT EDRAAK**

The first and leading Arab non-profit Massive Open Online Course platform offers free high-quality online courses in Arabic in various domains.

- Aims to empower **10 million** learners across the MENA region
- Over **81,000** certificates issued
What prompted you to focus on people with visual disabilities?
One of my best friends was diagnosed with an eye disease, which caused her vision to deteriorate rapidly until she went completely blind. I was there with her through this painful experience, which motivated me to look for ways to help blind people in our society. I am unable to make them see again, but at least I can help them receive a quality education.

The beginnings of any project are usually difficult. How would you describe yours, and how did you overcome obstacles along the way?
In early 2013, we were working under the umbrella of Youth Volunteers-Irbid; however, by the end of the year, the initiative phased out. With very little support for the project, we started to think of innovative ways to help students at the lowest possible cost. We created a Facebook group called Matar, through which we contacted volunteers from different Arab countries. We would send them pictures of the needed academic books for them to record vocally so they can eventually be converted into audio books. Another way volunteers helped was by typing out the book contents onto a Microsoft Word document, which screen readers can convert into synthesized speech. Matar’s call for action to volunteers was: ‘Would you like to help the blind get an education while you are at home?’
We faced many difficulties, especially since we worked for three years pro bono, but through careful consideration, the help of the local community, and by investing whatever resources we had, we were able to find a solution.

As for supporting entities, both King Abdullah II Fund for Development and BADIR initiative supported us in 2015. Over the past four years, with the help of 4,000 volunteers from across the Arab world, we have been able to assist 200 students from inside Jordan and outside, like Saudi Arabia and Palestine. Inspired by Matar, two similar initiatives were launched in Palestine and Mauritania bearing the names ‘Rain Cloud’ and ‘Nour’ respectively.
How can technology make education and innovation opportunities accessible to the largest number of people?

The ease and speed with which information is disseminated through modern technologies have greatly increased access to target groups, regardless of their location or capabilities. This has also created opportunities for youth to volunteer without having to be in a particular place or time. By learning about modern teaching techniques, which incorporate innovation and creativity as a basic component, we can introduce these elements into our educational systems. In doing so, we are opening up new horizons for our youth that stimulate their thinking to build a generation capable of facing today's challenges.

How can Jordanian youth be encouraged to continue to innovate in the educational sector?

We must begin with students at schools, teaching them how to innovate, plan and implement their ideas, for an idea that cannot be managed is pointless.

How does your project impact blind students?

Over the four years we have been working on this project, we were able to help 200 blind students from Jordan, Palestine and Saudi Arabia. Each blind student needs the help of 200 volunteers to continue their academic course and excel in class. We have also supplied around 400 academic and cultural books for students to study the curriculum, whether through vocal recordings or typed out books.

Are there other ideas in the pipeline to develop your initiative in the future, and are there other solutions in the works to help you achieve the initiative’s goal?

We are now trying to expand and cover the entire Arab world by communicating with activists who are interested in this field. This way, we aim to reach blind students in their countries and help them to use the tools that we have developed.
Jordan is home to four UNESCO World Heritage Sites: Petra, the Baptism Site, Quseir Amra and Um er-Rasas.

The tourism sector accounts for 13% of Jordan’s GDP.

The Jordan Pass was launched in 2015 as a unified prepaid ticket to more than 40 local attractions.

Wadi Rum has seen a recent surge in popularity, receiving 60% more visitors in 2016 than in 2015.

In terms of medical tourism, the World Bank ranked Jordan as the leader in the Arab region and the fifth worldwide.

In 2017, Queen Alia International Airport was named the best airport of its size in the Middle East and the third best among airports of its size worldwide.

Two there are who are never satisfied, the lover of the world and the lover of knowledge.

Rumi
TOURISM IN JORDAN

TYPES OF TOURISM IN JORDAN

Ecotourism

- Dana Biosphere Reserve
- Dibeen Forest
- The Dead Sea
- Wadi Feynan

Religious Tourism

- Cave of the Seven Sleepers
- Shrines of Prophet Mohammad’s Companions

Medical Tourism

- Ma’in Hot Springs

Cultural Tourism

- Fuheis
- Jerash

Conference Tourism

- King Hussein Bin Talal Convention Center

Adventure Tourism

- Wadi Mujib

Aqaba
Tell us a bit about The Jordan Trail and what sets it apart from other experiences in Jordan.

The Jordan Trail is a 650-kilometer hiking trail from Um Qais to Aqaba, which was mapped out based on 30 years of exploration and developed by more than 40 volunteers over seven years. The project stems from a deep love for Jordan and its landscapes, and aims to make the outdoors more accessible for people of all budgets. We want more people to go out and explore the country responsibly, interacting with local societies in a positive way without negatively impacting the environment.

The Trail itself has an incredible impact on those who experience it; once you’re on it, you don’t want to leave. Jordan is such a beautiful country with unique biodiversity, and hiking gives you the opportunity to slow down the pace of travel, learn about the flora and fauna, talk to people and get to really know their culture. We’re always interacting with the people we meet along the way, doing everything from sampling their food to learning to herd goats. It’s easy to talk about big concepts like cultural diversity, coexistence and interfaith dialogue, but when you’re on the Trail, you really live them.

How does this project contribute to Jordan’s financial and social development?

The Jordan Trail has allowed us to take tourism beyond the big cities and into Jordan’s small villages, where we stimulate local economies by asking for services that the people there are already capable of providing. In addition to the income we facilitate for our guides, who are all local, as we pass through villages, we buy goods and pay people to sleep in their homes and cook for us. Our vision is to assist more families along the way to set up accommodations and services, providing an incredible economic opportunity within the 52 villages along the Trail.
As an association, we provide some training as well, which has been funded by USAID Building Economic Sustainability through Tourism (BEST). We’ve trained 20 guides from two pilot sections of the Trail on ‘leave no trace’ policies, wilderness first aid and navigation, and we plan to do a lot more moving forward.

How has innovation contributed to the realization of such a new tourism product in Jordan? This is a massive, national project, and one of the major challenges we faced was coming up with different ways to fund this. This is where volunteering and tapping into the passion of people have been really important. We have had to be innovative in the ways that we’ve mobilized people, and the voluntary efforts that went into this have been worth hundreds of thousands of dinars. It’s an inclusive type of innovation in tourism, because we have welcomed anybody that has something to bring to the table, whether they’re an explorer, business owner or goat herder. It’s not just cash-oriented – it’s the skill sets and the knowledge that people have been very willing to share that made the Trail a reality.

What other obstacles have you had to overcome? Because this was a new concept in Jordan, it was initially difficult to convince all of the parties involved to support the idea. You have to explain the impact of the project yet, at the same time, you don’t want to build unrealistic expectations. Another issue was institutionalizing the project. We have been working to find the right legal structure that exists beyond our team and will protect the spirit of the Trail and what it stands for into the future.

In your opinion, what makes up an innovation-enabling ecosystem? An innovation-enabling ecosystem is one in which ideas are given space to grow and develop, and for that to happen, many elements need to come together, including financing solutions and (de)regulation. It also requires incentive schemes that support creativity and allow people a couple of years of making mistakes as they try to figure their businesses out.

Why is innovation in tourism necessary? Due to the region’s political situation, we are currently in a very difficult era for tourism in the Middle East; we can’t shy away from that. Our country has been forced to get very creative in terms of not only destination marketing, but also local development in general. One of the critical pieces is attracting the right market by identifying people who care to know more and to learn about the country.

Where do you see further opportunities for growth in the sector? Ecotourism, as well as adventure and experiential tourism, are definitely growing all around the world. Tourists today are looking for much more from their trips. People don’t want to just go on holiday for fun anymore. They want their trip and experiences to change them and add more value to their lives. The most important thing is to understand tourists better and never undermine the destination. Don’t cater the destination to the client – cater the client to the destination.

Finally, what is your outlook for the Jordanian tourism sector? Very positive. There’s great potential in our country. We in Jordan are very wealthy in our history, heritage, culture and natural landscapes. We need to make sure that we attract the type of person that values this and is willing to pay money for this kind of experience.
In 2015, ‘Theeb’ became the first Jordanian film to be nominated for an Oscar.

Wadi Rum has been the backdrop for films including ‘Lawrence of Arabia’, ‘Prometheus’, ‘Rogue One: A Star Wars Story’ and ‘The Martian’.

The Royal Film Commission – Jordan received the ‘Outstanding Film Commission’ Award during the 2017 Location Managers Guild International Awards in California.

Over the past five years, SAE Institute – Jordan has contributed around 400 Bachelor of Film graduates to the country’s growing pool of film talents.

Behind the Scenes in Jordan:
- Theeb (2014)
- Transformers: Revenge of the Fallen (2009)

Cinema is a matter of what’s in the frame and what’s out.

Martin Scorsese
AMONG THE TOP LOCAL AND INTERNATIONAL FEATURES TO BE FILMED IN JORDAN:

- Lawrence of Arabia (1962)
- Sinbad and the Eye of the Tiger (1977)
- The Mummy Returns (2001)
- Kajaki (2014)
- The Hurt Locker (2008)
- Theeb (2014)
- Rosewater (2014)
- When Monaliza Smiled (2012)
- Transformers: Revenge of the Fallen (2009)
- Indiana Jones and the Last Crusade (1989)
- X-Men Apocalypse (2016)
- A 7 Hour Difference (2011)

JORDAN AS A FILMING DESTINATION:
- Outstanding and diverse locations
- Low production costs as a result of tax exemptions
- Talented Jordanian film crews and casts
- Well-developed infrastructure

THE FAR-REACHING ECONOMIC BENEFITS OF FILMMAKING:
- Empowering the workforce and equipping them with new skills
- Creating new employment opportunities
- Building cultural awareness
- Bolstering commercial activity
- Promoting tourism
- Promoting tourism
- Bolstering commercial activity
- Creating new employment opportunities
- Empowering the workforce and equipping them with new skills

FILM IN JORDAN
Can you give us an idea of what the Royal Film Commission – Jordan (RFC) does?
The RFC was established in 2003, and, in a broad sense, its aim is to find and support people to tell our stories. The purpose of film commissions worldwide is basically to promote and facilitate cinematic productions. However, the RFC in Jordan goes beyond that by serving as an institute, featuring a capacity-building department that holds workshops and seminars year round. We also hold short film competitions and screenings of independent, award-winning films, as well as coordinate with embassies to hold film weeks and our annual European Film Festival.

How does having a movie filmed in Jordan impact the local economy?
Firstly, any film that comes here hires a local crew, providing employment. They also bring their own crew members with them, who will need accommodation throughout preproduction, filming and postproduction, which could last for up to six or seven months, depending on the size of the project. For example, when ‘The Martian’ was filming in Wadi Rum, almost everyone involved in the film stayed in Aqaba. It was low season, so it was extremely beneficial to have the entire crew come in and fill two or three five-star hotels in the city. Additionally, during their stays, they hired local drivers and guides at Wadi Rum and the Disi area, as well as bought souvenirs, ate at restaurants and much more. All of this activity ripples across the economy.

The timeless beauty of Petra is enchanting in person, but, on film, can capture the imagination of global audiences. In his role with the Royal Film Commission – Jordan, Sharif Majali has made it his mission to promote Jordan as a filming destination and to facilitate the creation of films in the country. By supporting and developing the local television and cinema scene, he hopes to bring filmmakers to Jordan and, consequently, Jordan to the world.
How do you see Jordan contributing to innovation in filmmaking across the region?
As we have heard from many international producers, one of the things that have established Jordan as a leading filming destination is the caliber of our local teams. You can see the innovation in the talents that Jordan is exporting across the Arab world. One impressive example would be Phaedra Dahdaleh, who started with the RFC before leaving to work as an assistant in costume and wardrobe. Today, she’s a major costume designer with a massive costume warehouse in Jordan as well as one in the United Arab Emirates. Other examples would be Nasser Zoubi and Kareem Khair, who do incredible work with props and now work on productions across the region. There’s also Bahaa Othman, who was on the sound mixing team for ‘The Hurt Locker’ and was thanked by name by the film’s sound mixer, Ray Beckett, when the film won the Oscar for Best Sound Mixing in 2010.

What makes Jordan unique as a filming destination?
The diversity of locations in Jordan is a great advantage. We may be a very small country, but in just a one-hour drive, you can go from a desert landscape in Wadi Rum to a beach in Aqaba, or from Roman ruins in Jerash to a forest in Dibeen. Another thing that sets Jordan apart is our commitment to freedom of speech and that we don’t engage in censorship. Jordan also offers an exemption on VAT for filmmakers, which further reduces costs.

What role does the film industry play in promoting Jordan?
If you were to do a survey of tourists coming to Jordan, maybe five out of ten would tell you that seeing the country in ‘Indiana Jones’ and ‘Lawrence of Arabia’ contributed to their decision to come here. Recently, we have been working more closely with the Jordan Tourism Board to take advantage of any possible opportunities for film tourism, which is booming across the world. All we need is another iconic film to put Jordan more aggressively on the map.

Where do you see room for further innovation in the local film sector?
One of the areas that I believe requires increased creative innovations is screenwriting. ‘Theeb’, which won numerous international awards, proved that Jordanians have the capabilities to tell incredible stories. However, we need more writers who know their history and want to write about Arab characters. Also, despite a lot of talent in Jordan, most people doing visual effects are working from their own devices at home instead of as part of an institution. This means they only have the capacity to create simple effects, while more complicated things must be outsourced. The potential for growth in this area is huge and promising.

What does a career in the film industry offer young people that they may not find in a more conventional path?
Here’s the thing about the film industry: It’s long hours, but it’s a lot of fun. Every day is a different group of people in a different location. The fact that it’s irregular makes it both more exciting and challenging, and, because the work is project-based, salaries in the film industry are relatively high. The best way for people getting into the industry to learn is as part of a production. There has been a wave of movies filmed in Jordan by famous directors like Nick Broomfield, Brian De Palma, Kathryn Bigelow and Jon Stewart, giving Jordanians the chance to learn from the best. Because the filming community’s talents are concentrated in a relatively small pool, someone working on a film in Jordan may have the chance and the exposure to work with world-class directors much quicker than they would in Hollywood.
Jerash Festival for Culture and Arts
Summer 2017

Held in Jerash – one of the 10 Roman cities of the Decapolis League and one of the most well-preserved sites of Roman architecture in the world outside Italy – and in Amman, the Jerash Festival for Culture and Arts brings to the ancient city a lively and spectacular cultural event. Every year, the festival features a host of live concerts and performances by famous singers, as well as dances by local and international groups.

www.jerashfestival.jo/

Arab Storytellers’ Forum
16-20 September

In its third consecutive year, the Arab Storytellers’ Forum gathers professional storytellers and dialogue specialists for a conversation on speech as both an art form as well as a means of social transformation. Hosted over five days, each participant will present stories collected from their country, providing an opportunity for all those in attendance to become acquainted with diverse oral heritages from around the world.

www.hakaya.org/mujawaraa2017

Souk Jara
Every Friday, 12 May-29 September

Enjoy the splendor of Jabal Amman while walking in one of its oldest streets, searching for unique souvenirs, handicrafts, antiques, paintings, handmade accessories and more. Open from 10:00 AM to 10:00 PM, the open-air market offers a wide selection of food and beverages and features local bands, talent exhibitions and other live performances.

SOUKJARA

World Economic Forum on the Middle East and North Africa
19-21 May

In partnership with the King Abdullah II Fund for Development, the World Economic Forum on the Middle East and North Africa (MENA) will convene at the Dead Sea under the theme ‘Enabling a Generational Transformation’ and attract over 1,000 government, business and civil society leaders from more than 50 countries, providing a collaborative platform for shaping the future of the MENA region through public-private cooperation.

www.weforum.org/
What’s On?

Amman Design Week
6-14 October

Amman Design Week 2017 offers an array of programs that keep the discourse alive around design and crafts, with an aim to build further connections and learning programs focused on local and conscious design. This year’s ‘movement’ theme is at the core of what Amman Design Week stands for – collaboration, exchange and the creation of momentum for the transfer of ideas, expressions and stories.

www.ammandesignweek.com

Amman International Marathon
13 October

The Amman International Marathon takes place annually and features a 42km marathon, a 21km half marathon, a 10km fun run race and a children’s race.

www.marathons.ahotu.com/event/amman-international-marathon

The International Conference on New Trends in Computing Sciences
11-13 October

Facilitating the meeting of international and Jordanian scientists from various computer science fields, the conference is a platform for the exchange of ideas and information on current studies, challenges and practical experiences.

www.ictcs.info

The 4th International Tourism and Heritage Conference and Exhibition
18-20 October

The largest conference and exhibition centered on the promotion of tourism facilities, real estate, leisure and resorts, the event is organized by AFAQ Group in cooperation with the Jordanian Ministry of Tourism and Antiquities, and serves as an ideal opportunity for participating countries to display and promote their heritage.

www.afaqevents.com/tourismexpo

World Science Forum 2017
7-11 November

Under the theme of ‘Science for Peace’, World Science Forum 2017 will present a vision of a world in which science plays an increasingly important role as an enabler of equitable and sustainable development for all people. The international event will address the scientific issues of our time, including sustainability, food security, scientific education, science diplomacy and digital transformation.

www.worldscienceforum.org
**Jordan at a Glance**

- **Official name:** The Hashemite Kingdom of Jordan
- **Languages:** Arabic (official) and English (widely spoken)
- **Currency:** Jordanian dinar (JOD), equivalent to USD 1.42
- **Capital city:** Amman
- **Population:** 9.5 million (including 2.9 million non-Jordanians)
- **Gross domestic product (GDP):** JOD 27.4 billion
- **Major exports:** Textiles, fertilizers, potash, phosphates, vegetables, pharmaceuticals
- **National flower:** Black iris
- **Weather and climate:** Mediterranean, with long, hot, dry summers and short, cool winters

**MUST-VISIT TOURIST DESTINATIONS:**

- **Mount Nebo:** Inhabited since the Bronze Age, the city features one of the largest and most well-preserved sites of Roman architecture outside Italy.
- **Jerash:** An unmatched archaeological city, carved from rose-colored stones by the Nabataeans.
- **The Dead Sea:** The world’s saltiest sea, located at the lowest point on Earth.
- **Petra:** An unmatched archaeological city, carved from rose-colored stones by the Nabataeans.
- **Dana Biosphere Reserve:** The nation’s largest nature reserve, home to hundreds of different species.
- **Wadi Rum:** Jordan’s largest valley, ideal for hiking, rock climbing and an authentic Bedouin camping experience.
- **St. George’s Church:** Features the oldest mosaic map of Palestine, carefully crafted during the Byzantine era, located in Madaba.
- **The Baptism Site:** Located by the Jordan River and one of the three holiest sites of Christianity, along with Bethlehem and Jerusalem, it is the place where Jesus was baptized by John the Baptist.
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