## SOFTWARE TECHNOLOGY PARKS







## Focusing on Second-tier cities:

In the last three decades, countries from the Asia Pacific region have adopted a highly targeted approach for economic development by accelerating their scientific and technological capacity. Pakistan has also timely realized the need to establish such parks in order to support the Tech sector as well as to encourage economic development. The country has taken several initiatives to incentivize the IT sector. In continuation of the same, establishing Software Technology parks in Pakistan for stimulating entrepreneurship, the culture of innovation, and bringing foreign investment in the country is a way forward towards success and adoption of innovation.



Software Parks in Pakistan are somewhat similar to innovation centers, information technology, and software technology parks developed by Korea, Taiwan, and China. Pakistan Software Export Board has taken up this responsibility to establish Software technology parks not only in the major cities of Pakistan but also in the secondary cities to enhance exports of Pakistan's IT and IT-enabled Services and ultimately boost the economic activities in the said area. One of the reasons behind the establishment of Software Technology Parks (STPs) in major cities, (Islamabad, Rawalpindi, Lahore & Karachi) is to augment the rapid development of the IT industry. These cities account for around 90% of all IT companies based in Pakistan, therefore, the demand for software technology parks is increasing.

The Government of Pakistan is focused on developing the IT Industry in secondary and tertiary cities of Pakistan. In this context, it intends to set up Software Technology Parks across Pakistan to replicate the success of Pakistan's tech hubs (Islamabad Rawalpindi, Lahore, and Karachi). There are several reasons behind the development of STPs in second-tier cities of Pakistan. Pakistan is considered to be the fifth-largest young country in the world. Around 63 percent population of the country comprises youth aged between 15 and 33 and this is forecasted to continue to increase until at least 2050.

A greater proportion of young people is considered to be a major economic driver for growth and progress. Amongst the factors that make digitalization such an enticing phenomenon for investors, employers, employees, and economists in the country, is the ability for the industry to create jobs at a rapid pace and the impact that it has on the barriers to entry in any given industry. Traditionally, Pakistan's rural sector and second-tier cities have been dependent on trading and agriculture. This little economic dependence has not only resulted in lower growth rates but has also exposed a large part of Pakistan's population to systemic risk. For instance, lower commodity prices or a natural disaster such as flooding or drought in a given year and in a given area can quickly cause havoc for an entire community. In addition, the lack of diversification away from trading and agriculture has reduced the economic growth of a large swath of the Pakistani population.



Ultimately, the development of the IT ecosystem in rural and secondary cities of Pakistan would potentially expand the local economies by creating both employment entrepreneurship, thus enhancing income levels and partially increasing exports of Pakistan's IT industry. In short, the people and particularly the youth of the area would have an alternative and non-dependent plan for their livelihood which certainly can develop the local economy. The main reason for the lack of growth of the technology industry in secondary and tertiary cities has been the lack of infrastructure and an enabling technology ecosystem. Consequently, technology professionals prefer to move to Pakistan's tech hubs to create startups or find employment. This results in brain drain and, therefore, stunts the technology industry's development across Pakistan. The development of STPs in secondary and tertiary cities would ensure that technology professionals are incentivized to stay in their respective cities by finding employment or the necessary supporting ecosystem to launch startups.



The presence of software technology Parks in secondary and tertiary cities would also address the infrastructure-related issues and thus provide an enabling environment for the growth of the technology ecosystem in the secondary and tertiary cities. The STPs in these cities would also provide all mission-critical facilitates that technology companies need under one roof, consequently enabling the technology industry's growth in secondary and tertiary cities.



These Software Technology Parks would also provide a platform for interaction between IT companies from different cities. This collaboration can further pave the way for sharing knowledge and ideas. Establishing STPs in secondary and tertiary cities will contribute to the development of the local economy. It would also expand Pakistan's tech ecosystem beyond Islamabad, Lahore, and Karachi, thus contributing to the local economies through expansion of the tech industry, export earnings growth, and employment generation. The term 'womenomics' defines the role of women in any economy. Countries can boost their economies by creating knowledge. proper management, opportunities for womenomics. Almost 48 percent of Pakistan's population is made of women. A large number of women in Pakistan particularly in rural communities are unable to participate in administrative and managerial jobs due to a lack of education. In order to cope with this issue when facilities would be provided to the people of these rural communities,

it will not only create white-collar jobs but also will convince parents to provide education to their daughters to become part of the economic cycle.



According to Statista, the projected gross volume of the global gig economy in 2023 would be US\$455.2B. Pakistan's current freelance market consists of more than one million individuals working in various specialized fields. A Pakistani IT professional with technical skills, can work as a freelancer from any part of Pakistan, be it rural or urban, and can provide services to clients worldwide earning a high income in foreign currency.



Gujranwala STP- Work space

The person does not need to migrate to a bigger city in quest of opportunities. Worldwide, even prominent Companies like Google tends to hire more freelance IT professionals than permanent employees, and this trend is rapidly becoming commonplace. STP in any part of Pakistan can provide a platform for these IT professionals to connect with potential clients from across the globe. Pakistani freelancers have a significant impact on their remote, rural communities as they contribute to expanding a diverse economic ecosystem through their white-collar earnings. Enabling the growth of freelancers results in the social uplift of rural and remote communities increased disposable income without migrating to big cities to seek social equity. The earnings, as mentioned earlier, would not have been possible without taking the freelancer route due to relatively limited livelihood opportunities in rural parts of Pakistan for educated youth. Therefore, the development of the





IT Industry in rural and secondary areas would create jobs without

without requiring substantial capital expenditures associated with developing factories or other commercial entities. It is also pertinent to mention that the IT Industry development is not dependent on the location. For instance, many commercial entities/factories select their site keeping in view the logistical issues or transportation costs. This particular factor restricts the growth in many parts of a country, fortunately, the IT Industry is not location-dependent and can grow independently without impacting location-related inherent disadvantages.



Many parts of Pakistan are either economically fragile or simply cannot support industries due to infrastructure or terrain, etc. IT Industry has minimal impact on the environment as it requires only IT equipment and knowledge-based tech workers. Freelance IT professionals can work from any location, be it a city or a rural area while earning a viable livelihood providing services to clients around the globe. Freelancers staying in their cities also mean that they can contribute to localities in more ways than one.





They can certainly contribute to the growth of a vibrant tech ecosystem across Pakistan, by accelerating growth of the local IT/ITeS companies in these secondary cities through the platform of the software technology parks can enable the growth of the other sectors as well whether it be the retail industry or merchandising, Establishing Software Technology parks in secondary cities of Pakistan is no more a dream now. The Gilgit SCO Technology Park has been a significant success story and an evident example of dream come true. This is merely one example as there are many to be talked about in the near future. located far away from Pakistan's tech cities (Islamabad, Rawalpindi, Lahore & Karachi, the companies in Gilgit SCO are exporting to countries around the globe. The success of companies in Gilgit SCO Park has gotten the attention of other companies and entrepreneurs that there is another potential way to make a good earning, thus creating a healthy, virtuous cycle of an expansion of the tech ecosystem and economic growth. The same model can be replicated in other cities of Pakistan to emulate the success individually and thereby collectively.



Surprisingly, the growth of the IT/ITes companies in second-tier cities of Pakistan is phenomenal. According to PSEB's data regarding the registration of IT/ITEs companies shows that there are 455 IT/ITeS companies in Faisalabad, 87 in Gilgit, 113 in Quetta, 40 in Sukkur, and so on. This trend clearly indicates that the rural population is also embracing tech development and is becoming part of the ecosystem.

In this context, PSEB would establish 25 Software Technology Parks in KLI (Karachi, Lahore, Islamabad) and secondary and tertiary cities and towns of Pakistan. These STPs will be established by converting public/private owned dilapidated or defunct office buildings, factories, and warehouses to provide IT-enabled office space to IT & ITeS companies at affordable rates. Tenant companies will receive 100% internet and 25% rental subsidy during the first 12 months of establishing the STP throughout the concurrency of project life. PSEB would also establish a US\$186m. IT park in Karachi, which would significantly contribute to the growth of the IT Industry in Pakistan. With the advent of the 4th Industrial Revolution, the world has begun to change rapidly as never before. Fantastic developments are taking place in several fields specifically technology. Countries around the globe are following the practices of the knowledge economy. The first prerequisite of Knowledge economy is equity in access to information by encountering the state of information disparity. We cannot grow our Knowledge economy without addressing the issue of the digital divide. Therefore, immediate actions are needed to provide equal access to information. By establishing STPs in secondary cities of Pakistan a platform can be provided and a stage can be set to avail equal opportunities to grow. indeed, the sky is the limit.



## **Success Stories of STPs**

NADIA IQBAL-GILGIT

Age: 34 Years Years of Freelancing: 3.5 Years Area of Specialization: Front-End React Developer

Hailing in Gilgit, Nadia is a freelance FrontEnd React Developer on Upwork. She and her husband used to work in Lahore, but they couldn't earn enough even then. Nadia was skeptical about doing a 9 to 5 job with two kids to raise.



That's what became her true motivation to start freelancing, so she colud manage her home, work, and look after her kids without worrying about anything.

The initial phase was a real struggle, Nadia spent more than 12 hours every day learning improving, and refining her skills as a developer. After learning, she started working on Upwork almost three years ago. She managed to earn approximately US \$40,000 in this period.

https://www.upwork.com/freelancers/~012ea56efb7e570c96

Front-End React Developer

Nadia did not stop here, and looked for ways to progress even more. She hired and trained four more developers who now work with her on different projects. She initially established a proper home office, but now, they have built a separate office where Nadia intends to take more people under her wing soon. She has a dream of tuming Gilgit into a city of freelancers. Her husband has been her constant support throughout her struggle. He never hesitated in supporting her.

She faced various challenges while working from Gilgit. She said, power shortage is a constant in our lives, and poor internet connectivity aggravates the situation. Soom being the only ISP in Gilgit-Baltistan has been facing challenges in providing state of the art facilities due to the region's rough, and challenging terrain. Her valuable advice to the youth, and ambitious newbie freelancers is, Master skills to learn freelancing, and be your own boss. To improve Pakistan's struggling economy, we need more skilled freelancers who can bring in more foreign exchange that is not impossible at all given the rising trend of freelancing in the country.







Age: 23 Years

Vears of Freelancing: 2 Year

Area of Specialization: Mobile App
Development. Web
Graphics Designing

"We aim to connect women to the digital, technologically advanced world, thus providing them with financial stability via stypical methods of learning and earning. Moreover, it is also a place for women to break stereotypes, and excell in IT, says 23 year old Zahra talking about free technologies for three years, and have to solid to make the more of the last one year. In Gilgit Baltistan, we have tever opportunities, and have to migrate to methods of learning did earling from the last one year. In Gilgit Baltistan, we have tever opportunities, and have to migrate to methods of said and the start, her plans did not more one of the last one year."

After completing her schooling she moved to Faisalabad for graduation in Computer on Carbon in Computer Sciences. Shesaid, "lalways felt that women a part of the tech world. I took the responsibility to give back to society to utilize my skills, and kept searching for opportunities. The weeks of struggle paid off, and I joined The methods of learning and earning. Moreover, it is also a place for women to break stereotypes, and excel in IT, says and I am a Microsoft Office. Specialst (Word, Power Doint, and Excel 2013). Also, I am an Amoria of the foundations of a new venture-SheDev Pvt. Ltd. "We are grateful to the National Expansion Plan of NICs for providing us the beautiful office space".

Special Steven opportunities, and have to more the digital, the last of the technologically advanced world. Thus providing the world in the society, My journey from an intern who believe in their skills, train, and assist meny women in more to do the technologic for the technologically advanced world. Thus provided me opportunities to flourish my skills, and motivated me to go the extra meny women in them thinking should refer the technologically and motivation and their skills, and in SheDev to find dynamic earning opportunities. We have a team of 46 passionate wo

## EXISTING STPS | UPCOMING STPS | PLANNED STPS



SECONDARY CITIES
SOFTWARE
TECHNOLOGY
PARKS INITIATIVE