accelerate prosperity

STARTUP & SGB DIAGNOSTIC

REPORT 2022

TABLE OF CONTENTS

ACRONYMS

A - D	
ADB	Asian Development Bank
ANDE	Aspen Network of Development Entrepreneurs
AP	Accelerate Prosperity
AWS	Amazon Web Services
ASEAN	Association of South East Asian Nations
BIC	Business Incubation Center
BNPL	Buy Now Pay Later
CEO	Chief Executive Officer
DFT	Deal Flow Tracker
E - H	
ESO	Entrepreneur Support Organization
GCI	Global Competitiveness Index
GDP	Gross Domestic Product
GEM	Global Entrepreneurship Monitor
HCI	Human Capital Index
I - L	
i2i	Invest2Innovate
ICT	Information, Communication, and Technology
IP	Intellectual Property
IPO	Initial Public Offering
IT	Information Technology
KPITB	Khyber Pakhtunkhwa Information Technology Board
KP	Khyber Pakhtunkhwa
KPI	Key Performance Indicators
KSE	Karachi Stock Exchange
M - P	
M&A	Mergers and Acquisitions
MDTF	Multi Donor Trust Fund

MENA	Middle East and North Africa
MIT	Massachusetts Institute of Technology
MoITT	Ministry of Information Technology and Telecommunications
MVP	Minimum Viable Product
NC	Network Cluster
NIC	National Incubation Center
PITB	Punjab Information Technology Board
PKR	Pakistani Rupees
PSX	Pakistan Stock Exchange
Q - T	
SGB	Small and Growing Business
SME	Small Medium Enterprise
SMEA	Small Medium Enterprise Activity
SMEDA	Small and Medium Enterprise Development Authority
SPAC	Special Purpose Acquisition Companies
U - X	
UNDP	United Nations Development Programme
USAID	United States Agency for International Development
USD	United States Dollars
UX	User Experience
VC	Venture Capital
VCX	Venture Capital Exchange
VFP	Venture for Pakistan
WEF	World Economic Forum
Y - Z	
YTD	Year to Date

ABOUT ACCELERATE PROSPERITY (AP)

Accelerate Prosperity (AP) is an enterprise accelerator for Startups and Small and Growing Businesses (SGBs), co-designed and promoted by the Aga Khan Foundation (AKF) and Industrial Promotion Services (IPS) of the Aga Khan Development Network.

It is a unique platform that extends tailored financing and technical assistance to potential entrepreneurs and existing businesses.

EXECUTIVE SUMMARY

Pakistan's entrepreneurship ecosystem has been steadily maturing over the last decade. Improved digital connectivity has led to a fourfold rise in the number of third generation (3G) and fourth generation (4G) subscribers. Additionally, with approximately 140 million people below the age of 30 and an additional 2.1 million projected additional middle-income households by 2025, the country is one of the fastest growing economies in Asia, with a substantial number of growth opportunities for existing and new enterprises.[1] However, 2022 has been a turbulent year. The economic recession, political instability and devastating climate change induced flooding which displaced around 33 million people across the country[2] took its toll on Startups and Small and Growing Businesses (SGBs) alike. The resulting market skepticism was evident in a drop in the 'Business Confidence Survey Index' from 60.5 in 2021 to 46.10 in 2022.[3] While this meant rolling back services and downsizing for some enterprises, others experienced more severe outcomes, such as complete closure.

Despite the challenges, several factors have created an environment conducive to enterprise growth across the country. Investors in developed economies have broadening their holdings to emerging and frontier markets such as Pakistan[4] is one such contributor. According to the Pakistan Startup Ecosystem Report (PSER) 2021, there has been an increase in the number of international investors which has translated into Startups raising a reported total of $350 million via 83 deals in 2021 alone (which accounts for 60% of all deals in the past 7 years).[5] In addition, access to finance is now acknowledged as a path to meaningful economic inclusion for SGBs as well, [6] with initiatives such as the government launched 'Asaan Finance' Scheme, which aims to ensure financial inclusion of small enterprises by enabling them to acquire loans without strict collateral requirements.[7]

Continued support from Entrepreneur Support Organizations (ESOs) across the country in the form of incubation centers (22), accelerator programs (13), coworking spaces (18), university-based Business Incubation centers (24) and other organizations including foundations, business associations, and conferences/challenges (13) [8] also significantly contributes to the growing ecosystem. The Pakistani government, through the National Incubation Center's (NICs) has also increased accessibility for support services. 5 operational NICs across Islamabad, Lahore, Karachi, Quetta and Peshawar have already collectively incubated around 300 Startups,[9] and more centers across the country are in planning[10]. The private sector players such as Habib Bank Limited (HBL) and Standard Chartered Bank have also stepped up while several telecommunication providers have launched standalone accelerator programs such as Telenor Velocity[11] and Jazz xlr8.[12]

1 https://www.mckinsey.com/featured-insights/middle-east-and-africa/pakistans-start-up-landscape-three-ways-to-energize-entrepreneurship
2 https://www.unhcr.org/news/stories/2022/9/6311c7f54/pakistans-disastrous-floods-uproot-refugees-citizens.html
3https://thedocs.worldbank.org/en/doc/410d0506bba8afc6fd9d9541148bfe4d-0310062022/original/PDU-April-2022-April18-ForWEB-Final.pdf,https://www.theglobaleconomy.com/rankings/business_confidence_survey/
4 https://dai-global-developments.com/articles/new-research-offers-alternatives-for-frontier-markets/
5 PSER 2021 https://www.insightsi2i.com/pser-21
6https://openknowledge.worldbank.org/handle/10986/13803?show=full
7 https://www.dawn.com/news/1641123
8 PSER 2021 https://www.insightsi2i.com/pser-21
9 https://nicpakistan.pk/
10 https://pitb.gov.pk/nep-nics
11 https://www.cbinsights.com/investor/telenor-velocity-accelerator
12 https://jazzxlr8.com.pk/

In terms of sheer magnitude, Pakistan has among the 10th largest labor forces in the world, with 64% of the population below the age of 30.[13] This young workforce, which is increasingly plugging into professional roles in the Information and Communications Technology (ICT) sector is the key to accelerating the growth of the ecosystem and in turn the economy as a whole.[14] Moreover, even though female labor force participation remains far below that of men, trends from the International Monetary Fund (IMF) show that the gender gap in labor is slowly but surely declining.[15] The benefits of women in the workforce are being recognized at the policy level with Pakistan's development roadmap 'Vision 2025' aiming to increase female labor force participation to 45% by 2025.[16]

While the overall outlook is positive, some key challenges with regards to the state of finance, human capital, support services and gender disparity remain unresolved.

Financial landscape

Our findings suggest that despite greater access to capital in recent years, the absence of tailored support programs for startups and SGBs results in low investment readiness and hence low investor confidence. Investors are also skeptical about the whether the financial valuations proposed by startups and SGBs truly reflect market potential. Inaccurate valuations can create distrust between investors and impact Startups' ability to raise capital in follow on rounds. There is also a shortage of diversified financing options. Founders do not adequately explore debt finance as a viable option for business growth. In addition to debt financing terms being perceived strict and collateral requirements unreasonable, high interest rates hinder businesses from accessing this form of finance.

Support services

ESOs most often run cohort-based programs, incubating and accelerating Startups from different sectors and at varied stages of the business life cycle. This means they cater to the overarching needs of the group rather than deep dive into specific issues faced by individual firms. There is also a focus on the needs of novice founders, which are vastly different than those of experienced entrepreneurs. This lack of tailored support is perceived as a limitation by most entrepreneurs. Moreover, ESOs, particularly those in tier 2 cities, are likely to face challenges in recruiting mentors - which is an important aspect of support and value addition for enrolled businesses. Startups and SGBs from our sample also reported difficulty accessing direct funding from ESOs. Early stage funding (seed stage) can be essential for young enterprises that traditionally cite access to capital as one of their most pressing concerns.

Human capital

Despite the significant potential of human capital in Pakistan, during our research, founders identified a dearth of skilled human resources. They identified critical thinking abilities and product-oriented experience as extremely lacking. We also observed that investors tend to lean towards founders with certain characteristics: an international educational background and experience working in high growth companies. These characteristics instil investors' confidence

13https://www.weforum.org/agenda/2020/11/this-is-how-pakistan-is-closing-its-skills-gap/

14https://www.un.org/youthenvoy/2016/02/pakistani-youth-see-opportunity-in-digital-economy/

15 https://www.dawn.com/news/1535374

16https://openknowledge.worldbank.org/handle/10986/30197 in founders' ability to drive their business towards growth and profitability.

Gender disparity

Whereas women constitute nearly half of the country's population, they form a very small part of the labor force.[17] This represents a massively untapped opportunity.[18] Our findings report that women-led businesses account for a very small share of the Pakistani market. Negative gender perceptions also make it much harder for female founders to raise finance, as investors consider enterprises run by women founders better suited to low-risk capital. Because women in Pakistan do not typically own assets usable as collateral, women also face greater challenges when accessing debt finance. Additionally, they are challenged by limited mobility and unfair treatment by bank staff. ESOs are also unable to provide tailored support to address these additional challenges.

Both Startups and SGBs can play a pivotal role in driving Pakistan's economic, social and financial recovery. However, this is only possible if the aforementioned challenges are addressed. As part of this report, we also propose conclusive recommendations and ways forward across all four lenses of finance, support, human capital and gender. These key recommendations - which are discussed in detail in the respective sections of the report as well as presented as *key actionable items* at the conclusion of each section - are summarized next.

FINANCE

- Investment-readiness support should be improved with focus on financial modelling and valuation training
- Investors need to adopt better due diligence practices
- Debt finance should be explored as a viable avenue for raising capital
- Ecosystem players need to study market trends to understand areas of opportunity.

SUPPORT

- Curriculums and mentorship programs should be tailored for different audiences and industries
- Donor and grant funds should define clear KPIs.

HUMAN CAPITAL

- Locally educated founders need to be provided increased exposure to international investors.
- Human capital needs to be upskilled to strengthen the talent pipeline.

GENDER

- Investors require training on gender sensitivity.
- Women's access to finance (debt and equity) needs to be improved.
- Support programs should be designed keeping in mind the unique issues faced by women in Pakistan.

17 https://www.dawn.com/news/1635897

18 https://borgenproject.org/female-labor-pakistan/

1

INTRODUCTION & LITERATURE REVIEW

INTRODUCTION & LITERATURE REVIEW

In developing economies where digital adoption is rapidly growing, **Information and Communications Technology (ICT)** has been widely acknowledged over the last decade as a major driver of economic growth.[19] Pakistan too, witnessed internet penetration reach 36.5% with 82.90 million active internet users and 71.70 million active social media users.[20] Pakistan's ranking on the World Economic Forum's (WEF) ICT Adoption Index also improved by 17 places (from 127 to 110 [out of 141] in 2019.[21] While this still falls behind comparable countries such as Bangladesh (108), Sri Lanka (107), Egypt (106), Philippines (88), Indonesia (72) and Vietnam (41), the overall outlook is positive for businesses looking to increase their digital footprint in the country. With its increasingly tech-savvy youth bulge, an increasing number of young and technology-enabled people are launching their own enterprises, making it extremely important to create an enabling ecosystem for Startups and Small and Growing Businesses (SGBs).[22]

SGBs and startups are seen as catalyst for economic growth, poverty alleviation and responsible recovery both globally and locally. SGBs enable people from lower socio-economic status (SES) to transition into the middle class by providing formal jobs as an alternative to unpredictable daily wage labor.[23] Startups, in comparison, offer highly innovative solutions to real world problems, encourage technological adoption, while showing promise for scalability into new markets. Despite the global COVID-19 pandemic, investments raised by Startups and SGBs in Pakistan hit an reported all-time high at $350 million in 2021, more than five times what was raised in 2020 (Invest2Innovate, DFT).[24] According to notable experts in the ecosystem, the total market capitalization for all Pakistani Startups currently lies between an estimated $1.5 billion and $2 billion, and is expected to increase to $6 billion over the next five years and to $30 billion by 2031.[25] However, considering the macroeconomic uncertainty experienced in 2022, this trend has shifted both locally and globally. According to Invest2Innovate's Deal Flow Tracker, Startups in Pakistan reportedly raised a total of **$351.9 million** across **51 deals** with average ticket size o**f $8.58 million** in **2022** in comparison to the total **$354 million** across **83 deals** raised in **2021** with an average ticket size of **$5.2 million[26],** in line with global trends where **VC funding has slowed down by 23%.**[27][28]

Despite their importance and contribution towards the economy, only 2% of businesses launched annually in Pakistan survive in the medium term.[29] Pakistan still ranks 120 out of 137 countries on the Global Entrepreneurship Development Index 2018, well behind comparable countries such as Philippines (84), Vietnam (87) and Indonesia (94).[30] This can be indicative of the **impact** that positive or negative externalities created by the state of **finance, human capital and support services can have on the players in the entrepreneurship space.**

19 Majeed, M.T., Ayub, T. (2018). Information and communication technology (ICT) and economic growth nexus: A comparative global analysis.
20 Ibid
21 Global Competitiveness Report 2019 - World Economic Forum
22 PSER 2021 https://www.insightsi2i.com/pser-21
23 https://www.theigc.org/wp-content/uploads/2018/11/IGC_ANDE-review-paper_final-revised.pdf
24 I2I DFT Internal Analysis
25 https://restofworld.org/2021/pakistans-startup-investment-boom/
26 I2I DFT Internal Analysis
27 PSER 2021 https://www.insightsi2i.com/pser-21
28 https://www.ey.com/en_us/growth/the-venture-capital-bull-market-has-run-its-course-but-reports-of-demise-are-premature
29 https://www.thenews.com.pk/print/863197-help-the-entrepreneur
30https://www.researchgate.net/profile/Laszlo-Szerb/publication/322757639_The_Global_Entrepreneurship_Index_2018/links/5c040b02a6fdcc1b8d503a9e/The-Global-Entrepreneurship-Index-2018.pdf

Startups have seen success with initiating regulatory reforms tailored to their needs and create greater access to capital. While this is a positive step in creating a conducive environment for Startups to flourish, similar measures are important to enable SGBs that contribute considerably to job creation in the country. This is only possible if we understand the nuances between these two types of enterprises and their varying growth trajectories (Figure 1: Operational definition/characteristics of Startups and Small and Growing Businesses).

A defining characteristic of Startups is their ability to leverage technology (Figure 1). SGBs are also increasingly using technology to increase efficiency.[31] However, a truly ***Digital Pakistan*** begs for an appetite for technology from other players in the ecosystem. In recent years, this has been observed with policy side initiatives such as the State Bank of Pakistan's (SBPs) Digital Banking Policy, the launch of micropayment gateway 'Raast' and the introduction of a legal framework for launch of EMIs.

A **sector-wise analysis** of Invest2Innovate's deal flow data shows that from 2015-2021, e-commerce was the largest sector both in terms of deal count (64) and reported amount raised ($315 million), with $211 million (26) deals raised in 2021 alone. E-commerce was followed by fintech with Startups raising approximately $95 million across 25 deals and an aggregate of $113 million across 40 deals from 2015-2021. The third top-funded sector in 2021 was Trucking/logistics, as Startups reportedly raised $17.4 million in 2021. The trucking and logistics sector fits in neatly with Pakistan's foray into super apps,[32] with notable examples of companies like Careem and Bykea venturing from delivery of goods into payments. The trend of the Superapp seems to be set in motion now with companies like Daraz branching out into streaming, and payments and Bazaar[33] and Retailo[34] introducing ledger apps and BNPL.

A key finding in the literature suggests that for SGBs, capital intensive sectors are under-represented in countries which have less developed capital markets.[35] Therefore, lack of access to **finance** is one of the most cited constraints for **SGBs** in Asian economies.[36] Evidence also suggests that small business owners find giving up control of their business in return for investment an alien concept that does not make commercial or logical sense. This explains their preference for debt as opposed to equity financing.[37] Their financing pattern also suggests that they are likely to use their own money to start their business, with debt financing coming into the picture much later during development and expansion stages.[38] Debt financing is also a cumbersome process for them due to information asymmetry, unreasonable collateral requirements, unacceptable interest rates (both in terms of religious views and high cost to the borrower) and inflexible payment terms. On the contrary, often, **Startups** choose the route of equity financing to raise capital. In this regard, recent years have seen an increasing appetite from investors in frontier and emerging markets, including Pakistan.[39] As seen through Invest2Innovate's Deal Flow Tracker, out of a total of $565 million raised in Pakistan between 2015 and 2021, international investors were involved in 28.6% of the deals compared to local investors who participated in 38% of the deals (PSER, 2021 via DFT).[40] However, more recent developments, which include Pakistan's political instability, economic crisis, soaring petrol prices and Rupee devaluation altered the

31https://www.forbes.com/sites/forbestechcouncil/2021/12/01/how-technology-is-leveling-the-playing-field-for-small-business-underdogs/?sh=333d8181da66
32 https://insights.datadarbar.io/the-rise-of-super-apps-in-pakistan/
33https://www.menabytes.com/bazaar-series-a/
34https://bwdisrupt.businessworld.in/article/Rupifi-Partners-With-Retailio-To-Provide-Embedded-BNPL-To-Pharma-SMEs/16-09-2021-404790/
35 https://www.theigc.org/wp-content/uploads/2018/11/IGC_ANDE-review-paper_final-revised.pdf
36https://www.adb.org/sites/default/files/publication/474576/adbi-wp911.pdf
37 https://medium.com/thecapitalnet/these-blurred-lines-startups-versus-small-business-b7912f7a741e
38https://www.researchgate.net/publication/283047696_Investigation_on_Preferred_Source_and_Pattern_of_Funding_Small_Business
39 https://dai-global-developments.com/articles/new-research-offers-alternatives-for-frontier-markets
40 PSER 2021 https://www.insightsi2i.com/pser-21

landscape for Startup activity to some extent. While for some, this has meant cutting costs through restructuring, for others, the consequences have been more grave i.e. suspending operations altogether. Additionally, in terms of investment, a 40% decline was seen in the alleged amount raised from Q1 2022 ($173 million) to Q2 2022 ($103.8 million) (Data Darbar, 2022).[41]

Considering available **support services**, Incubators and accelerators are the most common type of Entrepreneur Support Organization (ESO) in Pakistan. ESO's address ecosystem gaps, particularly through provision of education and mentorship to entrepreneurs with as well as access to investors and networking opportunities. A study on business incubator centers in Pakistan reveals that these such programs are often run by university based incubators, industrial incubators and technology incubators.[42] Overall, there is a **mix of public and private sector actors** that enable entrepreneurs. The **government** has been providing on-going support through the National Incubation Centers (NICs); the Higher Education Commission's 2021 Business Incubation Center Policy; and the Punjab Information Technology Board's (PITB) Plan9 and PlanX support programs. On the other hand, **private sector players** contribute through training enterprises on the fundamentals of entrepreneurship and enable fundraising through cohort-based programs. International development organizations such as the United States Agency for International Development (USAID), the United Nations Development Programme (UNDP) as well as not-for-profit organizations such as Karandaaz have deployed funds and support interventions to bridge the gap in access to finance and skills for young and early-stage entrepreneurs. Moreover, since 2016, co-working spaces [Kickstart (2016), Daftarkhwan (2016), The Hive (2016), and Colabs (2019)] have also been in the limelight with locations across major cities. These spaces commonly offer office space, along with networking and knowledge sharing opportunities for startups. It is, however, important to consider that because support programs usually select and enroll ventures with the highest growth potential[43] - owing to the differences in growth trajectory between Startups and SGBs - they are more likely to prioritize the former.

Considering **human capital**, Pakistan currently ranks 0.4 (out of a maximum of 1.0 when scored against 173 countries) on the World Bank's Human Capital Index 2020.[44] This is an underperformance when compared to benchmark countries such as Vietnam (0.69), Sri Lanka (0.60), Philippines (0.52), Indonesia (0.54), Egypt (0.49) and Bangladesh (0.46). In existing literature, the relation between founder characteristics and firm success is often explored. Certain 'entrepreneurial personality traits', including extraversion, attitude towards risk, emotional stability and conscientiousness emerge as factors that increase the probability of a business leaning towards success. This also triggers the 'Horse versus Jockey' argument,[45] whereby investors assess whether to inject their capital into a particular enterprise by betting on either i) the 'Jockey' i.e. an individual entrepreneur and his 'entrepreneurial personality traits' or ii) the 'Horse' i.e. the attractiveness of the Startup opportunity. Another lens of human capital explores the availability of educated and skilled professionals who can constitute a solid workforce. Due to the increasing shift towards technology, Pakistan produces approximately 25,000 IT graduates annually, with an increasing proportion of talent concentrated in the technology sector.[46]

41 https://www.dawn.com/news/1697531

42https://www.researchgate.net/publication/277938800_Business_Incubators_Boon_or_Boondoggle_for_SMEs_and_Economic_Development_of_Pakistan

43 https://www.theigc.org/wp-content/uploads/2018/11/IGC_ANDE-review-paper_final-revised.pdf

44 https://data.worldbank.org/indicator/HD.HCI.OVRL?locations=PK

45 https://www.hbs.edu/ris/Publication%20Files/21-057_0c4f5410-3dcb-4c2f-8c4e-6fcbc358b92f.pdf

46 Pakistan's IT Industry Overview, Pakistan Software Export Board, Ministry of Information Technology & Telecommunication (MoITT). (2020).

Pakistan is **ranked 145 out of a total of 146 countries on the Global Gender Gap Index, 2022.**[47] **53.6%** of women in Pakistan are **deprived of education, training and employment** compared to only 7.4% of men.[48] A study conducted with female small business owners in Pakistan reveals that **cultural barriers** and the prevalent concepts of 'izzat' and 'purdah' creates a **sectoral presence of women entrepreneurs** who limit themselves to solely female clients or **'feminized skills and products'**, restricting their growth potential. [49] This is perhaps one of the reasons why so many women operate in the informal e-commerce sector.[50] Women are also at a disadvantage when **raising finance through equity or debt.** For the former, a lack of gender sensitivity among investors as well as fewer women in senior professional roles and for the latter, issues such as mobility constraints and a lack of information and mistreatment by banks are commonly cited reasons.

PURPOSE OF THE REPORT

This report has been written in support of Accelerate Prosperity's (AP) ongoing initiatives for the creation and assistance of Small and Growing Businesses (SGB) and Startups across Central Asia, Afghanistan and Pakistan. We specifically focus on mapping the wider continuum of SGBs and Startups currently operating in Pakistan, and the existing programs of support (in particular regards to investment and technical assistance).

The report provides updated perspective and insights for guiding AP's internal strategy in tailoring its program of support for Small and Growing Businesses and Startups. A **sub objective of this report** is also to **drive ensuing program design** and provide the **supporting grounds for future programs** with KfW and the Federal Ministry for Economic Development and Cooperation (BMZ) - in order to **prioritize their strategies** and the **flow of investment** in **Pakistan's entrepreneurship ecosystem.**

SCOPE OF THE REPORT

- Mapping out the existing universe of SGBs and Startups and identify prominent success stories among these enterprises (and the conducive factors which may have shaped their successful outcomes)
- Evaluate how the present macroeconomic environment in Pakistan has shaped the activities of SGBs and Startups.
- Develop an understanding of the support mechanisms available to SGBs and Startups in Pakistan (such as access to financing and support facilities) and highlight gaps in the provision of such mechanisms.
- Establish a detailed analysis on laying out a viable investment pipeline to financially support SGBs and Startups.
- Propose recommendations on how AP could augment its existing strategic initiatives for serving its target beneficiaries and highlight sectoral/geographical areas which have untapped potential.

47 https://www.weforum.org/reports/global-gender-gap-report-2022/
48 https://edufinance.org/latest/blog/2021/empowering-girls-through-education-in-pakistan
49 http://www.diva-portal.org/smash/get/diva2:1149878/FULLTEXT01.pdf
50 https://www.cgap.org/blog/covid-19-testing-resilience-informal-e-commerce-pakistan

2

METHODOLOGY

METHODOLOGY

OPERATIONAL DEFINITIONS

Whether termed as 'blurred lines,'[51] 'a raging debate',[52] or 'a battle of abbreviations',[53] there is a lack of consensus in existing literature around the precise definition of 'Startups' and 'Small and Growing Businesses' [with some commentators throwing Small and Medium Enterprises (SMEs) into the mix as well[54]]. For the purpose of this study, we draw on a variety of literature to extract common themes to lay out key characteristics that are typically used to define Startups and SGBs (Figure 1). Despite this, certain businesses that might fall under the theoretical classification of an SGB, might refer to and classify themselves as Startups, reinforcing the blurred lines that exist in both theory and practice.

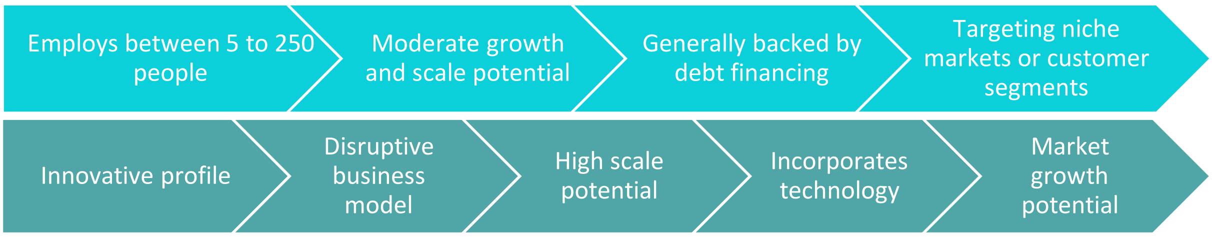

Figure 1: Operational definitions/ characteristics of Startups and SGBs

There is also significant debate about what makes startups successful. Given the difficulty in reliably predicting the outcomes of entrepreneurial initiatives[55] and based on our extensive literature review, we consider ventures '*leaning towards success*', instead of defining success as an absolute measure. For a Startup **'leaning towards success**' can be defined as having raised significant investment, having high growth and scalability potential, and having a high potential for IPO and/or acquisition. While an SGB 'leaning towards success' has a solid financial performance, develops high-quality products, and creates stable employment opportunities.

FRAMEWORK

This report will provide a comprehensive overview of SGBs and Startups in Pakistan focusing on 4 key pillars namely Finance, Support, Human Capital and Gender. Each of these pillars will be broken down into specific findings and possible recommendations. The report maps out key players in the Startup and SGB ecosystem using primary and secondary data, highlights important challenges faced by these enterprises, and assesses how the ecosystem can be improved to enable their growth.

INSTRUMENTS

The analysis in this report is based on:

- **Existing research** conducted by Accelerate Prosperity in 2016 as well as data from recent studies conducted by Invest2Innovate namely the Pakistan Startup Ecosystem Report 2021 (PSER, 2021),[56] Khyber Pakhtunkhwa Startup

51 https://medium.com/thecapitalnet/these-blurred-lines-startups-versus-small-business-b7912f7a741e
52 https://www.linkedin.com/pulse/startups-smes-why-does-even-matter-nirjhor-rahman/
53https://athenaga.com/battle-of-the-abbreviations-sme-vs-sgb-2/#:~:text=We've%20decided%20to%20use,what%20Athena%20is%20all%20about
54 https://www.adb.org/sites/default/files/evaluation-document/346336/files/eap-sme.pdf
55 https://hbswk.hbs.edu/item/determinants-of-early-stage-startup-performance-survey-results
56 PSER 2021 https://www.insightsi2i.com/pser-21

Ecosystem Report 2021 (KPSER 2021),[57] and the Deal Flow Tracker (DFT)[58] (data on the quantum of investment deals raised by Pakistani Startups from 2015 to 2022 YTD).

- **Case study interviews** with eight enterprises (including 2 SGBs and 7 Startups) 'leaning towards success' to formulate case studies highlighting their unique value propositions, factors that enabled them, and opportunities that remain untapped.
- **An Expert Focus Group Discussion (FGD)** comprising a mix of founders, investors/funders and ESO personnel. The insights from this FGD will be weaved across the current report to factor in the nuances of business ecosystems in smaller cities.

A version of the **ASPEN Network of Development Entrepreneurs (ANDE) Ecosystem Survey Instrument**[59] adjusted for local context was used to gain these insights.

SAMPLE SIZE

SECONDARY DATA			
Source	Surveys	Interviews	Total
PSER	195	52	247
KPSER	99	22	121
Total	294	74	368

To add nuance and triangulate the findings obtained from the secondary data sources listed above, we also engaged in primary data collection vis a vis a focus group discussion and case study interviews. This additional data collection exercise was done to gather unique insights and explore the themes emerging in the secondary sources more exhaustively.

SAMPLING TECHNIQUE | CASE STUDIES

A systematic and structured process was followed to arrive at the final pool of 8 businesses for the case studies.

- Based on an extensive literature review, operational definitions were established for both Startups and SGBs.
- These operational definitions were built upon through further analysis and criteria was established to define Startups[60] and SGBs [61] that are *leaning towards success.*
- On top of this criteria, additional qualifiers namely, sector, geography and gender were also incorporated.

57 KPSER 2021 https://dl.orangedox.com/y0oxWEebP1TopXMAmA
58 I2I DFT Internal Analysis
59 ANDE Entrepreneurial Ecosystem Diagnostic Toolkit 2013 https://www.aspeninstitute.org/wp-content/uploads/files/content/docs/pubs/FINAL%20Ecosystem%20Toolkit%20Draft_print%20version.pdf

60 Startups leaning towards success included those that displayed viable financial performance, high market potential for growth and scalability, developed high quality products/solved for an actual problem and had high potential for IPO or acquisition.
61 SGBs leaning towards success were defined by: financial performance, high quality products and ability to create stable employment opportunities.

- The Analytical Hierarchy Process (AHP) [62] was employed to assign scores and compute weightages for each criteria.[63]
- For each business, computed scores across different criteria were added together to calculate a total aggregate score.
- Finally, this macro score was used to determine the final list of eight businesses that were then interviewed.

FINAL SAMPLE | CASE STUDIES

		SECTOR	GEOGRAPHY (HQ)	GENDER
STARTUPS	Dawaai	Health-tech / Health	Karachi	Male founded
	Rider	Transport / Logistics	Karachi	Male founded
	Roomy	Tourism / Hospitality	Islamabad	Male founded
	Edkasa	Ed-Tech / Education	Lahore	Female co-founded
	Ricult	Agri-tech / Agriculture	Lahore	Male founded
	EcoEnergy	Green solution	Karachi	Female co-founded
SGBs	Yak Grill Passu	Tourism / Hospitality	Passu, Upper Hunza	Male founded
	Greenovation	Green solution	Peshawar	Male founded

[62] The Analytical Hierarchy Process is a multidisciplinary decision making method that assigns quantitative criteria to qualitative data, to arrive at the best possible outcome

[63]https://www.researchgate.net/publication/301719119_A_Method_of_Assigning_Weights_Using_a_Ranking_and_Nonhierarchy_Comparison

SAMPLING TECHNIQUE | FOCUS GROUP DISCUSSION

Purposive sampling was employed to select participants for the expert focus group discussion i.e., participants were chosen based on their role in and contribution towards the local ecosystem. Following best practice, the size of the focus group was limited to ensure control and provide each participant with the opportunity to share their thoughts. The discussions were moderated following a detailed focus group discussion guide that outlined and prioritized relevant themes to be discussed. This discussion guide also detailed the roles assigned to the researchers i.e., chief moderator, assistant moderator and facilitator.

LIMITATIONS

Since this report utilizes data from both the KPSER 2021 and the PSER 2021, the limitations of those two reports carry over. Within the PSER, these included an uneven distribution of respondent categories and weightages that were attached to the entrepreneur sample to balance the proportions between male and female respondents. Limitations of the KPSER included a lack of primary and secondary data on the KP ecosystem as well as the survey sample being skewed towards Startups from major cities. In terms of primary data collection for this report, whereas, we employed a structured approach to sample businesses for case study interviews, in utilizing the AHP there is a degree of subjectivity on part of the researcher during the process of assigning quantitative values to qualitative data. Additionally, whereas the focus group discussion generated valuable insights, the sample likely did not offer a truly accurate representation of the players in the ecosystem, therefore additional research will be beneficial as the findings are confined to the sample selected for this report.

3

FINANCE: FINDINGS & RECOMMENDATIONS

FINANCE | FINDINGS

LENS 1: WARINESS AMONG INVESTORS AND FOUNDERS ABOUT LACK OF EXIT OPPORTUNITIES AND HIGH VALUATIONS

Despite increase in investment activity, there have been few exit events to prove the case for investment outcomes in Pakistan[64]. Besides profitability, the two core ways for investors to gain return on their investment are an IPO and mergers and acquisitions (M&A).

The price to earnings ratio that the KSE-100 index is trading at (4.59x), relatively lower market capitalization to nominal GDP ratio (17.4% in 2021), and existing private valuations of Startups being relatively higher in comparison to those available in the public markets, are just a few reasons why Startups exiting via listing on the Pakistan Stock Exchange (PSX) seems an unlikely route. A lot of these Startups are raising considerably more through private channels than they could potentially raise through public equity markets. [65] In comparison, there are examples of Startups such as Anghami - that services the MENA region and - that recently exited through SPAC in New York at a valuation above $200 million. This is an avenue Startups like Retailo originating from Pakistan can explore in the future.[66]

Box 1: Exits Work Differently for SGBs

SGBs approach exit strategies differently. Except for businesses in health-tech, a considerable number of SGBs operate in social sectors where, historically, there have been few IPOs and M&As. In addition, the long-term nature of these businesses and their approach often deviate from that set by the investors. Founders, therefore, may lean towards retaining as much stake in their company as possible, its cash flow, and the capacity to create jobs and provide services in the local landscape they have originated from. Under such circumstances, SGBs may opt for what is known as a "self-liquidating exit" where the existing owners repurchase the equity. Alternatively, a loan may be repaid with revenue generated by the assets it is used to purchase.

M&As, on the other hand, are still largely conceptual in Pakistan. Out of the 209 companies to raise investment from 2015 to 2022 YTD, only ***three Startups***, i.e. TruckSher by TruKKer,[67] Tez Financial Services (by Zoodpay),[68] and Slide App (by Buzzvil)[69] have been **acquired**. [70] There are global, regional and local level players in the ecosystem who could potentially acquire smaller tech-enabled and tech-based Startups to either expand their range of products/services or to simply absorb competition. Uber's acquisition of Careem (for $3.1 billion) for expansion into the region is a perfect example of this. Similarly, DoorDash recently acquired Finland-based food delivery company Wolt for $8 billion to scale internationally and to catalyze its product development.[71] ***It would not be far-fetched to say that DoorDash would soon look to expand to Asia***. Other examples of major acquisitions include *Alibaba buying Daraz*[72] and *Ant Financial*

64 https://www.dawn.com/news/1646134/exit-strategy-post-blitzscaling
65PSER 2021 https://www.insightsi2i.com/pser-21
66https://www.mckinsey.com/industries/technology-media-and-telecommunications/our-insights/whats-fueling-pakistans-emerging-start-up-ecosystem
67https://tribune.com.pk/story/2319333/trukker-acquires-pakistani-startup-trucksher-as-part-of-expansion-drive
68https://www.fintechfutures.com/2022/05/swiss-fintech-zoodpay-acquires-pakistans-tez-financial-services/
69https://profit.pakistantoday.com.pk/2018/08/30/pakistans-leading-lock-screen-app-slide-set-to-be-acquired-by-s-korean-buzzvil/
70 https://techcrunch.com/2022/08/29/postex-acquires-call-courier-to-become-pakistans-larger-e-commerce-service-provider/
71https://www.forbes.com/sites/iainmartin/2021/11/10/doordash-muscles-into-europe-with-8-billion-wolt-deal/?sh=7dea209fc885
72Ali baba extends logistics arm to Pakistan for e-commerce unit Daraz

taking a 45% stake in fintech Easypaisa[73]. Needless to say, when and if this trend of global and regional players acquiring local Startups becomes more prominent, Startups who either have a highly scalable business model or already have multi-country operations will have an edge over others.

Most key players in the Pakistan SGB and Startup space were ***speculating on high valuations and their impact on the Startups' ability to raise follow-on rounds***. A spike in valuations and their misrepresentation of the true opportunity and size of the market created a 'bubble'.[74] This bubble burst recently owing to the global economic downturn, resulting in scarcity of capital in the space and hence a ***more cautious due diligence approach from investors***.

A total of **35 Startups** in Pakistan have reportedly raised **$516.5 million in later stage** investment from 2015 to 2022 YTD[75] (Invest2Innovate, DFT). **21%** of this funding (approximately $109 million across 4 deals) was attributed to Airlift, which was one of the most well-funded Startups in the history of the Startup ecosystem in Pakistan but recently shut down operations. The company was raising investment rigorously and was expected to be the first unicorn of the country. It is now alleged to be overvalued with some of its investors hoping to do an audit to see where things went wrong.[76]

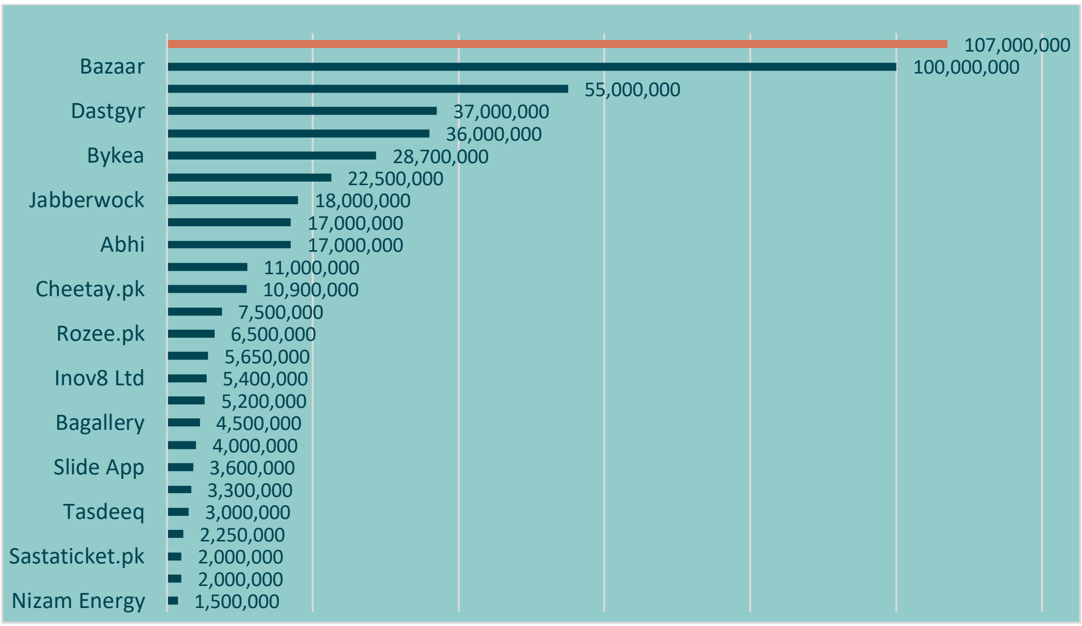

Figure 2: Amount raised by Startups in later stages i.e. Series A, Series B and Series C rounds, (i2i DFT).

There is a need for proper due diligence by investors to ensure companies are valued realistically and have a growth plan that justifies use of funds. A policy expert interviewed for the PSER emphasized that if there are enough *bad deals* and overvaluations, capital injection into the market will slow down. He, however, also pointed to the need for investors to be mindful of excessive checks and which can prove counterproductive particularly for Startups in early stages.[77]

73https://technode.com/2018/03/14/ant-financial-enters-pakistan-with-185m-mobile-finance-platform-deal/
74I2I DFT Internal Analysis
75 I2I DFT Internal Analysis
76 https://restofworld.org/2022/inside-story-of-airlift-crash/
77 Primary Interviews - PSER: (2021)

LENS 2: ACCESS TO DEBT BASED FINANCE IS A CHALLENGE

Lack of financial capital is often underlined as one of the biggest constraints to the growth of Startups and SGBs. Globally, as interest rates spiked in 2022, ***venture capital funding witnessed a drop of roughly 27%***, resulting in a capital crunch in frontier markets like Pakistan. [78] The variance in capital needs and suitability of different financing instruments for the type of enterprises in questions means that often ***there are more than a few ways of solving such capital constraints***. For instance, Startups with product-market fit, a repeatable sales process, and a growing cohort of users can often benefit more from debt financing than classic venture capital (equity). [79] One of the most prominent options under debt-based financing is **private debt** (otherwise known as **venture debt**, which can be disbursed by banking and non-banking entities), further bifurcated into **corporate debt** and **asset-backed debt**. Specific debt arrangements within these two categories of debt, are termed **debt facilities** such as, term loans, warehouse facility, and lines of credit. Another option that local players in Pakistan such as Accelerate Prosperity have been utilizing is **patient debt (also known as Concessional Debt),** via their Catalytic Financing and Investment program. [80] It extends patient debt financing or equity investments to approved proposals for up to 10 years on subsidized interest rates. Currently, there are very few other players in the Startup and SGB space in Pakistan who are specializing in debt based finance. During the focus group discussion conducted for this report, entrepreneurs were also appreciative of Accelerate Prosperity stepping up to offer financial solutions for small businesses to further their growth and expansion, where adequate support has been lacking from the government. The participants additionally shared that they have observed a dual trend in the ecosystem; firstly greater willingness among founders to explore debt

Box 2: Why debt finance works well for SGBs?

Despite SGBs' potential for accelerating economic development and recovery in the longer run, outside of a few sectors, access to tailored financial products and services is limited. Often this means SGBs are left to fund their own growth from internally generated cash flow.

The difficulty in market sizing also serves as a bottleneck when it comes to the ability of innovative SGBs to make cash flow projections required for traditional debt. Alternatively, when we look at private equity investors, their stance is typically informed by a combination of failures and very successful survivors. This renders even businesses with a high likelihood of success but a modest total opportunity size as *uninteresting* and *unviable* investments. This then translates to a "scale potential" mismatch for SGBs that have a smaller total addressable market to expand into, often seen as 'niche' by investors.

Hence, an adaptive approach can be taken to debt instruments (like loans, bonds, patient debt, etc.) with different provisions for SGBs, such as lower than the usual market interest rates, flexible and friendly repayment schedules or more lenient grace periods, lower collateral requirements if any, and/or less rigid underwriting guidelines than those used by traditional lenders.

78 https://restofworld.org/2022/inside-story-of-airlift-crash/
79 https://profit.pakistantoday.com.pk/2022/04/27/startups-should-be-looking-at-debt-not-just-vc-funding/
80 https://ibf-uzh.ch/wp-content/uploads/2022/02/Blended-Finance_When-To-Use-Each-Instrument_Phase-1-final.pdf

based financing and secondly, although still quite minimal, there is now some willingness on part of financial institutions to lend smaller ticket sizes, which was not the case a few years ago[81].

The bottomline is that debt is not a substitute for equity. In fact, lenders will usually use a Startup that has raised equity as a validation to underwrite early-stage companies, leading to founders raising debt after they have raised an equity round. Debt often provides a lot of flexibility in comparison to equity, while also ensuring less dilution and quicker access to capital. This means if a Startup or an SGB has a somewhat predictable future with foreseeable return on debt capital through say a lending product or a merger - then debt is probably a better option than equity. Eqiuty is often well suited to finance uncertainty (high risk but also high return) not just due to the business model but also when companies are relatively early stage and are building a product and a monetization roadmap. Debt finance is particularly suitable for sectors such as fintech where, for instance, asset-backed debt can help embed financeable financial products such as loans, credit cards, insurance, factoring, and banking.[82]

Despite the advantages of debt financing, Startups and SGBs in Pakistan face barriers to access. The addressable venture debt opportunity in Asia has the potential to reach roughly $490 million to $980 million annually, based on a 5% to 10% estimate of Southeast Asia's annual venture funding average from 2018-2020 of $9.8 billion a year.[83] By this standard, the approximately $300 million raised in equity funding by Startups in Pakistan in 2021 should translate to a $30 million demand in venture debt, which is certainly not being met at the moment.

Evidently, access to debt finance was reported as a serious obstacle to the operations of businesses by the majority of the entrepreneurs (66%), funders (100%), and ESOs (83%) in KP (KPSER, 2021)[84]. Despite this perceived difficulty in accessing debt finance ranked by different ecosystem players in our sample, a report published by the Sustainable Development Policy Institute (SDPI) shows that among all provinces in the country, the highest prevalence of borrowing is observed in Khyber Pakhtunkhwa. Statistics show that around 57% households in KP engaged in debt financing as compared to a national average of approximately 22%. However, this cannot be considered in isolation as the same report also mentions that Khyber Pakhtunkhwa also holds the highest share of unsustainable debt i.e. debt to income ratio (51%). This alludes to the fact that while a higher number of households in KP are borrowing money as compared to other regions, they also face the greatest difficulty in meeting their repayment obligations which ultimately inflates the cost of borrowing either in the form of higher absolute amount in repayments or longer repayment periods[85]. Still, whereas the SDPIs data reveals the appetite for debt financing in KP it also simultaneously points to the fact that households are unable to relieve themselves of debt which is in fact counterproductive.

81 Source: Primary data collection: FGD (2022)
82 https://a16z.com/2022/04/15/16-things-to-know-about-raising-debt-for-startups/
83 https://www.pwc.com/sg/en/financial-services/assets/venture-debt.pdf
84 KPSER 2021 https://dl.orangedox.com/y0oxWEebP1TopXMAmA
85 https://sdpi.org/first-estimates-for-household-debt-and-indebtedness-in-pakistan-pp-77/publication_detail

On the national level 39% (61/155) of the entrepreneurs surveyed believed that access to debt finance was an obstacle for their business, out of which 72.14% have not raised investment, while 27.86% have raised investment (PSER, 2021). Similarly in KP, out of the Startups and SGBs that consider debt based finance to be a challenge (31/70), 81% have not raised investment, while 19% have raised investment. The latter category, in this case, are particularly more qualified to leverage debt financing, which could translate to greater growth and scalability opportunities. Nonetheless, an estimated 6.7% of firms in Pakistan are known to have successfully received a bank loan or a line of credit, while 14% firms reported their loan application being rejected.[86]

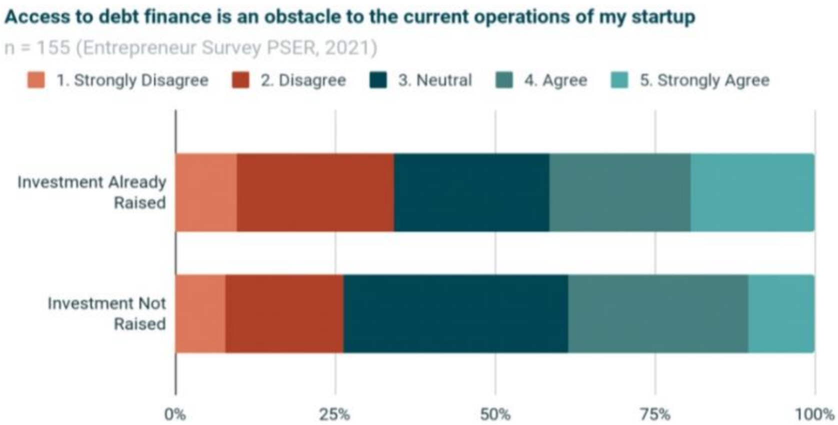

Figure 3: Founder perception of access to debt finance related to their investment raising outcomes

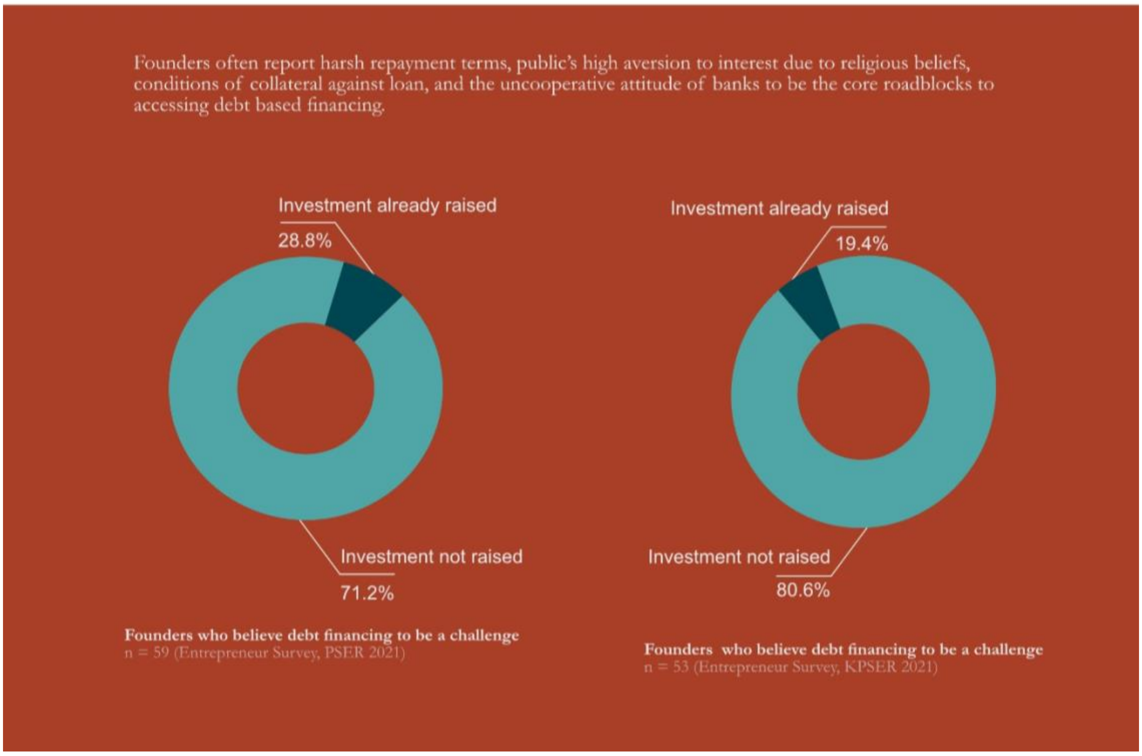

Figure 4: Founders who perceive debt finance as a challenge in relation to investment raising outcomes (PSER,2021).

Figure 5: Founders who perceive debt finance as a challenge in relation to investment raising outcomes (KPSER,2021).

86 https://karandaaz.com.pk/blog/businesses-pakistan-access-financial-services/

LENS 3: INVESTMENT READINESS SERVICES NEED IMPROVEMENT, WHILE STARTUPS IN KP REQUIRE TAILORED INVESTMENT READINESS SERVICES.

Investment readiness is most often talked about in the context of raising equity-based finance, *but it is equally significant in raising other forms of funding including debt finance.* Evidence shows that **63% of founders surveyed reported believing that raising capital in KP (n=70) is difficult**. Entrepreneurs, funders/investors, ESOs, and policy individuals unanimously rated Startups and SGBs based in the province as 'not investment-ready' (On a scale of 1 = Not Investment-Ready to 5 = Fully Investment-Ready).

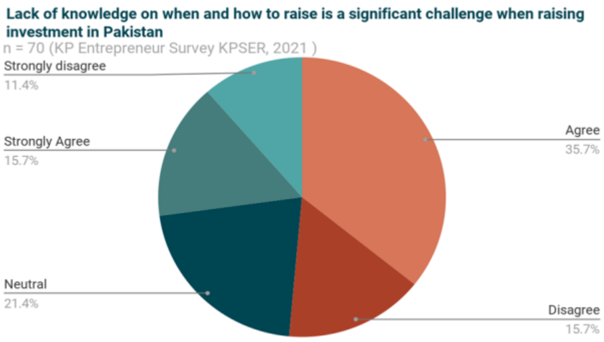

Figure 6: Founder perception of their lack of knowledge regarding when and how to raise investment (KPSER, 2021)

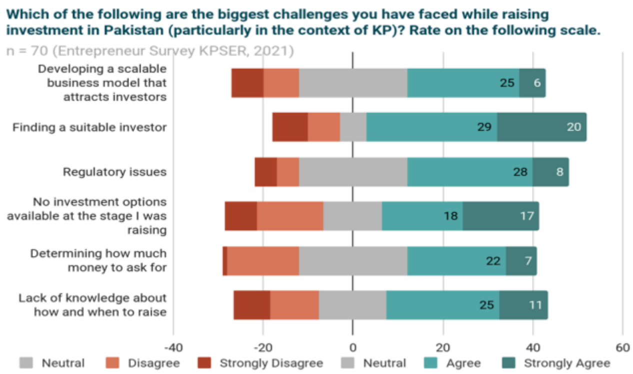

Figure 7: Perceived Difficulty of Raising Investment for KP Based Founders.

Box 3: How is investment readiness different for SGBs?

There is an abundance of SGBs in Pakistan that contribute to job creation and sustaining livelihoods but they typically end up failing standard investor expectations due to smaller size, slower growth, risky nature due to lack of traditional track record and cash flow, unoptimized and undocumented business systems, and so on.

How can key players in the space help improve these SGBs' access to seed-stage capital considering that they are either too big for microfinance and informal investors, or too small or risky for conventional financial institutions/banks and direct investors who are often more focused on financing bigger later stage companies? Any technical support on investment readiness for SGBs needs to consider this nuance to create effective support programs.

Investment readiness is often categorized into three dimensions including ***equity aversion, investability*** and ***presentational failings***[87]. Most of the perceived challenges in KP are concentrated around investability, with *founders* reporting *lack of knowledge about how and when to raise (51%), developing a scalable business model that attracts investors (44%),* and *determining how much money to raise (41%)* as major challenges. Qualitative data from the same study also points to equity aversion among founders who equate raising equity based capital to losing control over their company.

Additionally, *finding a suitable investor (70%), regulatory issues (51%)* and *lack of investment options at the stage where Startups/SGBs raise funding (50%)* were also reported as major challenges - all factors closely associated with availability of suitable investment options in the market. SGBs and Startups in KP have also

87 https://www.oecd.org/global-relations/45324336.pdf

been known to overvalue themselves during investor negotiations, pointing to the lack of understanding of how Startup valuations function[88].

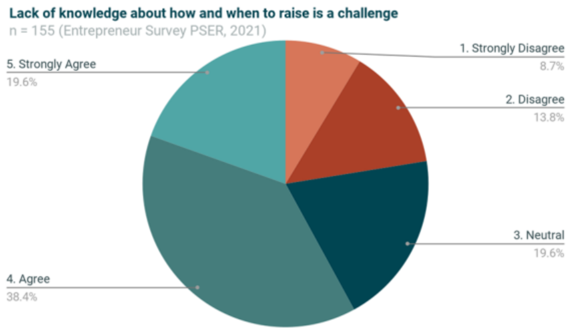

Figure 8: Founder perception of their lack of knowledge regarding when and how to raise investment (PSER, 2021)

According to Pakistan Startup Ecosystem Report 2021, the situation is not very different at the national scale where a considerable number of surveyed entrepreneurs (n=155) ranked ESOs unfavorably on aspects of investment readiness such as *investment negotiation and investor education* (22%), *access to advisory services (legal/IP/accounting)* (17%), *access to investors/funders* (17%), and *growth and scaling* (16%)[89]. These are all very specialized outcome-driven support services that should be customized to the Startups and SGBs unique needs.

Invest2Innovate's interview data showed that entrepreneurs who are looking to scale and raise capital were very dissatisfied with the services being offered by ESOs in the space. Many entrepreneurs reported that advice on the fundraising process is most helpful when it comes from fellow founders with experience with the same processes[90][91].

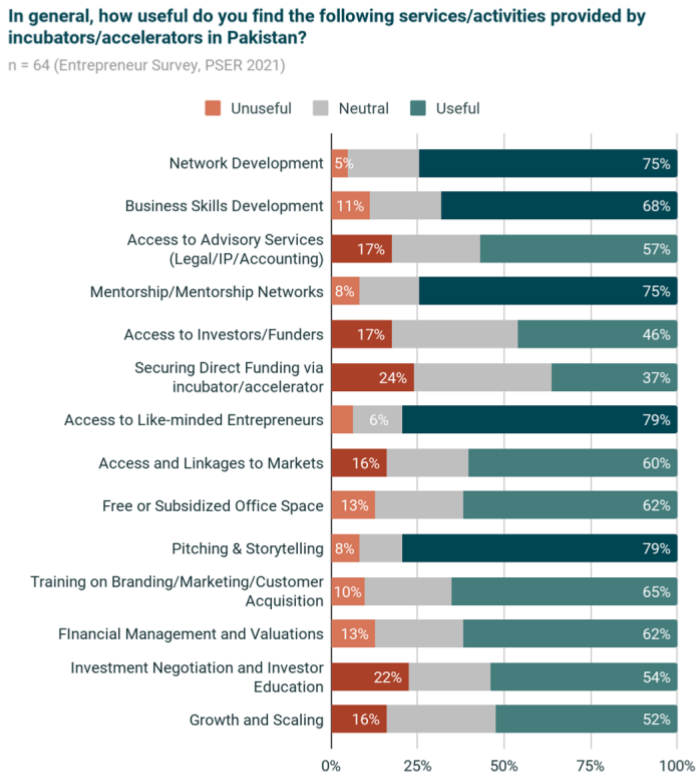

Figure 9: Perceived Usefulness of Services provided by Incubation/Accelerator Centers in Pakistan.

Entrepreneurs also highlighted the ineffectiveness of the support organizations' current approach to delivering support services on fundraising and scaling, including *suboptimal training curricula* [92] *and insufficient networking opportunities for early stage Startups, as well as a lack of dedicated attention to the needs of Startups*[93] *operating in a specific niche*[94].

Moreover, in KP, a lack of investment readiness is reflected in the small number of Startups and SGBs to have reportedly raised investment as well as in the quality of investor to investee relationships reported in literature. Besides Startups and SGBs not being investment ready, stakeholders such as founders and support organization representatives pointed out investor education as a key area of improvement in KP. ESOs shared during interviews that the **investors in KP are mostly**

88 KPSER 2021 https://dl.orangedox.com/y0oxWEebP1TopXMAmA
89 PSER 2021 https://www.insightsi2i.com/pser-21
90 Founders consistently mentioned Muneeb Maayr (co-founder at Bykea)# as an example of a seasoned local founder with experiential knowledge and understanding of the fundraising process that was seen as extremely helpful by many.
91 Primary Interviews: Ahmed, L. (2021), Moeen, A. (2021), Shabbar, A. (2021)
92 Primary Interviews: Kidwai, F. (2021), Tanveer, F. (2021), Shahid, S. (2021)
93 Primary Interviews: Hussain, A. (2021), Gul, S. (2021)
94 Primary Interviews: Hyat. N. (2021)

businessmen who do not necessarily understand the risk appetite needed to be a successful Startup investor[95].

LENS 4: SECTOR-WISE INVESTMENTS & MOST PROMINENT UNTAPPED OPPORTUNITIES IN DIFFERENT SECTORS/VERTICALS

Different key factors have accelerated the growth of Startups and SGBs in Pakistan more recently. From cell phone subscriptions growing to **184 million in 2020-2021** (from the previous **168 million** in **2019-20)**[96] to an additional **14 million** broadband connections coming online during **2021**, the enterprises in the space have benefited from these changing market dynamics.[97] Similarly, information Technology (IT) exports - at **$2.1 billion during 2020-2021** - demonstrated **47%** year-over-year (YOY) growth.[98] So, technology is propping up and proliferating the digital businesses in the country, with **16% (over 12,500 registered companies in 2021 versus less than 4,000 in 2016)** of all newly incorporated companies in 2021.[99] While many sectors were gradually moving towards digitization, it is safe to assume that COVID-19 had a huge role to play in the recent uptick in digital adoption across all sectors. E-commerce and edtech sectors, therefore, have seen exponential growth, leading to other supporting sectors such as logistics and fintech to pick up pace as well. However, sectors such as travel and hospitality suffered due to travel restrictions and border closures.[100]

Top Funded Sectors

According to Invest2Innovate's Deal Flow Tracker (DFT), **E-commerce has been the largest sector both in terms of deal count (64) and amount raised ($315 million) from 2015-2021, with a reported $211 million (26 deals) raised in 2021 alone.** However, the sector's dominance has decreased as **fintech Startups continually raised bigger rounds in 2021, amounting to an alleged total of $95 million across 25 deals, thus yielding**

Top Funded Startups in Pakistan by Sectors | 2015 - 2022

Startup Name	Amount Raised (in USD)	Sector
Airlift Technologies	107,000,000	E-commerce
Bazaar	100,000,000	E-commerce
Daraz	55,000,000	E-commerce
Dastgyr	37,000,000	E-commerce
Retailo	36,000,000	E-commerce
Bykea	23,000,000	Transportation/Mobility
Jugnu (by Retailistan)	22,500,000	E-commerce
Jabberwock	18,000,000	E-commerce
DBank	17,600,000	Fintech/Finance
Tajir	17,000,000	E-commerce
Abhi	17,000,000	Fintech/Finance
QisstPay	15,000,000	Fintech/Finance
Truck It In	13,000,000	Trucking and/or Logistics
NayaPay	13,000,000	Fintech/Finance
TAG	12,000,000	Fintech/Finance
MedznMore (now Tabiyat)	11,500,000	HealthTech/Health
OneLoad	11,000,000	Fintech/Finance
CreditBook	11,000,000	Fintech/Finance
SadaPay	10,700,000	Fintech/Finance
BridgeLinx	10,000,000	Trucking and/or Logistics
Grand Total	557,300,000	

Figure 10: Top funded startups by amount raised (USD) and sector.

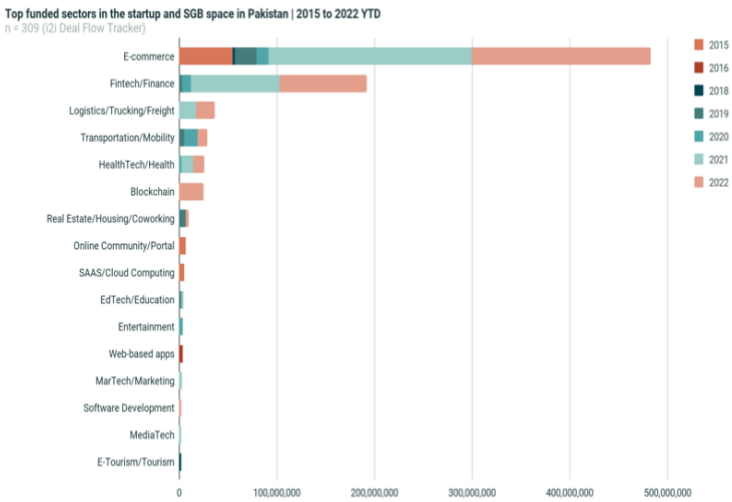

Figure 11: Sector wise funding breakdown

95 KPSER 2021 https://dl.orangedox.com/y0oxWEebP1TopXMAmA
96https://www.pta.gov.pk/en/telecom-indicators/1
97https://www.pta.gov.pk/en/telecom-indicators/1#broadband-subscribers
98https://pakobserver.net/pakistans-it-exports-grow-by-47-for-year-2020-2021/
99 Securities and Exchange Commission of Pakistan
100 Investors Round Table White Paper, 021Disrupt Wired. Nest I/O. 2021

a 2015-2021 aggregate of approximately $113 million across 40 deals [101] **.** Globally, fintech companies raised $95 billion, minting **43 unicorns** in the process [102]. **Logistics - digital trucking platforms** more specifically - notably raised sizable rounds, with Bridgelinx reportedly raising a seed round of **$10 million,** and Truck It In raising **$4.5 million** across 2 deals (Invest2Innovate, DFT). Regional players are also entering the Pakistan market, with Egypt-headquartered Trella already having expanded to Pakistan[103] while UAE-based Trukker acquired Karachi's TruckSher[104], which was founded in the beginning of 2021.

Untapped/Underpenetrated Sectors

Amidst this activity, a new breed of Startups has emerged, digitizing traditional sectors including agriculture, logistics, and financial services. The agriculture sector which accounts for 24% of our GDP,[105] remains in serious need of an overhaul. Startups including Tazah, Jiye Technologies, and Easy Fresh, are ***digitizing Pakistan's agriculture supply chain***. However, the sector still requires better access to agricultural technology products,[106] access to public funding, and improved capacity to deal with climate change.[107] ***B2B e-commerce Startups*** including Bazaar, Dastgyr, Jugnu, Retailo and Tajir have also emerged on the scene and are working to streamline procurement processes for traditional mom-&-pop (*kiryana*) stores. In Pakistan, the transportation industry - a key cog in the wider logistics industry - has reportedly witnessed growth at a CAGR of over 18% since 2017 and is valued at over $35 billion.[108] Overall, the logistics and transport sector accounts for roughly 22.3% of the services sector GDP and contributes about 6% to the total jobs created in Pakistan.[109] Given the growing need to deliver better services to customers, decrease costs and increase efficiency, ***logistics tech enterprises*** everywhere have begun to leverage digitization for their day-to-day logistics and supply chain operations, and to solve long-standing inefficiencies, fragmentation, and bottlenecks in the sector.[110] Most popular verticals in the logitech sector include road freight, digital trucking marketplaces, e-commerce delivery solutions and freight software solutions. Some of the most notable companies in the sector include BridgeLinx, Truck It In, Freightix, Rider, PostEx and Oware. However, despite the boom in the logistics sector it largely remains fragmented. According to interviews we conducted, founders from 6 different sectors opined that poor infrastructure including irregular electricity supply, broken road networks and weak internet coverage impacted their daily operations and opportunities for scalability. In particular, Salman Allana, Founder and CEO of logistics-tech Startup Rider emphasized that building a digital logistics solution is challenging due to Pakistan being one of the largest unmapped countries in the world. [111]

Another sector that warrants attention is the ***inclusive fintech sector*** which includes verticals such as lending solutions, insurtech, and such. Finally, the ***clean energy*** sector - focused on providing universal access to sustainable and clean

101 I2I DFT Internal Analysis
102 https://www.cbinsights.com/research/report/fintech-trends-q3-2021/
103 https://www.menabytes.com/trella-pakistan/
104 https://www.techjuice.pk/trukker-acquires-pakistani-startup-trucksher-as-a-part-of-its-expansion/
105https://www.pbs.gov.pk/content/agriculture-statistics#:~:text=Introduction,source%20of%20foreign%20exchange%20earnings.
106 https://www.mdpi.com/2504-3900/36/1/219
107 Ibid
108 https://www.techjuice.pk/lorryz-making-waves-in-pakistans-digital-freight-industry/
109https://gulfnews.com/world/asia/pakistan/pakistani-startup-aims-to-digitize-road-freight-transport-1.82094432
110 https://tracxn.com/explore/Logistics-Tech-Startups-in-Pakistan
111 Primary interviews: Allana, S. (2022)

energy, increasing sources of renewable energy, and improving energy efficiency and conservation is also in need of an overhaul. To ensure 60% of our energy comes from clean and renewable sources by 2030 would require an abundance of investment and Startups/SGBs in the country stepping up to make this possible.[112] The two green businesses that were interviewed for this study i.e. EcoEnergy and Greenovation opined that raising finance in their sector was especially difficult.[113] This is because VCs typically look into popular sectors such as fintech and e-commerce, which can offer them the highest amount of return, rather than untapped sectors such as green solutions.[114] In light of this, Greenovation gained most of its support from winning awards and government support, while EcoEnergy was able to leverage the founder's presence in the the USA - a more developed ecosystem - where investors had a stronger appetite for investing in untapped sectors.

112 https://tribune.com.pk/story/2366224/pakistan-aims-for-60-clean-energy-by-2030

113 Primary interviews: Bin Azam, S., Khan, S.(2022)

114 Primary Interviews: Khan, S. (2021)

CASE STUDY:

RICULT

Industry:
Agri-Tech
Founded in:
2015
Founders:
Usman Javaid & Aukrit Unahalekhaka

Reported amount raised:
USD 2 million[115]

Operating at the nexus of agri-tech and fin-tech, startup Ricult works to ensure financial inclusion of smallholder farmers in Thailand and Pakistan, through the provision of AI/data/tech and financial based digital solutions. The Startup envisions improving lives of 3 million small holder farmers with only a 25% adoption of the Ricult application.

20%
of Pakistan's Gross Domestic Product (GDP) is attributed to agriculture[116]

40%
or 25 million of the country's employed population works in the agriculture sector[117]

75%
of the agricultural workforce are smallholder farmers who own 5 acres of land or less[118]

12.5 acres
of land - bank's refuse to engage with farmers with this size of landholding[119]

30% or less
of Pakistan's population is financially included[120]

54
reported total agri-tech startups in Pakistan[121]

RICULT'S POWER CARD

Identifying innovation champions in financial institutions - the key to unlocking financial inclusion for small scale farmers.

Ricult solves for 29% of smallholder farmers in Pakistan that are completely financially excluded, with the remainder having limited access to formal finance.[122] Smallholder farmers that do manage to get loans through financial institutions, experience high interest rates. As a result, farmer becomes dependent on informal loan sharks and are further cemented into a cycle of poverty. Ricult's success is most often discussed with reference to their data analytics solutions that offer weather data predictions, crop health insights, etc. However, since banks are the medium through which small farmers essentially gain access to capital, equally important is how Ricult also solves for banks by making small ticket lending viable for them.

APPROACH

Small ticket sizes are expensive for banks making them averse to partnering with Ricult. Financial institutions' overall capacity for innovation and tolerance for failure is also very low, as Pakistan ranks 99 out of 127 on the Global Innovation Index.[123]

> "In Pakistan, we question the need for innovation. We ask why anything new should be tried."

115 DFT https://invest2innovate.com/access-deal-flow-tracker/
116 https://tabadlab.com/wp-content/uploads/2022/07/AgriTech-Report-07-07-22.pdf
117 Ibid
118 Ibid
119 Ibid
120 Ibid
121 https://tracxn.com/explore/AgriTech-Startups-in-Pakistan
122https://marketdevelopmentfacility.org/wp-content/uploads/2021/03/Financial-Inclusion-in-Pakistan-FINAL.pdf
123 https://tribune.com.pk/story/2335751/innovation-deficiency-in-pakistan

In order to combat this, Ricult looks for exceptions to the norm or people it terms as 'Innovation Champions' or 'Early Adopters'. Usman mentions his access to a strong network as a key enabling factor towards accessing such individuals. Once Ricult is able to identify and convince the 'Innovation Champion' who has an appetite for risk and strong buy-in with senior management, these people are eventually able to bring the whole financial institution on board. Ricult's sales pitch to the innovation champion involves detailing how the solution makes lending to small scale farmers more financially viable, though addressing the cost drivers of the bank i.e. loan recovery and customer acquisition.

RESULTS

40% – 50%
year-on-year revenue growth[124]

Around 120,000 farmers
utilize the Ricult solution[125]

17 Tehsils in Punjab
Ricults current area of operation[126]

LOOKING FORWARD

With the devastation caused by the recent floods owing to Monsoon rains, Usman believes that 'What we really need to be worried about as a country is the climate change impact because this is going to literally turn our agriculture upside down'. Despite this mammoth threat, Ricult believes that there is vast opportunity in the sector and that they are just scratching the tip of the iceberg '...as agriculture is a very broad and very deep industry.' There are many untapped verticals within this broader sector e.g. horticulture, floriculture etc. that are yet to be explored.

As Ricult continues to work towards improving financial inclusion of underserved small scale farmers, it hopes for an increasing trend in 'Innovation champions' or 'Early Adopters' which moves the needle in terms of less risk aversion. Ricult also strongly hopes that the government learns from comparable ecosystems such as Thailand and steps up their game in terms of policies that can enable the digitization of agricultural practices.

124 https://profit.pakistantoday.com.pk/2021/02/13/bringing-technology-to-farmers-ricult-maintains-its-strong-growth-trajectory/

125 Ibid

126 Ibid

FINANCE | RECOMMENDATIONS

LENS 1: CREATE THE RIGHT ENVIRONMENT FOR EXITS, BETTER DUE DILIGENCE PRACTICES TO ENSURE VALUATIONS CAPTURE THE NUANCES OF THE LOCAL MARKET, AND PROVIDE QUALITY INVESTMENT READINESS SUPPORT.

The lack of exit opportunities for investors and asset managers points towards the need for investors to **fine tune the selection criteria for future portfolio companies**. This involves developing a deep **understanding of the need for exits** and its **significance to investors.** There also needs to be some semblance of how liquidity will be delivered to investors, collating evidence on potential acquirers' interest in the of well-reputed companies investing in the sector, as well as interest from potential large acquirers. [127] Additionally, business models that are scalable nationwide - with multi-country operations being a bonus in case of Startups - typically offer better paths to M&A. Similarly, tech-enabled and tech-based businesses with higher capacity to expand their range of products and services will be easy to incorporate into bigger companies. In the case of SGBs specifically, those solving real life problems in niche markets usually have a better chance of being bought out by industry giants. When it comes to SGBs, they can get a lot of value from debt-based financing instruments, which allow for less dilution over time, enabling them to raise more follow-on rounds and can help the businesses achieve profitability in the longer run.

As far as unrealistic valuations are concerned, it closely relates to the quality of **due diligence** conducted by investors in a deal. As part of the due diligence process, it is important for investors and funders to leverage their relationships with other credible players providing support to both Startups and SGBs in the ecosystem. This can be helpful in verifying and providing a further nuanced understanding of the involved companies and their founding teams. Applying this approach during due diligence can be especially helpful for investors with relatively limited presence and expertise in the space, where knowledge sharing can help avoid pitfalls.

Moreover, evidence in Pakistan suggests that out of investors with a history of investing in incubated or accelerated companies within 2 years of their program participation, ⅜ reported such companies to have a better quality of due diligence documents (i.e. Audited financials, MIS systems, legal, etc.). This underscores the importance of **quality investment readiness support services, which can help entrepreneurs value their companies realistically.** This includes understanding the downsides of overvaluing a deal and risking the company being unable to meet the revenue goals or market traction in the future, not basing the company's health on the leverage, debt, and profitability ratios, and using metrics that inflate your company's valuations without accounting for cash flow projections and events like inflation.[128]

127https://fla.yourcreative.com.au/wp-content/uploads/2021/10/Report_on_Demand-led_Investment_for_the_Missing_Middle_2021.pdf

128https://www.forbes.com/sites/theyec/2021/11/30/before-you-start-fundraising-consider-these-eight-important-valuation-factors/

CASE STUDY

ROOMY

Industry:
Tourism/Hospitality
Founded in:
2018
Founder:
Asad Samar

Reported amount raised (2019-2022):
USD 1million[129]

Tourism/hospitality Startup Roomy targets domestic, young and tech savvy tourists across Pakistan through offering the best of both worlds i.e. affordable prices and quality customer service. The name of the game for Roomy is mid-tier accommodation offered through partnership with local hotels and guesthouses. Roomy currently has over 200 rooms in four cities across Pakistan, with a team of around 100 employees.

3%
Contribution to national GDP[130]

5.4%
Expected year-on-year growth[131]

50 million
Domestic tourists travel in personal cars with families in groups of an average of 5 people[132]

122 million
projected growth of Pakistan's middle class by 2025[133]

130 million
are below the age of 30 i.e. Millennials and Gen Zers who are eager to travel [134]

ROOMY'S POWER CARD

Trailblazing its way through the domestic tourism market - an asset light business model.

The key problem faced by domestic tourists is that on one hand, there are expensive 5 star hotels, which the majority of people cannot afford. On the other hand there are local hotels or guest houses which lack severely in terms of quality of service. Either way, whether local tourists feel a pinch to their pocket or to their experience, they are left dissatisfied. In the midst of this dilemma emerges - Roomy which currently operates in the North of Pakistan as the largest hotel operator in Hunza with 5 properties and 120 rooms[135]. Since 2018, the company has managed to scale swiftly in a short time due to its asset light business model.

APPROACH

Roomy does not construct or purchase properties. Rather, they lease properties from local landlords and then manage these, in turn paying the landlords a share of the revenue. - *price point, check*. How Roomy manages the properties is equally important. Aesthetically pleasing interiors, trained staff, standardized quality of service and enabled with technology - *customer experience, check*. Both these factors i.e. price point and customer experience are held in high regard by young, tech-savvy travelers which make up the bulk of Roomy's clientele. This unique asset light business model has gained traction because Roomy entered the market in the North of Pakistan at a time when there were no other established hotel chains there. Additionally, Roomy was also a trend setter in establishing its online advertising campaigns in 2018, which was something the majority of hotel brands lagged far behind in. This digital footprint enabled its popularity and worked in their favor.

> "The bigger chains in Pakistan had not set up shop in any of the northern areas yet, so we had a first mover advantage there.'"

129 DFT https://invest2innovate.com/access-deal-flow-tracker/
130 https://profit.pakistantoday.com.pk/2020/12/04/hotel-management-startup-roomy-raises-1-million-in-pre-series-a-round-led-by-lakson-vc/
131 Ibid
132 Ibid
133 Ibid
134 Ibid
135 https://propakistani.pk/2020/10/07/roomy-a-pakistani-hospitality-startup-is-making-mid-tier-travel-more-accessible-and-fun/

RESULTS

73% lower
price point vs top-tier hotels in the country[136]

1.5x – 2x
reported increase in partner landlords' income[137]

70%
occupancy rate across Roomy's properties[138]

LOOKING FORWARD

Dr. Asad Samar believes that there is a massive untapped opportunity in service department management, explaining that *'the scale of the construction sector is 10 to 20 times bigger than the scale of the hotel construction sector'*. Following the asset light business model, he explains that it is much more scalable to lease and manage properties such as apartments through doing short term rentals such as Airbnb, rather than utilizing your own capital to build apartment complexes.

Building on its success in the North, Roomy's future plans involve expanding into the South of Pakistan, and in the long-run establishing itself internationally as well. While how this pans out remains to be seen, Roomy has definitely placed itself in prime position through making the business of tourism/hospitality affordable not only to its customers but also to itself.

136 https://www.menabytes.com/roomy-pre-series-a/
137 Ibid
138 Ibid

LENS 2: DEBT SHOULD BE EXPLORED AS A VIABLE AVENUE OF RAISING INVESTMENT.

Debt has emerged as complementary and in some cases even an alternative source of investment in Southeast Asia for high-growth technology companies that previously only raised equity capital, case in point Grab's $2 billion term loan.[139] The capital will be used to strengthen its super app ecosystem in the region while also establishing a diversified capital structure in the longer run.[140] According to PitchBook, globally, debt has grown faster than the VC market in 2019 and 2020, it was used roughly 3000 times by VC-backed companies and technology companies accounted for the biggest proportion of it.[141] These are all signposts - in part influenced by the current economic climate and the ongoing capital crunch - indicating that **financial institutions, commercial banks, and even VC funds need to diversify the instruments in use and start incorporating debt finance instruments.**

In some parts of the world, experts have identified clustering different ***blended finance instruments*** together under two premises, ones that can blend within a single transaction and others that can be blended over time. Blending in one transaction signifies blended capital that exists simultaneously within the same transaction structure, e.g. concessional debt, equity or guarantees could go hand in hand in a single deal. Blending instruments over time consists of capital provided with the intent of accelerating other types of capital over time. For instance, providing seed stage companies with grants to make them more investable and to improve their chances of raising private capital at later stages. Grants or catalytic technical assistance can be used under the latter category.[142] However, understanding the investors', the ventures' and the national level context, the deal/transaction purpose, and the resources at hand, all play a central role in selecting the most appropriate instrument. In developing private markets such as Pakistan - as cases of commercial viability, scale of the opportunity, growing pipeline of investable companies, increasing dealflow, and an advancing financial sector become more evident - blended finance becomes a great way of further strengthening businesses, including Startups and SGBs.

To further support SGBs, **ESOs can also play an important role by incorporating rigorous accounting practices, scaffolding around formulating exit strategies early on in their journey, and implementing bespoke investment readiness programs/services.** SGBs often lag behind in these areas, which serves as one of the biggest deterrents for lenders who could potentially partake in some risk-sharing rather than only offering traditional loans to small businesses.[143] Additionally, they can also help raise awareness about when and how different debt instruments can be leveraged to avoid unnecessary company dilution over time. It will help dismantle the misconceptions around the general use case of debt based finance.

139 https://www.pwc.com/sg/en/financial-services/assets/venture-debt.pdf
140Grab raises US$2B term loan to strengthen liquidity and diversify financing sources | e27
141Q1 2021 PitchBook Analyst Note: Venture Debt a Maturing Market in VC
142 https://ibf-uzh.ch/wp-content/uploads/2022/02/Blended-Finance_When-To-Use-Each-Instrument_Phase-1-final.pdf
143A Research Agenda for the Small and Growing Business Sector

LENS 3: NEED TO MAKE SUPPORT SERVICES, ESPECIALLY RELATED TO INVESTMENT READINESS, MORE BESPOKE

ESOs in the country should work on designing customized investment readiness programs that address challenges related to equity aversion, investability, and presentational deficiencies (in the pitching process). It is also important to recognize that each of these components will probably carry different meaning for different businesses considering variables such as founder maturity, educational background, professional experiences, history of running a business, history of participation in previous incubation programs, type of investment being raised, stage of the business, size and nature of the businesses in question (Startups, SGBs, SMEs, MSMEs,), etc. Evidence also suggests that investors, first and foremost, look for a 'goodness of fit' to determine whether the opportunity matches the investors' own criteria. Once a company checks off on this, they typically judge the opportunity based on strength within the founding/management team, market-related factors, marketing strategy and approach (with notably flawed or incomplete marketing strategies considered uninviting), and financial considerations (with notably flawed financial projections seen as unattractive).[144] Therefore, it is advised that after selecting businesses for support programs, ESOs can provide them technical support on understanding the why of their business, strengthening team dynamics, market analysis and positioning, market validation, clarity in their business model, intellectual property, competition, differentiation and barriers to entry, future products/services, and financial planning among other things.

As far as the **presentation or pitching aspect is concerned, using focused data and information to demonstrate and signal personal and organizational competence and the entrepreneur's abilities and motivations can be very helpful in piquing investor attention.** This also involves developing a deeper understanding and awareness of deal structures and valuations, dos and don'ts of approaching investors. Finally, there is an additional need for ESOs to fine tune their investor networks and help entrepreneurs connect with and leverage the ESOs network of investors that suit the businesses' financial needs.

On the other hand, what we discussed above is the ***most commonly used approach to the investment readiness issue that takes on a deficiency lens***, which fixates on providing SGBs with technical support services to help them reach a predetermined investment readiness standard. Meeting a lot of these standards is typically dependent on SGBs raising investment, which may not be viable considering that the SGBs in question are presumably not investment-ready. This leads ***SGBs to get stuck in a recursive cycle that stagnates them further.*** However, **using their VIRAL (Venture Investment-Readiness and Awareness Levels) framework**, impact investing pioneer **Village Capital** proposes that it is possible to bridge this gap using demand-led investment, which instead adapts capital to respond to the needs of SGBs as they currently exist in the market.[145]

The VIRAL framework - including ***eight components: team, problem and vision, value proposition, product, market, business model, scale and exit*** - helps create a milestone-based roadmap to growth and

144 https://www.oecd.org/global-relations/45324336.pdf

145A new perspective on approaches to adapting capital and bridging the Missing Middle in Southeast Asia scale for SGBs. Using common investment readiness concepts for early stage businesses, it helps stakeholders effectively represent the nuance from one SGB to another, specific ways in which they are unable to meet investor expectations, and different ways to improve their capacity for better growth and eventual success. This makes the framework an excellent communication tool which can be used by investors, entrepreneurs, and ESOs alike.[146] Similarly, **Tideline's Pathways to Impact Framework** summarizes the different forms of risk or return concession to incorporate into the investment structures as ***"5 Ps" including price, pledge, position, patience, and purpose*** (with the sixth p of ***Partners*** added on later).[147] This framework can be used to inculcate more productive conversations between investors and portfolio managers deploying catalytic capital in different scenarios as it clarifies their investment thesis, the use and role of capital, and finally how concessions can be interleaved into deals. These tools have been known to benefit investors when adapting capital to the needs of SGBs in more developed markets but they can be tailored to the local context as well.

LENS 4: PLAYERS IN THE ECOSYSTEM SHOULD STAY UP TO DATE ON THE SECTORAL MARKET TRENDS TO ENGAGE IN EVIDENCE BASED DECISION MAKING AND PROMOTE SECTORS THAT ACCELERATE LOCAL INCOMES AND EMPLOYMENT OPPORTUNITIES.

According to i2i's Deal Flow Tracker (DFT) as of 2021, the **top 3 funded sectors of opportunity** in Pakistan (ranked by deal count and alleged amount raised) are E-commerce, followed by fin-tech and trucking/logistics respectively(PSER, 2021 via DFT**)**.[148] Moreover, considering the **distribution of female-founded Startups by sector**, data from the PSER 2021 Entrepreneur Survey (n=155) shows us that the top 3 sectors where women are concentrated include Fashion/lifestyle (24%), followed by e-commerce (17%) and health-tech/health (12%). Most of the sector-wise trends are influenced by the global patterns in flow of capital as well as regional investment trends. Startups in the B2B sector in Pakistan experienced a boom in terms of both the number of new enterprises founded in the sector and incoming investment capital in the past two to three years. While some players like Bazaar were already looking at the opportunity and engineering B2B solutions before the pandemic, it is not an overstatement to say that COVID-19 accelerated this activity. **Therefore, the approach most players in the ecosystem (including investors and prospective founders) can benefit from is evidence based decision making that heavily relies on data and research to inform their practices.** For fund managers this translates to continuous desk research, conversations with peers in the space both locally and regionally and deeper due diligence mechanisms, to stay updated on market trends, **real life challenges that enterprises can help solve and future direction that global investors may take based on their lens on valuable opportunities.** The discourse on real life challenges that enterprises can help overcome becomes even more important considering the untapped sector of green solutions in Pakistan, since the number of clean energy Startups and SGBs in the country servicing the industry are very limited and the unavailability of clean energy financing companies adds another barrier for customers who are willing to adapt. Therefore, companies that are intersecting clean energy and fintech

146https://fla.yourcreative.com.au/wp-content/uploads/2021/10/Report_on_Demand-led_Investment_for_the_Missing_Middle_2021.pdf

147https://tideline.com/wp-content/uploads/2020/11/Tideline_Catalytic-Capital_Unlocking-More-Investment-and-Impact_March-2019.pdf

148PSER2021 https://www.insightsi2i.com/pser-21 solutions offering financing options - like EcoEnergy and Instaenergy - for clean energy products will be key to the growth of the industry.

Apart from investor perception of valuable opportunities for investment, an interesting point of conversation emerged among participants in the focus group discussion. They opined that apart from prominent tech-driven sectors that are the focus of most investors, untapped potential exists in traditional sectors that make use of indigenous skills. Small business owners participating in the discussion stated that industries such as handicrafts as well as locally produced delicacies such as honey, jam, fruits etc. should also be given greater attention because they create employment opportunities and generate income for a lot of people at the community level, particularly women. They emphasized that even though local businesses are steadily scaling and have great potential and ambition for growth, they are unable to fully meet this potential due to lack of financial support.[149] Yak Grill's co-founder Rashid Ali Tariq echoed this sentiment by pointing to the untapped potential that exists in the local food industry in Passu.[150] He stated that if food tourism is prioritized, it can act as a catalyst to promote tourism in the region and therefore increase the visibility of other local businesses such as hotel chains. Therefore, apart from market trends driving capital injection, funders should also consider venturing into local industries. Apart from a creating direct impact in communities these injections are also easier to track and offer greater tangibility in investment outcome due to their scale.[151]

149 Source: Primary data collection: FGD (2022)
150 Primary interviews: Ali Tariq, R. (2022)
151https://www.forbes.com/sites/forbesbusinesscouncil/2022/01/26/could-the-future-of-investment-be-local/?sh=311f90573d0a

FINANCE | KEY ACTION ITEMS

KEY ACTION ITEMS | FINANCE

Investors should engage in deeper, more robust due diligence practices through building and leveraging relationships with credible players in the ecosystem.

Entrepreneurs should take a more pragmatic and realistic approach in valuing their companies. This will avoid overvaluation and setting unrealistic KPIs, which will inevitably be harder to meet and can bring their business viability into question while raising follow-on rounds.

Financial service providers need to cater to the appetite and opportunity for debt finance in Pakistan through designing and offering products that consider founder aversions e.g. harsh repayment terms, high interest rates and stringent collateral requirements.

In deciding whether to inject capital into a particular business, investors typically attach the greatest importance to accurate financial valuations and modelling. ESOs should therefore focus on designing customised investment readiness programs which can make a business more attractive to potential investors and therefore increase its chances of raising.

Investors and prospective founders should keep a pulse check on global and regional market trends to gauge up and coming sectors of opportunity, which will ultimately be a catalyst for ecosystem activity and growth.

CASE STUDY: RIDER

Industry:
Trucking / Logistics
Founded in:
2019
Founder:
Salman Allana

Reported amount raised (2019-2022):
USD 5.9 million[152]

Rider, an e-commerce logistics Startup offers route optimization for delivery agents, live tracking and scheduling for buyers, and a highly digitized warehousing function for sellers. Rider works with over 650 online retailers, which include small-scale online sellers, as well as some of the largest retail brands in the country. Since 2019, Rider's presence has grown to 60 locations across the country[153].

21.7%
Predicted Compound Annual Growth Rate of the global logistics tech market[154]

78.9%
Year-on-year growth of the e-commerce market in volume in Pakistan[155]

22.3%
Logistics and transport sectors contribution to the services sector GDP[156]

6%
Total jobs created by the logistics and transport sector[157]

RIDER'S POWER CARD

Adopting technology through constant iteration

E-commerce and logistics have experienced unprecedented growth in frontier and emerging markets, including Pakistan. However, traditional courier companies in the country are not best set up to serve this boom. One of the most pressing yet unaddressed issues is ineffective last-mile delivery. Rider recognized the trend of people shifting online, particularly the increase in 'social media sellers'. Whereas these sellers had soft tools such as 'Facebook', 'Whatsapp', 'Shopify' to engage with their customers online, they had no physical infrastructure when it came to moving their products to the end customers.

APPROACH

Rider went back to the drawing board to understand the reasons why there are so many failed deliveries. Whether they discovered 'genuine reasons' e.g. a wrong address or 'fake reasons' e.g. no desire to put in effort - essentially, there was no way of check and balance or accountability assigned to the fleet[158]. To solve for this, Rider leveraged technology to put in place checks and balances to increase the probability of successful delivery. For instance, automated prompts from the rider to the customer detailing expected time of delivery. Or in case of wrong address, an automated push notification from rider to customer to request a location pin. Whether it is location, call logs, or images Rider has put in place different checks for different scenarios to ensure optimum outcome in terms of delivery success. *At the online seller's end,* through trial and error, Rider researched the pain points experienced by their customers and found that because they don't have large teams or digital tools at their disposal, they needed a platform to manage their business processes. In response, Rider developed a one-stop application that conclusively offers online sellers order management, financial reconciliation, transport management, customer service and warehousing function.

152 DFT https://invest2innovate.com/access-deal-flow-tracker/
153 https://www.google.com/url?q=https://profit.pakistantoday.com.pk/2022/06/20/logistics-startup-rider-com
154 https://www.prnewswire.com/news-releases/the-global-digital-logistics-market-size-is-expected-to-grow
155 Feature: Pandemic-promoted online shopping becoming new normal in Pakistan - Xinhua | English.news.cn
156 httaps://invest.gov.pk/logistics
157 Ibid
158 Primary Interviews: Allana, S. (2022)

> `We are constantly learning, what loopholes there are? What challenges are there? How do we fix these?'

RESULTS

3 million
parcels successfully delivered[159]

60 cities
in Pakistan serviced through Riders delivery[160]

110%
reported increase in monthly revenues since September 2021[161]

650 online retailers
form Rider's customer base - a 2x increase since September 2021[162]

LOOKING FORWARD

'We have got a massive tech penetration, but a very low-tech sophistication.'

Rider is mindful to develop technological solutions that the average Pakistani customer is ready to accept and easily use. Salman explains that if Rider is to introduce robocalls in the future, this aspect will also involve a lot of small iterations and a lot of pilots.

159 https://techcrunch.com/2022/06/19/rider-is-taking-a-nimble-approach-to-e-commerce-logistics-in-pakistan/
160 Ibid
161 Ibid
162 Ibid

4

SUPPORT: FINDINGS & RECOMMENDATIONS

LENS 1: CURRENT CURRICULUM IS NOT TAILORED TO INDIVIDUAL STARTUP'S NEEDS & MENTORSHIP MATCHMAKING RELATED CHALLENGES

Among the different typologies for incubators and accelerators Pakistan most closely follows the 'place-based' model i.e. focused on business development within a certain geographic area to foster economic and community development.[163] This is as opposed to 'sector' and 'demographic' models, where the former club together businesses within a certain sector and the latter, where businesses are grouped according to founder characteristics e.g. gender. Similarly, 83% of ESO's in KP are **sector-agnostic and incubate Startups from diverse spheres**.[164] However, too much heterogeneity can lead to operational inefficiencies resulting from catering to requirements of enterprises from different sectors.[165] This can be challenging as a fintech Startup would have vastly different requirements in terms of tailored support as compared to say, a health-tech Startup. This can get further complicated if there are SGBs in the mix, who operate at a different scale and with a different growth potential altogether.

Box 4: Mentoring - An SGB Lens

A report by 'American Express' details the importance of mentors to the SGB community. Statistics show a clear majority i.e. 92% of small business owners in the United States agree on the direct impact of on the growth and survival of their business. Still, only 22% of SGB owners reported having a mentor when they started their businesses.

In frontier markets such as Pakistan, awareness about and availability of mentors is a problem.

The majority of literature on the impact and importance of mentorship on small businesses has been focused on the West. We can, however, draw some insight from a report by the IGC which considers SGBs in light of developing and emerging ecosystems. Evidence suggests that virtual classroom training and information sharing was not effective for most. Rather, in-person interaction with mentors was far more effective. Therefore, the method of delivery plays a huge role in the potential benefits that mentors can provide to SGBs.

Echoing the trend in the broader Asia region, most **incubators and accelerators in Pakistan run a cohort-based model**. For instance, in KP, around 83% of ESO's operate as such, with an average cohort size of 11 Startups.[166] While there are merits of such a model, it does not allow ESOs to tailor curriculum to individual needs of Startups, rather they have to cater to the overarching requirements of the entire group.

163 Creating Inclusive High-Tech Incubators and Accelerators: - Strategies to Increase Participation Rates of Women and Minority Entrepreneurs
164 KPSER 2021 2021_KPEER.pdf - Orangedox
165 START-UP ASSISTANCE ORGANIZATIONS IN INDONESIA:
166 KPSER 2021 2021_KPEER.pdf - Orangedox

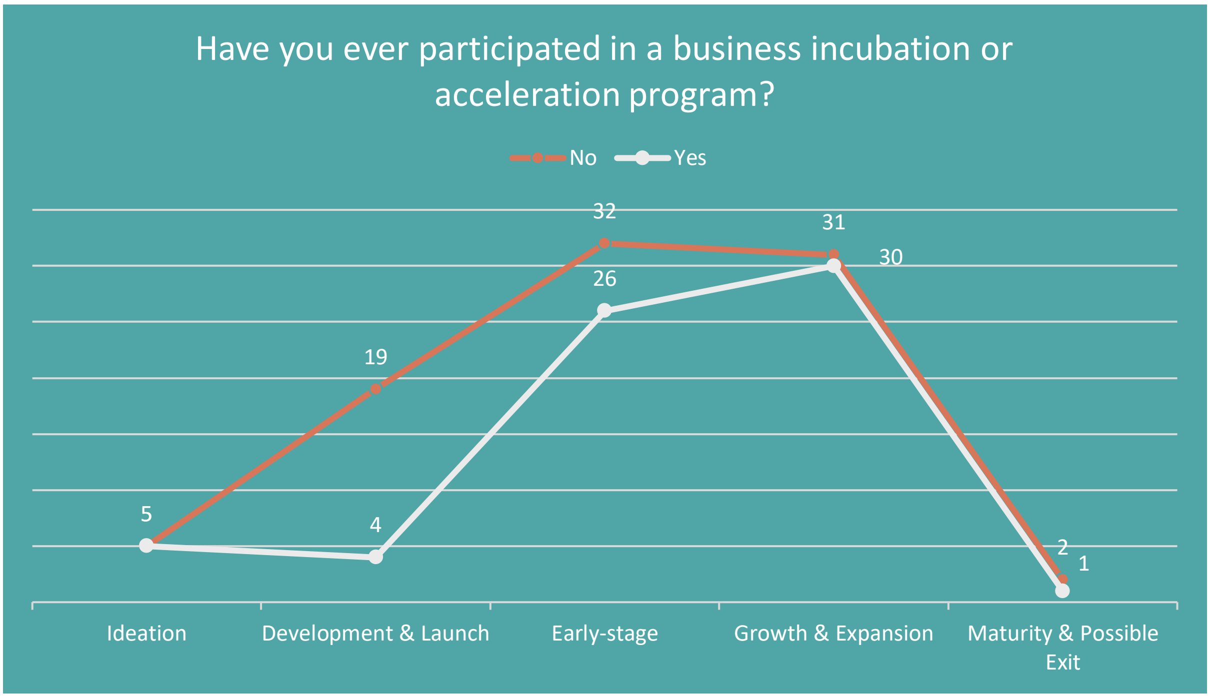

Figure 12: Distribution of incubated/accelerated Startups by stage of business life cycle, (PSER,2021)

As seen in Figure 12, 66 (out of 155) businesses **that had participated in an incubator or accelerator program, were from across different stages of the business cycle** (PSER, 2021). Likewise, 83% of ESOs in KP do not have a preference for selecting Startups that belong to a certain stage in their business lifecycle.[167] This amounts to a mix of early-stage and growth-stage enterprises, which can create a bottle-neck in terms of providing relevant and customized training. According to surveyed entrepreneurs, the resulting one-size-fits-all approach does not provide the same value to Startups at different stages of growth.[168] Similarly, small business founders who participated in the focus group discussion opined that whereas at least some form of support was available to them in terms of product development, technical expertise etc., they struggled to get any support regarding financial advisory services which was an aspect that intimidated them since they started their business. They also pointed to a severe lack of opportunities for networking and collaboration for smaller businesses which limited their opportunities for growth through partnerships.[169]

Additionally, recruiting and retaining employees is a significant issue faced by support organizations in South and West Asia.[170] This feeds into the concern voiced by entrepreneurs in Pakistan that **ESO's do not employ the right personnel with relevant background and training** to cater to their needs (PSER, 2021). The same trend is prevalent in KP as 59% of surveyed ESOs (n=12) considered the lack of staff with relevant skills and expertise as a serious challenge (KPSER, 2021). High team turnover, which is a product of inadequate reimbursement, leads to a lack of enabling environment for businesses enrolled in support programs, as they are unable to build a robust relationship with the ESO.[171]

167 Ibid
168PSER 2021 https://www.insightsi2i.com/pser-21
169 Source: Primary data collection: FGD (2022)
170 Mapping and Analysis of Entrepreneurial Ecosystems Incubators and Accelerators in the Asia-Pacific
171 Ibid

MENTOR MATCHMAKING

Access to mentors is a powerful tool because in addition to granting founders access to their network, they offer experience driven perspective, access to capital and a growth mindset which can increase business lifespan. [172] 75% of Startups (50/66) that participated in the PSER survey (n=155) and had been part of an incubator/accelerator found that access to mentors and mentorship networks was useful. Similarly research shows that SGBs who acquire access to mentors early on in their lifecycle go on to achieve higher revenues and rapid business growth.[173]

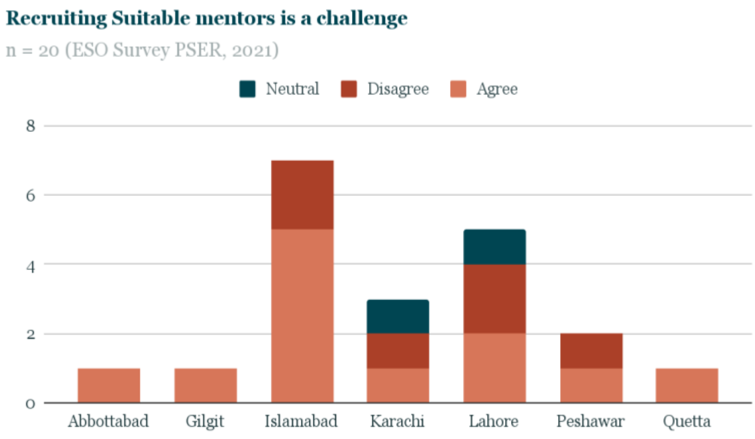

Figure 13: ESO perceptions on difficulty of recruiting suitable mentors across different regions.

Existing research does not analyze how mentorship contributes to the success of ESO programs and therefore it is difficult to isolate the impact of mentorship as an offering by an ESO.[174] Still, evidence suggests that **recruiting and retaining mentors is a significant issue** across the Asia-Pacific.[175] In Pakistan, finding suitable mentors is a challenge, as most **eligible candidates are based abroad**. Even those that are based in Pakistan are **concentrated in major cities** such as Lahore and Karachi and ESOs in tier 2 cities face significant hurdles in recruiting suitable mentors (Figure 13). This could be one of the reasons why **83% of focus group discussion participants in KP expressed that mentor matchmaking was not done effectively in the region** (KPSER, 2021). Moreover, **75% of the ESOs considered recruiting suitable mentors a serious challenge** (KPSER, 2021). The selected mentors also often either lack the necessary skills or lack Startup experience and are from more conventional organizations, therefore the services that they provide are not the most relevant for participating businesses. Ali Moeen the co-founder of ezBike, stated that telecommunication operated incubators and accelerator programs typically link participating organizations with their mid-level managers who are not well versed with the Startup ecosystem and therefore are are unable to understand and speak to the challenges that founders might face and how they can overcome these.[176] Furthermore, **mentorship support is most valuable across an extended period of time**. Since accelerator programs are usually fast-tracked 3 month cycles, this sometimes can reflect in terms of a superficial and short lived mentor-mentee relationship, which does not sustain past the duration of the program.[177]

172 Entrepreneurial learning and mentoring | Emerald Insight
173 https://www.sba.gov/blog/mentoring-missing-link-small-business-growth-survival
174 Mentorship Processes within Startup Accelerators
175 Matchmaking between businesses and investors | GIZ
176 Primary Interviews: Moeen, A.(2021)
177 How startup accelerators, incubators, and mentors are failing our entrepreneurs

LENS 2: SUPPORT SERVICES CURRENTLY BEING PROVIDED ARE NOT NECESSARILY HELPFUL TO MORE MATURE FOUNDERS AND STARTUPS

ESO's serve a diverse array of companies with both novice founders or more experienced founders. According to our analysis, **64% (42/66) of incubated Startups had founders with prior work experience in the Startup sector, which suggests that a number of mature founders still opt for support programs.** [178] However, deeper insights reveal that the services currently being provided do not provide the optimum outcome for experienced founders and therefore need to be improved upon significantly. For instance, **32% of surveyed entrepreneurs who had previously founded a Startup reported the dire need for ESOs to design programs that cater to the needs of more experienced founders.**[179]

Before diving into the prevalent gaps, for context, it is important to establish what is meant by 'experienced founders'. Essentially, 'experienced founders' are those with either; experience of working in a high-growth Startup/company e.g. Careem, SWVL, McKinsey & Co etc. (dubbed as Network Cluster Founder's) or - experience founding their own Startup in the past. [180]

These **experienced founders usually opt for accelerators which provide intangible, knowledge intensive support services as opposed to incubators which lean towards tangible services e.g. office spaces and procurement services**. They **demand strategic guidance such as identifying target market opportunities, potential customers, managing public relations and support in research and development activities**. Additionally, they are more inclined towards **tools that will enable their business to scale**, rather than survive its first few years of operation. Studies show that experienced business founders are more 'resourceful' than novices and typically will have acquired the necessary skills to overcome problems faced by new ventures. [181] These 'habitual' or 'serial' founders [182] should not be treated as a homogenous group as Shehryar Hydri from Deosai Ventures highlighted that founders

BOX 5: Support organizations and SGBs

Evidence from comparable ecosystem Indonesia suggests that there is a positive selection bias amongst support organizations towards ventures in retail, ICT and agriculture as compared to sectors such as professional services. Most SGB's in emerging and developing ecosystems likely fall under the latter category and therefore have a lower probability of gaining from ESO services from the get-go.

The digital transformation of small business support

With the increase in technology adoption, tools such as digital payments, e-commerce platforms and micro-lending services have become widely available. Additionally, social media applications such as Facebook and Whatsapp have become the infrastructure through which small businesses connect with customers and employees. Digital support services for SGBs include but are not limited to: digital skill building, digital credit, digitizing operations and digital market access. For instance, the e-commerce platform 'Shopify' offers digital business services such as free website templates and specialized marketing courses which can propel SGBs to the next level.

Daraz Parwaan Program - Pakistan

In 2021, E-commerce platform 'Daraz' partnered with QriosityNet, a 'gamified Linkedin for students', to offer student entrepreneurs business and financial training workshops that would enable them to launch their digital enterprises.

178PSER 2021 https://www.insightsi2i.com/pser-21
179 Ibid
180 Ibid

181 Klovereid, Lars (1993), Novices versus experienced business founders: An exploratory investigation, Entrepreneurship Research: Global Perspectives, 275-285.
182 Novice, portfolio, and serial founders: are they different? - Dimensions

with 10-15 years of experience under their belt and intricate understanding of the sector they operate in absolutely cannot be clubbed with young founders, as the needs and expectations of both will differ vastly.[183] Anecdotal evidence from PSER interviews reveals founder perception that **ESO's fail to understand the value of scaling and value-added growth services to experienced founders**. One of the pain points mentioned by founders at later stages in their careers is the **urgent need for ESOs to provide advisors and mentors with prior experience in scaling Startups so that mature founders can learn from them and replicate their practices.**[184]

LENS 3: LACK OF ACCESS TO DIRECT FUNDING VIA INCUBATORS

Aside from providing access to funding through introduction to external investment networks e.g. VCs and angel investors, support programs i.e. incubators and accelerators - also provide Startups with direct, early-stage funding. This support is typically provided at 'seed stage' and can take the form of equity, funds, soft-loans and grants. In Pakistan, as most investment flows in and around major cities (Karachi, Lahore, Islamabad) for Tier 2 cities, access to direct funding through support programs becomes even more important.

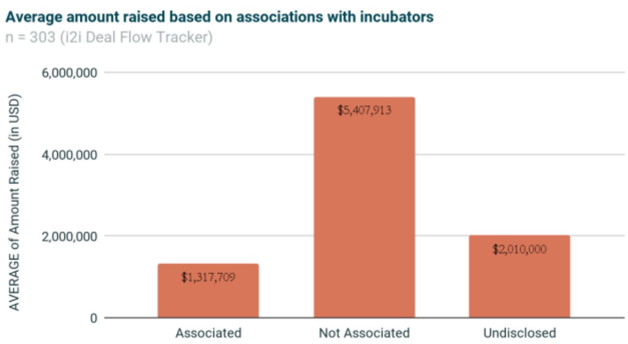

Figure 14: Average amount raised demarcated by incubator association.

According to the Pakistan Startup Ecosystem Report 23% of entrepreneurs (15/66) who had participated in an incubator or accelerator **reported that securing direct funding through participation in support programs was a challenge**.[185] Similarly around **29% of surveyed entrepreneurs in KP believed securing direct funding via ESOs was difficult**.[186] Additionally, **67.1% of surveyed founders in KP reported that an ESO had never helped them in accessing finance**.[187] Figure 14 displays that the majority of reported funding raised by Startups and Small and Growing Businesses across Pakistan has been by those with no association to an incubator or accelerator. The implications of this data are magnified when we consider a nascent Startup ecosystem such as that of KP, which largely comprises early-stage Startups. For such Startups, who have limited access to capital, early-stage financing plays an integral part in their decision to participate in an incubator or accelerator program.

183 Primary Interviews: Khan, S. (2021)
184 Primary Interviews - PSER (2021)
185PSER 2021 https://www.insightsi2i.com/pser-21
186KPSER 2021 https://dl.orangedox.com/y0oxWEebP1TopXMAmA
187 Ibid

CURRENT LANDSCAPE OF DIRECT FUNDING

Most incubator and accelerator programs in Pakistan are a part of the National Incubation Center (NIC) or provincial governments. Their core mission is to 'build and influence an ecosystem by empowering individuals and institutions to generate a positive and social impact'.[188] Therefore, among the different classifications of ESOs, the NICs operate successfully as 'Welfare Stimulators' as opposed to 'Deal-Flow Makers'.[189] Which can provide some insight into why the investment-side of Pakistani incubation/acceleration programs is underperforming.

Considering the direct funding landscape of a young ecosystem such as KP, there are currently 2 prominent **incubators and accelerators** which are channeling direct funding namely; 'Durshal Peshawar' and 'Accelerate Prosperity'. Durhsal Peshawar is a flagship project of the Khyber Pakhtunkhwa Information Technology Board (KPTIB), which was established to set up incubation and coworking spaces to nurture the Startup culture in KP.[190] Through participation in the incubation centers, businesses are provided with a monthly stipend as an incentive. However, these stipends are not coupled with strict KPIs in terms of fund utilization and therefore a degree of founder complacency seeps in. On the other hand, Accelerate Prosperity (AP) provides creative debt financing solutions to accelerated and incubated ventures in KP. AP provides patient financing or investments of up to $50,000 (up to $500,000 in some cases) on discounted rates. To quote an example, in year AP invested $300,000 in a small business i.e. 'Chkar Lodging & Experiences', which was incubated in 'Durshal Abbottabad'.

Another popular avenue of support for direct funding is **grant funding** which is in some cases also channelled through incubator and accelerator programs. Undoubtedly, grants have a positive impact on ventures, as evidence from Nigeria shows that grant awardees were more likely to be in business and employ 10 or more workers, 3 years after receiving the grant.[191] In Pakistan, Ignite Fund and KPITB are two key government bodies that are highly active in the funding landscape in KP. Additionally, in 2018, the World Bank approved its 'Digital Jobs in KP' project to fund the development of incubators and accelerators as well as focusing on promoting the digital economy.[192] Similarly, USAID's Small and Medium Enterprise Activity (SMEA) has provided support to SGBs and Startups in KP through grants and Business Development Services (BDS) support. Due to the lack of equity financing available in the region, as well as an aversion to debt financing (interest rates, uncooperative bank's, lack of collateral), many entrepreneurs still rely on grants as their primary source of capital. Despite these initiatives, 77% of Startup entrepreneurs and 58% of support organizations in KP still consider access to grants to be a serious obstacle. Moreover, these grants often fall victim to the pitfall of injecting money into enterprises without any mechanism for accountability on the entrepreneurs side, which has created an unsustainable and highly dependent financial climate in the KP region (KPSER, 2021).

188 https://nicpakistan.pk/partner/impact-dynamics-3/

189 Pauwels, C., Clarysse, B., Wright, M., & Van Hove, J. Understanding a new generation incubation model: The accelerator. Technovation, 50, 13-24 (2016).

190 https://www.durshal.com/about

191https://www.theigc.org/wp-content/uploads/2018/11/A-Research-Agenda-for-the-SGB-Sector_Practitioner-Summary.pdf

192https://documents1.worldbank.org/curated/en/837641592844160412/pdf/Disclosable-Restructuring-and-or-Additional-Financing-Paper-Digital-Jobs-in-Khyber-Pakhtunkhwa-P165684.pdf

LENS 1: CUSTOMIZE CURRICULUM TO THE LOCAL CONTEXT AND DESIGN BESPOKE MENTORSHIP PROGRAMS FOR STARTUPS AND SGBS

When designing curriculum, ESOs should follow international best practices and **invest in research and development in order to fully understand what kind of training participating Startups and SGBs need**.[193] Moreover, this should be examined in a local context, considering the most prevalent sectors in a region, as well as up and coming sectors which are predicted to take off soon. However, as the presence of large scale industries necessitates the need for smaller ventures[194], for some regions such as KP, this can be challenging because unlike Karachi (financial hub) and Lahore (garments hub), they might not be the center point of any prominent industry. Despite this, patterns of entrepreneurship and sectoral presence can be studied to make curriculum design more robust and relevant to a specific region.

Also, a more **targeted approach is required taking into account the growth stage and sector of a business.** Perhaps there is potential to offer a 'blended learning' model, as adopted by ESOs in Impact City's Startup Residence in New Zealand and the M Accelerator's Startup programme in Los Angeles.[195] Essentially, this model offers incubated Startups a mix of pre-set curriculum which applies broadly to businesses from different sectors, followed by focused modules that are unique to each participating businesses needs.

As identified in the *finance section*, a lack of investment readiness poses significant challenges to enterprise growth. Therefore an absolutely integral and uncompromisable component that must be included in ESO curriculum is a focus on building business investment readiness and offering financial valuation support. Becoming investment ready is not just an exercise for businesses seeking to raise capital, rather a process which can drive value in multiple key areas - a practice which if done successfully can reap benefits for years to come. [196]

Moreover, considering the shift towards a Digital Pakistan, there should be **greater availability of support services and virtual learning material**.[197] Globally there is a trend towards the 'digital transformation of small businesses support' (Box 5). This is similarly applicable to Startups who (as per the established operational definition [Figure 1]) incorporate technology into their business and therefore are highly likely to be tech-savvy and possess the ability to learn digitally. In addition to this, the method of delivery i.e. virtual or in-person should be carefully assessed to achieve optimal impact. Perhaps there is another opportunity for a blended approach i.e. certain aspects of curriculum, such as financial modeling and business planning, can be administered digitally, while aspects such as mentorship and pitching that warrant a more *personal touch* - specifically in the context of SGBs[198] - should be left as such. In the shift towards digital , ESOs should also be mindful that delivery that is too 'academic' and theoretical in approach fails to cater to the more practical perspective of business owners.[199]

193 https://www.etf.europa.eu/sites/default/files/2019-05/INFORM%2025%20Start-up%20training.pdf
194Eliasson, G. Industrial policy, competence blocs and the role of science in economic development. J Evol Econ 10, 217–241 (2000). https://doi.org/10.1007/s001910050013
195 https://maccelerator.la/en/startup-program/
196Being investment ready drives value for businesses
197 https://ieeexplore.ieee.org/abstract/document/9576943
198https://www.theigc.org/wp-content/uploads/2018/11/A-Research-Agenda-for-the-SGB-Sector_Practitioner-Summary.pdf
199https://www.oecd.org/cfe/leed/Cooney_entrepreneurship_skills_HGF.pdf

Additionally, **ESOs need to focus on building a strong internal team while reducing turnover, so that SGBs and Startups can form a relationship of trust and longevity with them.** Studies show that this trust can serve as an informal due diligence process for ESOs to assess the entrepreneurs' readiness to engage with external investors for follow-on funding.[200]

Regarding **mentorship,** there is an overarching need to provide enterprises with **access to more industry-specific mentors**. For starters, ESOs can create a more structured program for new mentors who are inducted into incubators/accelerators. Often, mentees face a disconnect with mentors, because the latter lack knowledge of participants as well as specific points of contention that their venture is facing. To solve this, there should be a **robust training manual for all mentors** so that they follow guidelines and adequately tailor their content in advance before having sessions with enterprises**.** Apart from this, ESOs can establish **tiered mentor networks**, which provide access to local, national and international mentors. The former would be relevant for early-stage ventures, in nascent ecosystems such as KP, where mentors who understand local complexities can provide valuable insight. While the latter would be extremely helpful for businesses looking to scale and expand their product offerings and geographic outreach.

200 Matchmaking between businesses and investors | GIZ

CASE STUDY: GREENOVATION

Industry: Green Solution
Founded in: 2018
Founder: Saad Bin Azam

Reported amount raised in USD (2019-2022): None

As Pakistan's first plastic waste to energy recycling company, Greenovation effectively offers a solution at the nexus of both waste management and energy provision, as it converts plastic waste into Liquified Petroleum Gas (LPG). The Startup is currently operational in Peshawar and sells around 40 kg of LPG/day. [201]

30 million tons
of solid waste is produced each year in Pakistan[202]

9%
of the produced waste is plastics [203]

50%
(approximately) of the generated waste is collected[204]

2%
increase in waste generation annually[205]

45%
of the population lacks access to natural gas and thus use firewood which results in massive deforestation[206]

GREENOVATION'S POWER CARD

Leveraging support.

Despite the massive amount of waste generated, an integrated waste management system is virtually non-existent in Pakistan, with the country resorting to burning, dumping or burying its waste on vacant lots and landfill sites. Contrary to this approach, comparable countries are exploring innovative ways of not only recycling waste but also producing energy from it. Since its inception in 2018, Greenovation has introduced and implemented this novel approach within Pakistan. Greenovation provides waste management services to the Government of KP and sells the LPG produced from recycling this waste to small hotels and bakeries as well as to peripheries of Peshawar where natural gas is not available. Operating successfully in such a nichè and untapped market is no easy feat, and Greenovation's success can be attributed to its ability to leverage support at every stage - from product development to dissemination.

APPROACH

Greenovation's solution required advanced research and development. The idea was born in 2018, when Saad was enrolled in his final year at Ghulam Ishaq Institute of Engineering Sciences and Technology (GIKI). Saad capitalized on the support provided by GIKI's technological incubator as well as expertise of relevant professors, who according to Saad put a lot of effort into conceptualizing the solution. After the solution was conceptualized, in 2019 Saad submitted Greenovation's entry into the Shell's 'LiveWire Top Ten Innovators Awards' - a global competition which rewards businesses that demonstrate excellence in innovation. Greenovation was selected as the only finalist from Pakistan, as a result of which, they gained valuable mentoring and coaching which helped in refining the business strategy and model. Apart from conceptualizing and drawing up the business model (with relevant support at each stage) Saad also successfully operationalized the Startup with the support of the Government of Khyber Pakhtunkhwa. In 2018, Greenovation applied for a program with the Directorate of Science & Technology (DoST KP). The government was extremely supportive and collaborated with Greenovation to implement their solution in Peshawar. The government currently provides Greenovation with labor and transportation to be able

201 Primary Interviews: Azam, S. (2022)
202 https://tameer.shell.com.pk/tameer-news/enabling-lives.html
203 Ibid
204Solid Waste Management Sector in Pakistan: A Reform Road Map for Policy Makers
205 https://tribune.com.pk/story/2289428/poor-waste-management
206 https://climatelaunchpad.org/finalists/greenovation/

to operationalize their business. This on-going partnership benefits the government as well as they are able to save money through utilizing Greenovation's advanced solution (rather than developing a solution from scratch).

Results

At PKR 4800/kg

Greenovation has reduced the cost of recycling waste for the Government of KP. [207]

Looking forward

Saad believes that there are many opportunities for horizontal and vertical expansion in the green sector citing production of alternatives to plastic bags and thermal insulation as key verticals. He is optimistic about the ecosystem's awareness toward climate change and remarks that an increase in support programs means that the future is looking much brighter for Startups developing Green Solutions.

[207] Primary Interviews: Azam, S. (2022)

LENS 2: CURATE SUPPORT SERVICES FOR THE NEEDS OF MORE EXPERIENCED FOUNDERS

Our findings fro**m the PSER (2021) revealed founder perception that ESOs are disproportionately oriented towards serving novice or first-time founders, while experienced or mature founders are on the back-burner.**[208] Support organizations should recognize this and cater to the needs of the diverse range of founders in the Pakistani Startup and SGB ecosystem. Leaning in from the approach to mentorship suggested above, **experienced founders, who require strategic guidance towards growth and scaling** - should be **matched appropriately with mentors who are working in more developed ecosystems and possess specialist subject knowledge.** In this regard, support organizations can draw valuable learnings from notable, positive trends among existing ESOs in Pakistan:

- Coworking space COLABS, through its 'CoGrow' program connects founders with international accelerators, corporations and investors.[209]
- In partnership with Amazon Web Services, co-working space Daftarkhwan, runs a VC Exchange (VCX) to arrange meetings between investors (angel investors and VC firms) and Pakistani Startups from different sectors.[210]
- PakLaunch - an online forum and community - is bridging the gap between international and local investors through fireside panels, which gives Pakistani Diaspora and international investors access to the local Startup ecosystem.[211]
- Venture for Pakistan (VFP) - an on-line platform - focuses on young professionals and offers them placements in Startups as well as access to coaching from industry professionals in tech giants such as Google, Facebook, Amazon and Uber.[212]

Additionally, a positive feedback loop emerges when successful founders who have managed to scale, recycle their knowledge, connections and financial capital back into ESOs which in the long-run is evidenced to change the dynamics of entire ecosystems.[213] Therefore, **successful founders should be leveraged and invited by ESOs not only as mentors, but also into positions of influence** such as members of board, selection committees etc. In positions of influence, these successful founders - many of whom will have gone through support programs themselves - can really drive home the point of which services need to be curated for experienced founders. They can have influence in setting curriculum, and provide first hand insight into the trials and tribulations they faced in their pathway towards growth as well as gaps in current processes, and in doing so alter ESOs for the better, for future generations of novice and mature founders.

208 PSER 2021 https://www.insightsi2i.com/pser-21
209 https://cogrow.pk/
210 https://daftarkhwan.com/daftarkhwan-vc-exchange-powered-by-aws/
211 https://paklaunch.com/
212 https://www.venturepakistan.co/
213The Role and Value of Entrepreneur Support Organisations in Strengthening Entrepreneurial Ecosystems

LENS 3: RESTRUCTURE DONOR AND GRANT FUNDS TO INTRODUCE SPECIFIC KPIS & DE-RISK THE CREATION OF VC FUNDS

There is a need to restructure the **'no strings attached' approach to grant funding, so that there is higher accountability and lower complacency among Startup and SGB founders**. This is because enterprises should not view grants as an endless supply of *easy* capital, and should rather consider it as a stepping stone which can help them to prepare for attracting private investment in the future.[214] One method to achieve this is for donor and grant money to be outsourced to private partners to manage with specific metrics in place. For instance, the MDTF-backed seed fund for the 'Digital Jobs in KP' is being managed by a third party fund management contractor with the role of designing, implementing and deploying the early stage capital.

Additionally, there is some degree of **information asymmetry, as success means different things to the grant provider and the grantee**. For instance, the former looks for some quantifiable return on investment when grants are distributed e.g. amount of jobs created, patents, follow-on funding - whereas the grantee does not typically gauge their success by the apparent amount of funding raised, or how many people they have hired. [215] **Therefore, there is a need to manage and realign these expectations, which would require intentional planning on part of institutions that provide grants.**

Furthermore, in order to channel greater private investment into Startups and SGBs, ESO should also set up **'seed funds' for early stage-financing via corporate venturing and local investments.** However, **channeling such investment into a specific region is a broader concern** which cannot be tackled by the ESO at a micro level, and rather needs intervention at a macro level where institutional forces in the ecosystem will need to step in. To this end, there needs to be proactive efforts by the government to redirect public funds, high net worth individuals, local industrialists etc. to inject their capital under VC funds to uplift the Startup and SGB ecosystem. This **increase in local investment activity will also in turn act as a catalyst for international investment** to start pouring in. Additionally, to create a more conducive environment for VC investments, the government should offer tax incentives to individuals as well as the corporate sector, on returns made on equity investments. The government could draw on lessons from the 'Seed Enterprise Investment Scheme' (SEIS) in the UK, where investors are offered tax benefits in return for investment in small businesses and early-stage Startups.[216]

Despite this, it is important to note that whereas capital is crucial to venture success, **finance should not be the only viable success metric for ESOs**. Research shows that if incubators fail to decouple their success from finance, it can result in them forcing inexperienced entrepreneurs into unnecessary financing rounds, which often leads to failed outcomes for the venture. Whereas one side of the coin is helping entrepreneurs to access funding, the equally important side is to provide education on what is not *fundable*.[217]

214 Ibid
215 mp, B. (2016, February 28). Why Grants are Bad for Startups (kinda). Medium. https://braden-kemp.medium.com/why-grants-are-bad-for-startups-kinda-855b0b0e0320
216 https://www.seis.co.uk/
217 https://hbr.org/2013/08/the-problems-with-incubators-a

CASE STUDY: DAWAAI

Industry:
Health-tech / Health
Founded in:
2014
Founder:
Furquan Kidwai
Reported amount raised (2019-2022):
USD 11.9M[218]

Founded in 2014, Dawaai is a Pakistani health-tech Startup which sells medicines, personal care products, and medical equipment to individuals and MSMEs (pharmacies) across the country, through its web and mobile-based platform. The Startup reports to have grown its revenue by 350% between 2020 and 2021, in addition to expanding its workforce from 15 to 350 employees in the last 3 years.[219]

365
Reported total health tech startups in Pakistan[220]

USD 3 billion
Estimated size of Pakistan's pharmaceutical market[221]

USD 1 billion
Estimated counterfeit pharmaceutical market in Pakistan[222]

498%
Increase in average monthly healthcare expenditure in Pakistan from 2002 to 2018[223]

DAWAAI'S POWER CARD

Customer trust - the backbone of the business

The healthcare system in Pakistan is plagued by shortage of medical professionals, lack of basic healthcare facilities in rural areas and the high cost of healthcare services relative to the purchasing power parity in the country. Since its inception, Dawaai has served 11 million people in 92+ cities of Pakistan. It only made sense when Dawaai - whose core value proposition back in 2018, was their online pharmacy (when only a few pharmacies had gone online) - started to offer online consultations and on-demand laboratory diagnostics during the pandemic. Certainly, COVID-19 catalyzed the growth of startups in the global and local health-tech sector, which had spillover effects for startups like Dawaai. Dawaai particularly stands out for its commitment to delivering authentic medicine at cheaper prices, which is a crucial but often overlooked factor in Pakistan.

APPROACH

Dawaai's approach stands apart because in a market where up to 40% of medicines sold are either counterfeit or substandard, the company heavily focuses on ensuring the authenticity of their medicines by directly working with the pharmaceutical companies and other major distributors.

> "The one key thing which we have done incredibly well is building trust and rapport with our consumers. We then built everything else around it."

218 I2I DFT Internal Analysis
219 https://www.menabytes.com/dawaai-8-5-million/
220 https://tracxn.com/explore/HealthTech-Startups-in-Pakistan
221https://profit.pakistantoday.com.pk/2021/06/10/amid-exit-by-an-early-investor-dawaai-lands-8-5mn-in-recent-funding/
222 Ibid
223Ibid

This also translates to a gain on bargain purchase and in turn cheaper rates for B2B and B2C customers. In essence, Dawaai has kept the sanctity of the supply chain intact over the years, which has led to the company delivering medicine in 98 cities, a revenue growth of 350% in the last twelve months, and team growth from 15 to 250 employees in two years. It has also branched out into telemedicine, diagnostics, and home nursing services. In essence, Dawaai is building the missing pharmaceutical supply chain infrastructure in the local market, with a low-cost healthcare model, to make healthcare services and pharmaceuticals accessible and affordable for the people of Pakistan and wider South Asia.

RESULTS

11 million
customers served since 2014[224]

98 cities
across Pakistan are serviced with Dawaai's pharmaceutical delivery[225]

150+
doctors are available for teleconsultations[226]

1000s
of teleconsultations are successfully conducted every month[227]

2x
increase in the income of doctors who offer their services through the Dawaai platform[228]

LOOKING FORWARD

Furquan believes that there are many untapped opportunities in the health-tech sector, with health insurance and digitizing administrative procedures pre-operation being two core areas where startups could make a difference. He also believes that whereas there is a lot of excitement around telemedicine, players often overlook nuances such as consumers being concentrated in and around Tier 1 cities (access to healthcare is not a barrier) and the preference amongst most people for in-person consultations. He further speculates that the slow take up rates of telemedicine could be owing to how hospitals in Pakistan '*...are basically run like real-estate companies*", earning revenue through renting rooms.. Therefore, adopting telemedicine would be akin to shooting themselves in their metaphorical foot.

Even as the pandemic has slowed down, Dawaai has not. The company remains laser focused in its mission to make healthcare accessible and affordable across the country. Dawaai continues to work towards the dream of a low-cost healthcare model for all Pakistanis, with expansion on the back-bone of customer trust on the horizon.

224 https://www.menabytes.com/dawaai-8-5-million/
225 Ibid
226 Primary Interviews: Kidwai, F. (2022)
227 Ibid
228 Ibid

SUPPORT | KEY ACTION ITEMS

KEY ACTION ITEMS | SUPPORT

ESOs should strengthen their internal processes and practices in order to provide optimum outcome to businesses. In this regard, there is a need to invest in research and development to fully understand what kind of support founders require and accordingly to design programs that fulfill these requirements.

ESOs should focus on building and retaining strong internal teams that participating businesses can trust and form a relationship of longevity with.

According to founders and ESO personnel, business development curricula are disproportionately oriented toward first-time founders and/or those with minimal experience, while there exists a lack of resources for founders looking to scale their companies. Therefore ESOs should diversify their programs to cater to the wide variety of needs of different enterprises in the ecosystem.

The collaborative interface between ESOs and investors should be streamlined by involving investors directly in ESO selection criteria and processes and increasing investor engagement more generally, therefore assisting in the development of common goals between these two groups.

ESOs should engage existing, seasoned and industry specific startup founders to serve as mentors for participating entrepreneurs.

5

HUMAN CAPITAL: FINDINGS & RECOMMENDATIONS

HUMAN CAPITAL | FINDINGS

LENS 1: FOUNDER CHARACTERISTICS AND HOW THEY CORRELATE WITH INVESTMENT RAISING OUTCOMES

According to surveyed stakeholders in the Startup and SGB space in Pakistan, even though the quality of new founders has significantly improved, founders' educational background vis-a-vis investment outcomes stacks the deck against those with higher education from the local universities (PSER, 2021).[229] 100% of active surveyed investors (n=17) in Pakistan reported **a good team as one of the most important factors while evaluating a Startup for investment (PSER 2021)**.

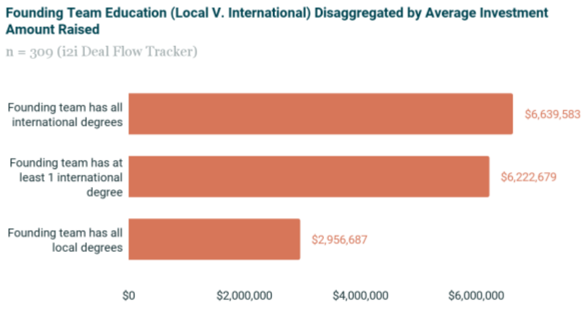

Figure 15: Founding team education background disaggregated by average amount raised (USD) | 2015-2022

While what defines a good team is a subjective question, it seems as though founder traits such as education and work experience have a positive impact on their fundraising outcomes.

Invest2Innovate's Deal Flow Tracker data shows that founding teams in which **at least one founder had an international degree** [230] accounted for **41.14% ($355 million across 96 deals)** of the alleged total amount raised from 2015 to 2022. **Founding teams with all international degrees**[231] accounted for **32.82% ($283 million across 68 deals)** of the total amount allegedly raised while **26.04% (i.e. $225 million across 109 deals)** of the total amount raised from 2015 to 2022 was attributed to **locally educated founders** (Figure 16). Additionally, **an international degree significantly increased the likelihood of raising a larger round as evidenced by respective average ticket sizes.** However, Figure 17 shows that the reported amount raised by founding teams with no international degrees has increased from 2015 to 2022 (YTD). Dr. Sara Saeed, CEO of Sehat Kahani - points towards an encouraging trend in the ecosystem, stating that she has seen a massive improvement since 2019, in how founders pitch themselves to investors, with greater confidence whereas before they were submissive

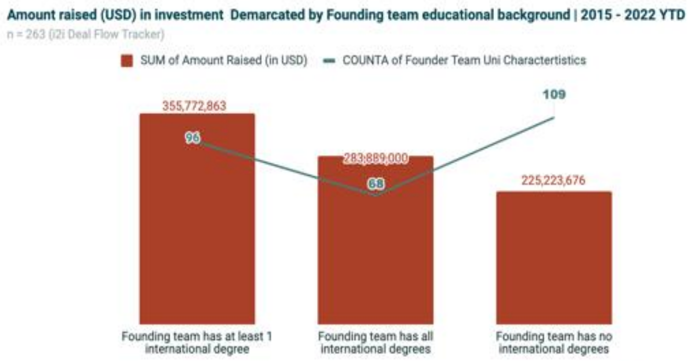

Figure 16: Amount raised (USD) in investment demarcated based off founding team educational background | 2015 - 2022 YTD

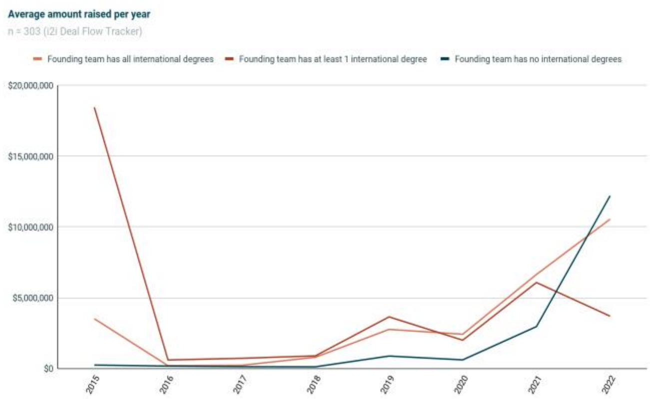

Figure 17: Average amount raised per year in relation to founders educational background.

---

[229] PSER 2021 https://www.insightsi2i.com/pser-21

[230] Classification of founding teams composed of all international degree holders *includes solo founders with international degrees.*

[231] Classification of founding teams composed of at least one international degree holder *includes founding teams with at least one local degree holder.*

and unsure of what they had to offer.[232] Still, according to Invest2Innovate's data, founding **teams with one or all internationally educated members** are also **more likely to have a foreign investor lead the round** compared to teams with all founders educated from local institutions.[233] Similarly, Individuals with **prior experience** at rapid-scaling tech ventures (e.g. Careem, Swvl, Foodpanda, etc.) - termed as a **network cluster (NC)**[234] - may be better equipped for solving problems relating to growth operations. This could be the reason why the reported amount raised by **NC startups** has increased from **$19.9 million** in 2019 to approximately **$199.6 million** in 2021, while **Non-NC startups raised 150.6 million (USD)** in the same year (Figure 18) (Invest2Innovate, DFT). Since 2019, startup founders with work experience from network cluster Startups have progressively raised more investment each year with their companies finally surpassing non-network cluster Startups in 2021 in terms of amounts raised.

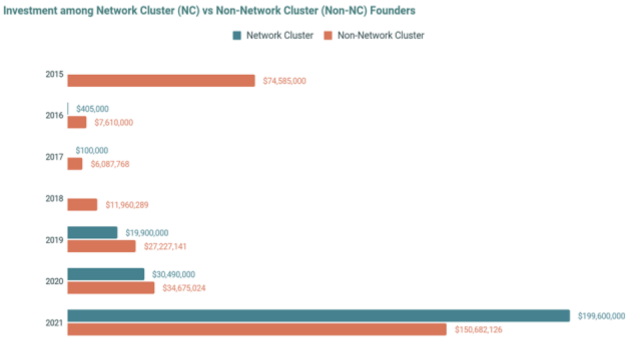

Figure 18: Investment Raised by Network Cluster and Non Network Cluster Startups | 2015-2021

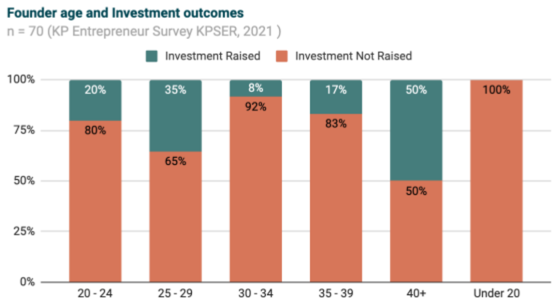

Figure 19: Founder's age correlated with investment raising outcomes.

This is in line with literature that examines the future prospects of new businesses raising external investment, in relation to variables such as founders' education, founding and industry experience as well as investors' prominence. Data from 235 new ventures across two stages of venture funding shows that the founders' education and experience are the strongest predictors of a positive investment outcome[235] in the first round of financing, while in follow on rounds education remains to have a signalling effect.[236] While these characteristics often give the founders an edge over their counterparts in the entrepreneurship space, these should not be taken at their face value. Other potential confounding variables are present, such as the efficacy of social capital and soft and hard skills gained during international educational programs (compared to local universities), in addition to overall exposure to more sophisticated entrepreneurial ecosystems. Most, if not all of these circumstances can be reverse engineered into the Startup and SGB ecosystem. *We discuss this further in the recommendations section.*

232 Primary Interviews: Saeed, S.(2021)
233 We discuss some potential confusing variables below.
234 Local and international rapid-scaling ventures were termed as a Network Cluster (NC) in the PSER 2021. Based on this, startups with founding teams who have prior work experience from the NC are called Network Cluster Startups and those without prior work experience from the NC are called Non-Network Cluster (or non-NC) startups in this report.
235 A positive investment outcome is when a company raises an investment round successfully, while a negative investment outcome is when the company fails to raise a round of investment.
236 Ko, E-J., McKelvie, A., Signaling for more money: The roles of founders' human capital and investor prominence in resource acquisition across different stages of firm development, Journal of Business Venturing, Volume 33, Issue 4, 2018, Pages 438-454.

A founder's age is also seen to have an impact on investment raising outcomes. Evidence suggests that the average age of a successful Startup founder is 45 years.[237] Following the same trend, as seen in Figure 19, 50% of surveyed founders in KP (n=70) in the 40+ bracket reported raising investment, which is the highest number across any age bracket. Multiple studies show that entrepreneurial resources such as human capital, financial capital and social capital accumulate with age. [238]

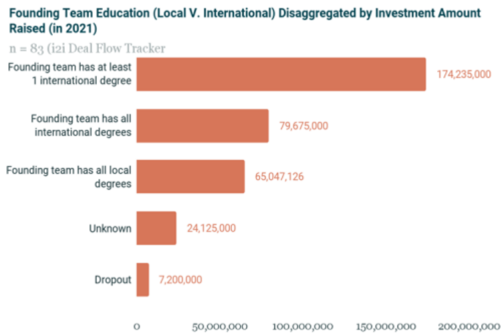

Figure 20: Investment raising outcomes of founders based on their education background.

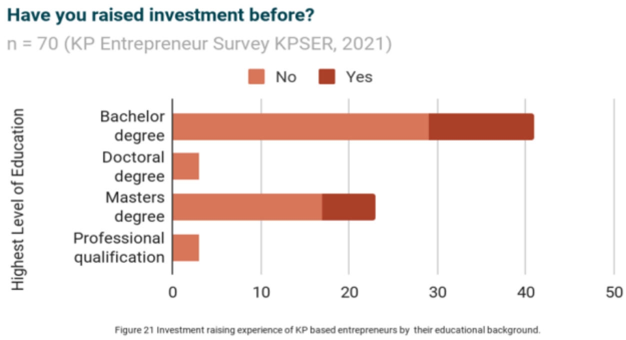

Figure 21: Investment raising outcomes of KP based entrepreneurs in relation to their educational background

LENS 2: ATTRACTING AND DEVELOPING SKILLED HUMAN RESOURCES

An estimated 350,000 people are associated with the IT sector in Pakistan, with 20,000-25,000 people graduating every year. This creates a pipeline to potentially meet the needs of the fast-growing Startup and SGB space.[239] However, enterprises remain concerned about the quality of this talent, as the employability of a significant portion of this group is questionable. Furthermore, Pakistan's talent ranks 110 out of 140 on the Global Competitiveness Index (GCI), which is below the South Asian average.[240] *Pakistan performs considerably poorly* regarding the quality of human capital, considering that one of the key pillars under the GCI is the *Skills* pillar which is made up of *current workforce (mean years of schooling)* and *skills of current workforce (consisting of five further sub-indicators).*[241] Additionally, Pakistan is the sixth most populous country in the world, where people below 30 make up 64% of its population and youth unemployment rate (8.5%) is also very high.[242]

237 https://hbr.org/2018/07/research-the-average-age-of-a-successful-startup-founder-is-45

238 https://www.nber.org/system/files/working_papers/w24489/w24489.pdf

239 https://propakistani.pk/2022/03/17/pakistani-startups-face-shortag

240 https://tradingeconomics.com/pakistan/competitiveness-rank

241 According to the Global Competitive Index, these sub-indexes concern employers' perception of the 'Extent of Staff Training Provided', 'Quality of Vocational Training', 'Skillset of New Graduates', 'Availability of Digital Skills among the Active Population', and 'Ease of Finding Skilled Staff' respectively.

242 https://www.weforum.org/agenda/2020/11/this-is-how-pakistan-is-closing-its-skills-gap/

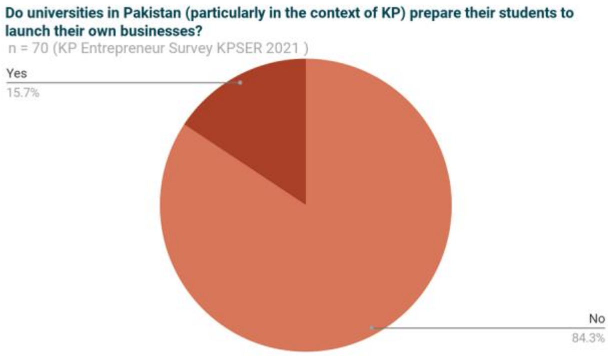

Figure 22: Founder perception of KP universities' aptitude in preparing students for entrepreneurship

57% of surveyed entrepreneurs (n=155) cited a lack of suitable top managers with relevant qualifications and 46% reported that availability of scientists and engineers is a challenge as well (PSER, 2021)[243] These apprehensions were even more pronounced among **ESOs and investors** as **90%** and **94%** of them respectively viewed the availability of top managers as a major obstacle for Startups. Similarly, the availability of qualified technical talent (such as Software Engineers and Data Scientists) also constitutes a prominent issue expressed by both ESOs and investors. Although Pakistan's youth, in comparison to their older counterparts, have shown improvement in cognitive abilities (i.e. adaptability, problem solving and logical reasoning) potentially due to an access to better-quality education, ***they still lack technical and entrepreneurial skills as well as on-the-job training, which poses a considerable challenge.***[244] In fact, **87%** of founder respondents to the **PSER 2021** survey (n=155) and **84.3%** of founder respondents to the **KPSER 2021** survey (n=70) believed that local universities do not prepare students to launch their own businesses, while ***57% (of a total 155) of survey respondents to the PSER 2021 reported that finding an adequately trained/educated workforce*** is a major obstacle for their businesses.[245] As compared to their counterparts in other regional ecosystem, the key missing skills identified by stakeholders in the Startup and SGB ecosystem include, critical thinking abilities, product oriented experience, and cross-functional flexibility.

Literature examines different ways in which workers acquire such new on the job skills in addition to how quickly they acquire these skills. Although the overarching skills acquired by workers prior to entering the labor market play an important role, most of the experienced employees' human capital is gained through practice and experience on the job.[246][247] Furquan Kidwai CEO and founder of Dawaai commented on this aspect as he shared that 'Dawaai was lucky to hire very experienced and intelligent people who came from traditional backgrounds but were fully committed and quickly able to absorb themselves in the Startup environment'. He mentions that these people who were able to learn on the job regarding the intricate details of the health-tech industry is one of the core reasons why the company has done so well. [248]

243PSER 2021 https://www.insightsi2i.com/pser-21

244https://openknowledge.worldbank.org/bitstream/handle/10986/31414/135324.pdf?sequence=4&isAllowed=y

245PSER 2021 https://www.insightsi2i.com/pser-21

246 https://www.theigc.org/wp-content/uploads/2018/11/IGC_ANDE-review-paper_final-revised.pdf

247 In well-functioning labor markets, workers are paid according to their productivity, and so wages provide a measure of skills. Thus, we see positive correlations between earnings on the one hand and education and labor market experience on the other.

248 Primary Interview: Kidwai, F.(2022)

Evidence suggests that the labor market returns to both education and experience are lower in lower-income countries, while employees' acquisition of skills on the job is also much slower in these countries, as compared to their higher-income counterparts. [249] This may, in part, be attributed to the lower school quality as gauged through data gathered across many countries using the standardized achievement tests.[250]

As stated by interviewed Startup and SGB founders for this report, the challenge of attracting and building a skilled team is further exacerbated in Pakistan, due to brain drain (skilled professionals migrating to developing countries); higher salary offers from competing firms; and the uncertainty of being employed in a Startup environment resulting in employees' short tenures.[251]

Box 6: WLB - Building teams

Interview data from the Pakistan Startup Ecosystem Report (PSER, 2021) suggests that women founders face difficulty in hiring teams - particularly on boarding technical resources - the talent pool of which is dominated by men. Lina Ahmad (co-founder at Dot and Line) and Noor Shaukat (co-founder at Aim fit) revealed that as female founders, they had to work hard to scout and on-board those men who would accept working in a women-led environment, which is not the norm in Pakistan's male dominated entrepreneurial ecosystem

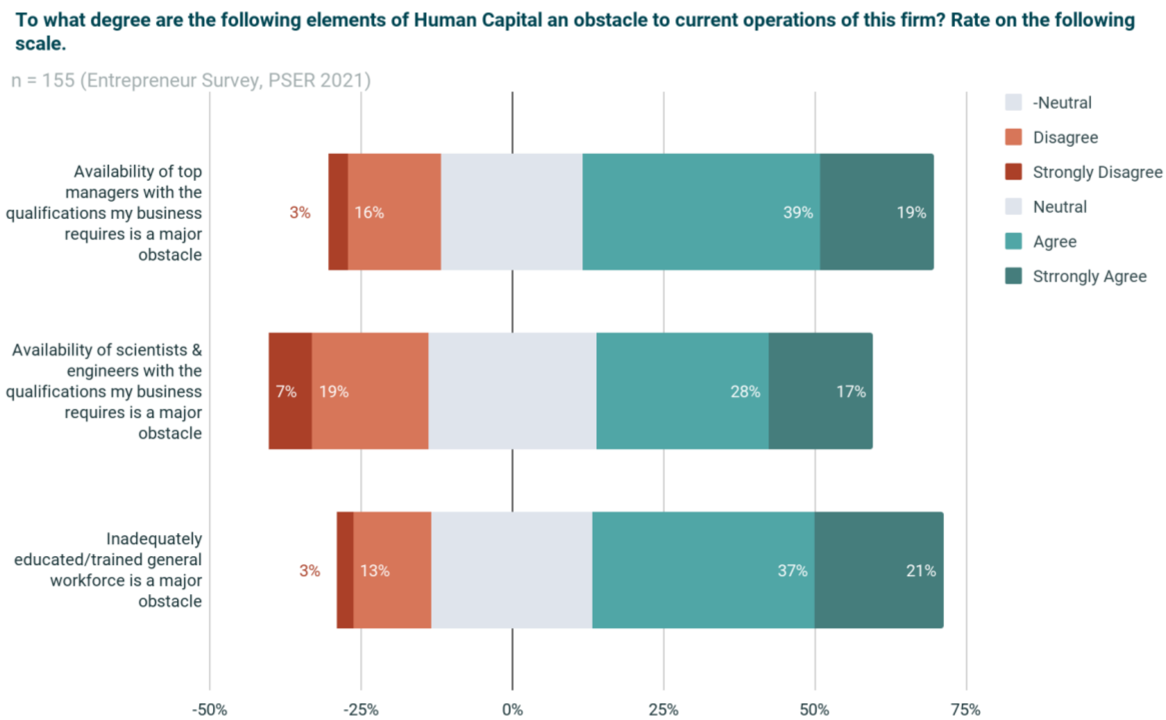

Figure 23: Elements of human capital and how they pose an obstacle to startup operations in Pakistan

249 https://www.theigc.org/wp-content/uploads/2018/11/IGC_ANDE-review-paper_final-revised.pdf

250 Both PISA and TIMSS data show lower achievement in middle-income countries, on average. Coverage in low-income countries is limited in the standardized achievement exams. See https://timssandpirls.bc.edu/ for TIMSS data and https://www.oecd.org/pisa/ for PISA.

251 Primary data collected for this study: Interviews: Bin Azam, S., Khan, S., Tanveer, F., Samar, A., Allana, S., Tariq, R.A. (2022)

HUMAN CAPITAL | RECOMMENDATIONS

LENS 1: CONNECT LOCALLY EDUCATED FOUNDERS MORE INTENTIONALLY WITH POTENTIAL INVESTORS

Assessment of founding teams at the time of investment and during selection for incubation and acceleration cohorts needs to be more inclusive. This entails looking for founders with not just good education (local or international) but more importantly who are battle hardened, have experience working on the ground in Pakistan and therefore have a deep understanding of the local context. As per I2I's DFT, 68% of the reported Series A amounts are attributed to mixed deals, while 22% to purely international investors; 91% of the reported series B amount (USD) is attributed to mixed deals; and 100% of series C deals were made by solely international investors. Therefore **it is clear that a huge proportion of the growth capital coming into Pakistan at later stages is sourced from international players**. Shazia Khan CEO and co-founder of EcoEnergy and Usman Javaid CEO and co-founder of Ricult both spoke to the great advantage because of being based abroad and having access to a pool of international investors who had greater sums of capital, in addition to similar companies in their portfolio that offered opportunities for networking and learning. [252] For the seed stage companies that are growing fast and will soon need access to this international capital, it is important to work with support organizations and other players with such a network of high value investors.

Additionally, out of the total reported investment amount raised in ***deals with all international investors (around $168.5 million from 2015 - 2022 YTD)***[253] ***50%*** was attributed to ***founding teams with at least one international degree.*** Similarly, ***52%*** of the amount reportedly raised through ***solely local investors*** was attributed to ***founding teams with no international degrees(I2I DFT)***. With mixed deals where a number of ***local and international investors co-invested, 40%*** of the alleged amount went into founding teams with all international degrees, 35% into ones with at least one founder with an international degree and 25% into founding teams with no international degrees(I2I DFT). This indicates that there is a ***visible trend where deals with all international investors lean towards founding teams with at least one international degree while deals with all local investors lean towards founding teams with no international degrees.*** Whereas deals with a ***mix of both local and international investors*** show lesser relative variance but still lean more ***towards founding teams with all international degrees***.

Work experience from well reputed Startups and SGBs often positions founders with local degrees better and equips them with tacit knowledge of the field they are working in. Hiring managers should focus on hiring and building teams more mindfully ensuring that they are reaching smart and competent graduates from local universities who can a be part of the workforce and later go on to create companies of their own. I2i's Deal Flow Tracker data shows that out of the reported amount raised by founding teams with at least one international degree (~ $355 million across 96 deals), ***50% is attributed to network cluster Startups*** (with an average ticket size of $8.9 million and 22 deals), the rest of the 50% is attributed to non-NC Startups with

252 Primary Interviews: Khan, S., Javaid, U.(2022)

253 An international deal is a deal in which all the investors are based outside Pakistan. A local deal is a deal in which all the investors are based in Pakistan. A mixed deal is a deal in which at least one of the investors is based in Pakistan and at least one is based outside of Pakistan.

an average ticket size of $2.48 million and a total of 74 deals. We see the same trend throughout where **network cluster Startups claim a greater proportion of the reported investment amount raised** in founding teams with all international degrees (66% with an average ticket size of $9.88 million) as well as in founding teams with no international degrees (52% with an average ticket size of $5.9 million). So, it's possible that prior work experience of the founding team can help equalize the playing field where entrepreneurs with local degrees can get a kickstart in the Startup and SGB space by starting with gaining work experience from high growth ventures.

The missing piece is also often connecting local founders effectively to valuable investor networks, which means members and alumni of the affiliated institutions can potentially work on creating consortiums to provide better access to the investors. In the case of Pakistan, creating such dedicated investment consortiums that locally educated investors can tap into, would prove helpful.

LENS 2: UPKSILL EXISTING HUMAN CAPITAL EARLY VIA EDUCATIONAL INSTITUTIONS AND LATER VIA TECHNOLOGY COMPANIES TO INCREASE THE PIPELINE OF TECH TALENT.

For starters, a multi-stakeholder approach to upskilling human capital is likely to be more successful than the public-public model, which is usually unhelpful due to subpar quality and irrelevance and/or outdated nature of training offered. Multi-stakeholder initiatives like 'Parwaaz'[254] help represent the interest of both the public and private sector by focusing on three areas i.e. lifelong future-readiness and youth employability, learning and upskilling, and innovative skills funding models. This program is currently working in six priority sectors such as financial services, ICT, textile, retail and services, hospitality, manufacturing and light engineering, agriculture and livestock. Additionally, out of the largest employers in Pakistan, 42 are working to set up six sector specific incubators with the Punjab Skills Development Fund through Parwaaz. This will further help identify 'reskilling, upskilling and new-skilling roles' which are key to the job market in the country today and ones that will surface in the future. **Incubators and accelerators running sector specific programs** requires them to study and accumulate knowledge regarding the industries their portfolio companies operate in. Such players have a unique advantage to identify technical skills relevant to specific sectors so Startups and SGBs can not only work on sharing job rosters with each other but also create a feedback loop for programs like Parwaaz to clearly identify human capital needs of each sector.

Similar to Pakistan, Bangladesh has a manufacturing sector that is fairly diverse, where a larger number of big firms is operating in the sector. A great example that demonstrates the importance of a single company in the ecosystem is 'Desh Garments' from Bangladesh. The biggest reason behind its influence is the heavy investment it made into human capital early on. They did this by sending 126 employees to a Daewoo factory in Korea to study and learn modern production techniques on the job. All these employees who had signed non-compete contracts for five years, ended up leaving Desh to start their own businesses within a year of their return. Interestingly, a decade worth of data from Desh shows that a vast number of major factories in Bangladesh had hired managers who were trained through the joint venture between Desh and Daewoo.[255] Therefore programs dedicated to upskilling the existing workforce (including fresh graduates entering the job

[254] https://parwaaz.com/about-psdf/

255 https://www.theigc.org/wp-content/uploads/2018/11/IGC_ANDE-review-paper_final-revised.pdf

market) can prove very beneficial to the wider ecosystem. Intermediaries and prominent players in the Pakistan Startup and SGB space are bridging the human capital gap in a similar way. A wide variety of entry level jobs in technology fields to young graduates (case in point Arbisoft & VentureDive) can serve as training grounds for upskilling existing talent. Additionally, initiatives like the AWS re/Start program by Learntech.pk - in collaboration with Amazon Web Services (AWS) - will be offering free cloud skills training to upskill people for tech careers in Pakistan. It intends to prepare unemployed and underemployed individuals for new careers in technology.[256][257] More programs like these, customized for the individuals in remote parts of the country such as AJK, Southern Punjab, KPK, Gilgit Baltistan, or Northern Sindh will help immensely in upskilling the youth for a career in entrepreneurship and technology companies.

256This includes scenario-based exercises, hands-on labs, and coursework, students build Linux, Python, networking, security, and relational database skills.

257https://profit.pakistantoday.com.pk/2022/03/28/learntech-pk-to-offer-free-aws-re-start-cloud-skills-training-program-in-pakistan-to-upskill-individuals-for-tech-careers/

CASE STUDY: YAK GRILL

Industry:
Tourism / Hospitality
Founded in:
2020
Founder:
Rashid Ali Tariq & Ali Din Ali
Reported amount raised in USD (2019-2022):
None

Founded in July 2020, family-owned restaurant Yak Grill celebrates the distinct and authentic taste of Yak meat, by offering its customers a small but specially crafted menu. While Yak Grill currently operates in Passu - Upper Hunza, the founders plan to expand their operations in the coming years.

83/117

Pakistan's rank on the International Travel and Tourism Development Index [258]

2022

A record breaking number of foreign tourists visited GB [259]

1 million

Reported tourists visited Pakistan's northern areas between May and July 2021 despite the pandemic [260]

YAK GRILL'S POWER CARD

Shared values - a family run business promoting the local Yak meat industry

In addition to adventure tourism being a major point of attraction, food tourism is also steadily growing in the North of Pakistan with Yak meat increasing in popularity particularly in the Gilgit region.[261] Brothers Rashid and Ali were quick to pick up on its rising acclaim in an attempt to fulfill the demand from domestic and international tourists - who were eager to explore local cuisine in a more modern setting. With their complementing skill sets i.e. Rashid being a trained chef, and Ali possessing international managerial experience, they launched Yak Grill. Through the restaurant, the brothers were passionate to promote the local Yak meat industry and to enable those locals for whom this forms a major source of income. Yak Grill stands out due to the strong personal bonds and shared values that are at the core of this family run business, which have allowed it to thrive even though it was launched in the middle of the pandemic.

APPROACH

The brothers who own the restaurant have strategically employed local family members such as cousins and other relatives to help them run the business. Essentially, this helps them overcome the most common hurdle faced by competing businesses in the region i.e. inadequate staffing and high employee turnover. This is particularly valuable in summer time i.e. the peak season in which international expeditions are expected alongside plenty of domestic travellers. Due to their strong personal bonds, shared vision, and passion for local entrepreneurship, the Yak Grill staff is a strong force. They operate in a flat organizational structure which motivates them as a team to regularly work around the clock during busy seasons.

258 https://tribune.com.pk/story/2358988/pakistan-up-six-notches-in-world-tourism-index
259 https://pakobserver.net/gb-asias-most-attractive-tourism-destination/
260 Ibid
261 https://www.mdpi.com/1660-4601/19/13/7734/htm

> It's not like I am the manager and everyone has to report to me. We all work together as equals, with mutual trust and respect which is why our business is able to perform well.

LOOKING FORWARD

The family is passionate about promoting organic Yak meat with plans to farm their own Yak on the horizon. In an effort to promote clean and organic produce as a unique selling point of their restaurant, they have also recently started farming their own vegetables, so that in the future they can market their menu items as being completely organic and home-grown. Moreover, the brothers want to continue to utilize the restaurant as a vessel to promote the local Yak meat industry and keep people connected to their local cuisine and their culture, as well as expanding their unique offering in other cities such as Islamabad and Skardu in the near future.

> "It would be a great achievement for us, we can connect people to their roots through our business."

CASE STUDY:

EDKASA

Industry:
Edtech / Education
Founded in:
2017
Founders:
Annum Sadiq & Fahad Tanveer

Reported amount raised (2019 – 2022):
USD 0.32 million[262]

Ed-tech startup Edkasa, provides digital learning tools to enable high school students to perform well on standardized government examinations, aiming to ultimately positively impact their quality of life. Since it was founded in 2017, Edkasa has amassed a user base of 55,000 students and approximately 40 schools across Pakistan utilize their solution.[263]

22 million children
Pakistan's approximate out of school population[264]

76
Pakistan's ranking on the internet inclusivity index[265]

356
Reported total Ed-tech Startups in Pakistan[266]

EDKASA'S POWER CARD

Human Centered Design - building for and with the end user

The education sector in Pakistan is dominated by public sector institutions (62%), followed by private institutions (38%).[267] Still, the public sector struggles to meet its mandate for quality education. In the long-run this can impact students as they are at a higher risk of; being less competitive in the professional job market; unemployed and having lower wages - which ultimately affects their quality of life. Edkasa aims to bridge this gap through offering end-to-end board exam preparation for students of public schools. The Edkasa solution is unique because human centered design is the heart and soul of their content design and delivery.

APPROACH

Edkasa currently has a user base of 55,000 students from across the country, covering all 20 boards of Pakistan, with more than 40 schools utilizing their solution.[268] This success primarily results from the founders' commitment and ability to understand and empathize with students for whom the solution is designed. For instance, the company's trajectory is that Edkasa started out as a website and Learning Management System (LMS), shifting to social media tools such as Facebook and Youtube, before finally developing their current solution i.e. the Edkasa mobile application. Before arriving at the final solution, the shift at each subsequent stage was guided by user feedback and insight along with striving for the right product market fit. For example, the video lectures on their application are a direct product of letting the users i.e. students decide what they want to see on screen. Through trial and error, the students informed the Edkasa team that albeit virtually, they still prefer to see a teacher on screen rather than only text explaining concepts.

262 DFT https://invest2innovate.com/access-deal-flow-tracker/
263 https://www.brecorder.com/news/40082184
264 https://profit.pakistantoday.com.pk/2022/01/02/will-the-india-model-work-for-pakistans-edtech-startups/
265 Ibid
266 https://tracxn.com/explore/EdTech-Startups-in-Pakistan
267 https://myaseen208.com/PakEduStat2017-18/report-at-a-glance.html
268 https://www.brecorder.com/news/40082184

> We have always focused on building the product as per the user's needs, and human centered design is our mantra because it has helped us unlock what the users wanted.

Edkasa's commitment towards human centered design was strengthened by choosing the right kind of support i.e. one that fit their mindset and company goals. For instance, through an accelerator program that they participated in, Edkasa gained access to the UI/UX team that was working with Apple and Facebook which was a game changer in terms of understanding the deeper nuances of what needs to be researched and how to draw up prototypes.

RESULTS

3000
engaging on-line learning videos per concept[269]

15,000
practice questions[270]

All 20
board examinations of Pakistan covered[271]

55,000
Edkasa reported student user base[272]

40 schools
across Pakistan utilize Edkasa's digital solution[273]

LOOKING FORWARD

As the world becomes increasingly digital, Edkasa believes that the uptake of ed-tech services will also increase. Fahad believes that as long as Startups can demonstrate financial viability along with a clear value proposition, customers will continue to purchase digital education solutions.

Through provision of quality education and therefore improving the scores that students attain in their examinations, Edkasa aims to improve the country's knowledge base as well as create a pathway towards a brighter future for its users.

269 https://www.linkedin.com/company/edkasa/
270 https://www.techjuice.pk/edkasa-pakistans-first-tiktok-e-learning-start-up-raises-320k-in-pre-seed/
271 Ibid
272 https://www.brecorder.com/news/40082184
273 Ibid

HUMAN CAPITAL | KEY ACTION ITEMS

KEY ACTION ITEMS | HUMAN CAPITAL

Investors and ESOs should be more inclusive in making decisions regarding capital injection and the selection criteria for support programs, respectively. This will create an opening for locally educated founders who despite having experience of working on the ground in Pakistan typically lose out to internationally educated founders.

In order to improve investment opportunities for those with Pakistani qualifications, ESOs and educational institutions should incorporate experiential learning into their curricula in to facilitate networking and simulate business operations.

Sector specific incubator programs that have identified the precise human capital needs of various sectors should proactively publicize this knowledge to the local population. This will encourage skill uptake and increase their chances of employability.

Employers can structurally combat the lack of female representation in the workforce by encouraging women to enter careers in tech and finance, and through training their existing workforce on gender bias and sensitivity.

Tech companies that offer entry level programs to fresh graduates in major cities should expand such initiatives to other parts of the country which will upskill the youth in these districts and ultimately better prepare them for a career in entrepreneurship.

6

GENDER: FINDINGS & RECOMMENDATIONS

GENDER | KEY FINDINGS

LENS 1: INVESTOR PERCEPTIONS AND GENDER DISPARITY IN VC FINANCING

In Pakistan, women account for only 1% of entrepreneurs.[274] The Global Entrepreneurship Monitor (GEM) estimates that there are only 3 female entrepreneurs for 10 male entrepreneurs and ranks Pakistan's female-to-male 'Total Entrepreneurial Activity' ratio at 0.30 i.e. half of the regional average (0.60).[275] Essentially, this disparity is two-fold i.e. not just the number of female entrepreneurs but also the reported amounts raised by women-founded Startups and SGBs.

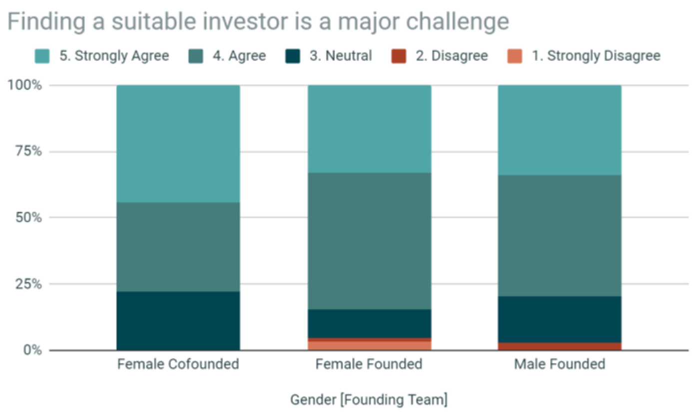

Figure 24: Perceived difficulty among founders of Finding a suitable investor demarcated along founder Gender.

Similar to global trends,[276] **female-founded Startups in Pakistan account for only 1.4% ($7.91 million /$563 million) of the reported total amount raised and 6.7% (17/255) of the total number of deals from 2015-2021** (PSER, 2021 (via DFT))**.** Additionally, in **2021 the average ticket sizes of female-founded Startups were much smaller ($2 million) than female co-founded ($8.1 million) and male founded Startups ($4.6 million)** [PSER 2021 (via DFT)]. Moreover, The World Bank estimates that there is an approximate **$1.6 trillion gap between the demand and supply for formal credit among women-owned micro small and medium enterprises**.[277] Despite these bleak statistics, relative growth has been seen in recent years. For example, according to Invest2Innovate's DFT the **total investment raised by female-founded Startups significantly grew from approximately $1.8 million (across three deals) in 2020 to a reported $4 million (across three deals) in 2021**, (including Oraan's record $3 million seed round in 2021). Additionally, regarding access to debt finance, small but relative improvement is seen with the launch of initiatives such as the State Bank of Pakistan's (SBPs) 'Banking on Equality Policy' (2021), with the mandate of reducing the gender gap in financial inclusion.[278] Still, putting things into perspective, these improvements still do not rectify the prevalent gaps that women entrepreneurs encounter.

Investor perceptions play a significant role in the gender disparity in financing. For instance, anecdotal evidence from PSER interviews points to a bias among investors, as they considered women-founded businesses better suited for low-risk capital and rarely considered these as high-growth ventures i.e. those that attract VC funding.[279] As a result of this, women receive lower investment and are restricted to small businesses in certain sectors, i.e. fashion/lifestyle (23.4%), and e-commerce (17.2%), (PSER, 2021), instead of high growth verticals such as transit or quick-commerce. Whereas there is ample evidence that male

274 https://we-fi.org/enabling-women-entrepreneurs-in-pakistan-through-training-and-legal-reform/
275 https://www.gemconsortium.org/economy-profiles/pakistan-2
276https://techcrunch.com/2020/11/09/startup-fundraising-is-the-most-tangible-gender-gap-how-can-we-overcome-it/
277 https://www.smefinanceforum.org/data-sites/msme-finance-gap
278 https://www.sbp.org.pk/press/2021/Pr-17-Sep-2021.pdf
279 Primary interviews, PSER (2021).

founders raise more than their female counterparts, Figure 25 paints an interesting trend whereby team-based female founders fare better than solo female founders when raising investment. Even though teams led by women still have the hardest time raising money, there appears to be strength in numbers - as investors' faith in women founders' potential to deliver is improved when they are supported by another female founder. Still, contrary to this norm, in 2022 the ecosystem saw Dr. Saira Siddique - the first solo female founder of a Pakistani Startup reportedly raised $1.8 million in capital for her health-tech Startup MedIQ.[280]

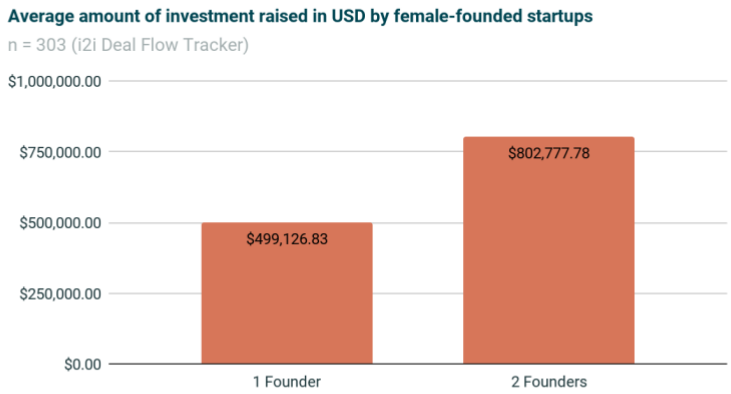

Figure 25 Average Amount Of Investment Raised(USD) By Female Founded Startups.

A global bias also exists whereby **investors cite the lack of investments into female-founded Startups as a 'pipeline problem', despite women entrepreneurs growing exponentially.** In reality, this points to inattentiveness on part of VCs to actively scout for women entrepreneurs. Studies suggest that this can stem from a lack of female representation in senior roles at VC funds. This is important as **more women in senior roles at VC funds leads to greater interest in and investment being channelled into women-led businesses.**[281] Moreover, statistics show that between 39% and 78% of VC's deal flow comes through referrals which further highlights the lack of female representation in VC funds, and translates into women-founded businesses being side-lined.[282] In addition to this, Startups that gain more attention and investment locally are more likely to catch the eye of international investors. Therefore, since **53% of all the deals raised by female-founded Startups (from 2015-2021) were attributed to local investors (PSER, 2021), who typically write smaller cheques** - women are less likely to raise from international investors as well.

LENS 2: WOMEN LED BUSINESSES FACE DIFFICULTY IN ACCESSING FINANCE

In South Asian countries, the most common roadblocks to female entrepreneurship are inherited customs and social norms which hinder women's ability to access finance.[283] Similarly, a study on women entrepreneurs in Pakistan reveals that social, economic and individual factors significantly impact the culture of entrepreneurship in the country.[284] In comparison to major cities such as Karachi, Lahore and Islamabad, evidence from tier 2 cities suggests that due to the presence of strong traditional norms in such regions, the

280https://ceotimes.pk/2022/04/21/dr-saira-becomes-the-first-solo-female-startup-founder-to-raise-1-8-million-in-pakistan/
281 https://hbr.org/2017/09/the-comprehensive-case-for-investing-more-vc-money-in-women-led-startups
282 https://aaltodoc.aalto.fi/handle/123456789/39084
283https://www.oecd.org/southeast-asia/regional-programme/Strengthening_Womens_Entrepreneurship_ASEAN.pdf
284 https://www.tehqeeqat.com/downloadpdf/9435

very **concept of entrepreneurship is *gendered.*** [285] As seen in figure 26, out of 18 **Startups that raised investment** only **5.6% were female founded**, followed by **11.1% female co-founded,** compared to the majority i.e. **83.3% were male founded Startups**. [KPSER, 2021].

Founder responses to the PSER 2021 survey reveal that irrespective of founding team makeup i.e. among female founded (83.3%), male founded (80.28%) or co-founded teams (77.78%) finding a suitable investor was reported as a major challenge (Figure 27). On the other hand, when it comes to founder's ranking their own knowledge of how and when to raise, 66.7% of female-founded teams reported this as a major challenge to raising investment, whereas a comparatively smaller percentage i.e. 50.7% of male founders ranked this as a major issue (Figure 28). A greater % of female founders ranking their knowledge as a major obstacle can be owing to reasons such as fewer investor connections, networking opportunities and ingrained psychological barriers etc.[286]

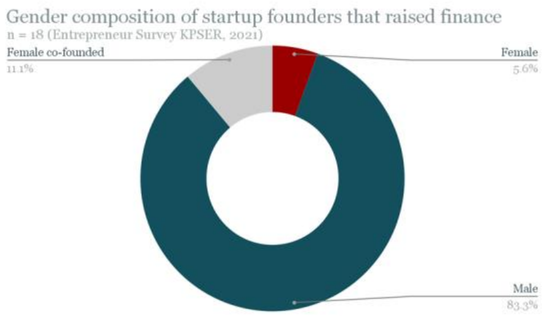

Figure 26: Founders which were successful at raising finance demarcated by their gender.

Box 7: Small Loan, Big Impact? Microfinance and women

Microfinance is the provision of basic financial services to the poor. Evidence suggests that women who opt for microcredit tend to reinvest more of their business earnings into their families, which also positively impacts the community at large. Studies from India and Pakistan show that whereas women struggle to obtain capital from commercial banks, they are able to so through micro-loans.

However, the microfinance industry is criticized for creating 'a vortex of debt', which generates returns for banks and does not benefit the poor beyond sustaining their consumption. Evidence suggests that microcredit enables clients to withstand shocks (due to illness, natural disasters, crop failure) but rarely enables them to escape poverty.

What is clear is that the microfinance industry is now an undeniable part of Pakistan's financial sector, with reported 8.4 million borrowers. Evidence from U Microfinance Bank's impact assessment report shows that women customers tend to borrow small loan amounts more than men, which leads into the broader point of a need for investigating woman focused product design, and bank's perception of women in general.

Additionally, since the reported female literacy rate in KP is low (36%) compared to men (72%)[287] **women tend to lack digital skills and technical knowledge which limit their opportunities to traditional, small-scale and home-based businesses.** Even if women battle all odds and operate in industries that require technical skills and therefore are male dominated, they are subject to unfavorable perceptions from society and their commitment towards their profession is questioned.[288]

As established in our operational definition of SGBs in this report, these enterprises are usually backed by debt finance.[289] As a large proportion of women in KP are small business owners, they are most likely to opt for debt financing. However, a study by the Asian Development Bank reveals the **reluctance on part of**

285 https://eprints.lancs.ac.uk/id/eprint/131519/2/Article_Sustainability_1_.pdf

286 https://techcrunch.com/2022/01/15/raising-money-is-catastrophically-challenging-for-female-founders/

287 https://ilm.com.pk/pakistan/pakistan-information/male-and-female-literacy-rate-in-pakistan/

288 https://journals.sagepub.com/doi/10.1177/097135570701700105

289https://www.researchgate.net/publication/283047696_Investigation_on_Preferred_Source_and_Pattern_of_Funding_Small_Business

banks to lend to female led businesses.[290] Banks in general, despite their seemingly gender neutral policies, are found to **discriminate against women as they consider them to be high-risk borrowers.** [291] Reasons cited include low property ownership, leading to lack of collateral etc. Moreover, **'demand side discrimination' also exists as women often lack information as well as suffer from low confidence which keeps them from applying for a loan**. [292] For conservative areas such as KP, taking a loan for establishing a business can also be difficult due to **mobility constraints and the cultural concepts of 'izzat' or 'purdah'**.[293] On the flip side, interestingly, evidence suggests women-owned firms are not only more credit-worthy in terms of financial penetrability, but also display better repayment rates. [294]

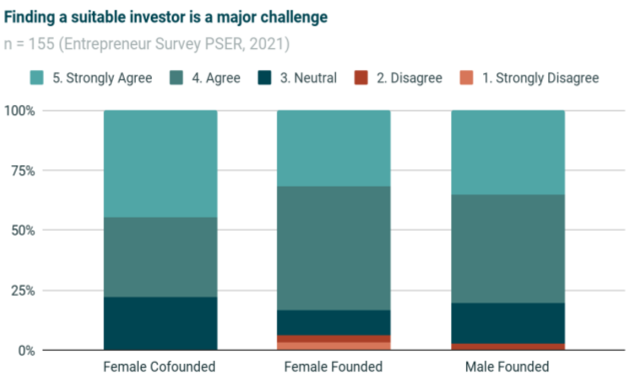

Figure 27: Perceived difficulty of finding a suitable investor among Pakistani founders demarcated by their gender,

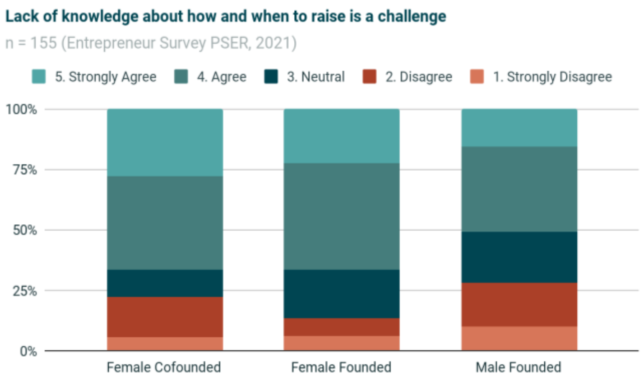

Figure 28: Perceived Difficulty of Lack of Knowledge Surrounding When To Raise Among Pakistani Founders Demarcated By Their Gender.

LENS 3: EXISTING SUPPORT SERVICES ARE NOT SUFFICIENTLY TAILORED TO WOMEN FOUNDERS' NEEDS

The female perception of a lack of access to support services and the cited benefit in securing funding from ESOs indicates that **women entrepreneurs rely on support services more than men** (PSER, 2021). The majority of female-founded Startups had positive opinions on the role of ESOs. **76% of female-founded Startups found training on financial management and valuations to be helpful, as compared to 45% of male-founded Startups** (PSER, 2021).

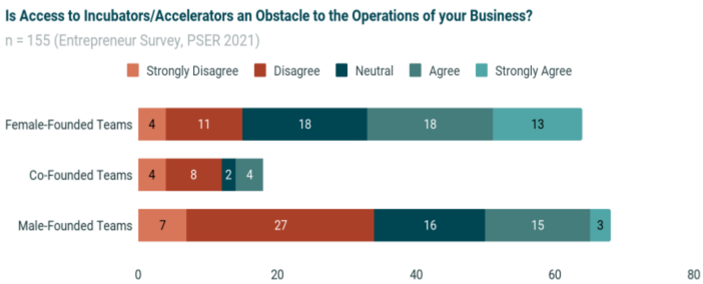

Figure 29: Perceived difficulty of accessing incubators/accelerators demarcated by founding team gender.

However, research indicates that women owned businesses do not participate in support programs and utilize resources provided by incubators and accelerators to the same degree as their male counterparts.[295] Therefore, while the perceived benefit of services is higher, there is a huge gap in accessibility. For instance, **48% of**

290https://www.adb.org/sites/default/files/publication/576086/sdwp-67-financial-products-services-women-asia-pacific.pdf
291 https://blogs.worldbank.org/psd/do-banks-discriminate-against-women-entrepreneurs
292 https://vc.bridgew.edu/cgi/viewcontent.cgi?article=2645&context=jiws
293 http://www.diva-portal.org/smash/get/diva2:1149878/FULLTEXT01.pdf
294 https://medium.com/@thierrysanders/women-deserve-more-finance-than-men-c864104262a
295https://www.jpmorganchase.com/content/dam/jpmc/jpmorgan-chase-and-co/documents/icic_jpmc_incubators_r7.pdf

female-founded Startups found legal services to be inaccessible as compared to 28% of male-founded Startups (PSER, 2021). **61% of women-founded Startups saw access to consultants and advisors as a challenge compared to 40% of the male-founded Startups** (PSER,2021). Also the **gender disparity in accessing finance begins at the ESO level**, because, as compared to male founded Startups who graduate from an accelerator and go on to raise equity, graduating from accelerators has minimal impact on helping women founded enterprises raise equity.

These issues boil down to the disproportionate barriers that women in Pakistan face as compared to men. The bigger problem **arises when ESOs do not cater to these barriers.** For instance, female founders are likely to have greater household responsibility, yet **ESOs often fail to provide services such as day care and child assistance - the introduction of which would be a huge support to women, and enable them to fulfill familial obligations while striking a better work-life balance.**[296] Azfar Hussain from the National Incubation Center (NIC) points towards increasing awareness of the importance of incorporating these facilities. He mentions that NIC Karachi has a day care facility, flexible timing, and availability of transportation to facilitate women entrepreneurs.[297]

Moreover, due to existing cultural and social norms, women in Pakistan are likely to be **more comfortable in conversing and connecting with female mentors as opposed to men**. Research shows that pairing mentors with mentees of the same gender generates positive results.[298] Despite this, ESOs do not place emphasis on diversifying their mentor base to include more women. Whereas finding qualified female mentors can be challenging, possible solutions can include partnering with international ESOs or proactively head-hunting female mentors, instead of self-selection.

One of the **key services provided by ESOs is access to a network of investors.** However, an individual's own social capital positively affects his or her ability to raise. Fahad Tanveer (co-founder at Edkasa) spoke to the importance of building a strong network and how this enabled business success, stating that 'people knew us due to past interactions, which created trust and a good professional reputation.'[299] But even networking is geared towards men,[300] as women's networks are often dominated by other women, which makes it harder for them to access and engage with more influential, and predominantly male dominated networks of investors. During the focus group discussion, female entrepreneurs emphasized that even though women were generally willing and able to work, they lacked awareness about available opportunities in the market, stemming from a lack of networking.[301] Overall, greater support for women leads to business growth which ultimately results in more creation of jobs and welfare in the region.[302] Therefore, through tailoring their financial and non-financial support services to address gender specific challenges, ESOs can play a crucial role in supporting not only women entrepreneurs but also benefiting communities at large.

296 https://www.theigc.org/wp-content/uploads/2018/11/IGC_ANDE-review-paper_final-revised.pdf
297 Primary Interviews: Hussain, A.(2021)
298 https://www.giz.de/en/downloads/giz2022-0011en-accelerating-women-entrepreneurs-handbook.pdf
299 Primary data collected for this study: Interviews: Tanveer, F.(2022)
300 https://www.jbs.cam.ac.uk/insight/2022/female-entrepreneurship/
301 Source: Primary data collection: FGD (2022)
302https://www.imf.org/en/Blogs/Articles/2018/11/28/blog-economic-gains-from-gender-inclusion-even-greater-than-you-thought

GENDER | RECOMMENDATIONS

LENS 1: PROVIDE INVESTORS TRAINING ON GENDER SENSITIVITY AND ENCOURAGE MORE WOMEN IN LEADERSHIP ROLES IN THE TECH INDUSTRY AND OTHER MALE-DOMINATED SECTORS

Investors need to be trained so that existing gender perceptions and biases are reconditioned, and the lack of venture capital funding injected into female-founded enterprises is reversed. In order to achieve this, **ESOs** should explicitly mention the commitment towards gender equality, diversity and inclusion in their **organization's mandate**.[303] Particularly, they can outline a formal definition of women-led businesses as a part of their **investment philosophy,** under their Environmental, Social and Governance (ESG) Mandate. A gender lens can be applied to the selection process, to review and update **criteria for businesses as part of their due diligence process**, to ensure that this does not favour one gender over the other.[304] **Formalized diversity and inclusion training** that addresses common gender biases - which can be made both consciously and unconsciously - can also be scheduled for investors . Additionally, in these trainings, it is important to **reverse the common investor misconception** that female-led Startups only thrive whilst delivering products or services that target women. This leads investors often taking a pass on investment opportunities based on founders' gender.[305]

Gender neutrality among investors can also be promoted through curating a greater pool of female investors. Research suggests that when women are making decisions on investments, they are twice as likely to invest in female founders.[306] **Moreover, at a macro level, greater participation of women should be encouraged in traditionally male dominated roles that demand technical and financial skills**. In order to incentivize this, companies need to introduce maternity and childcare policies, which have been found to bear a positive effect on work life integration and employee retention.[307] Added incentives such as **in-kind grants, wage subsidies and credit subsidies** can be introduced to encourage those women who would otherwise not opt to work, to enter the workforce.[308] Focus group participants emphasized encouraging trends in recent years, as women felt more empowered to become financially independent and start their businesses both in technical and traditional roles. Female participants shared that even if one woman entrepreneur was born out of a certain locality, this acted as motivation for other women to start thinking about entering the workforce. For them having a female role model from their area, was beneficial as their families became more open to the idea of a working woman. [309] Therefore, in order to encourage women to enter the workforce, women founders can curate and create **support groups**. For SGBs at a local level this small business owners can convene with women in their neighbourhoods in person, once a week, to share support programs they are participating in, job opportunities and ideas for collaboration etc.

303 Accelerating Women Entrepreneurs. A Handbook for Practitioners.
304 https://www.giz.de/en/downloads/giz2022-0011en-accelerating-women-entrepreneurs-handbook.pdf
305https://www.forbes.com/sites/forbesfinancecouncil/2022/05/31/lack-of-investment-in-women-founded-startups-is-a-missed-opportunity/?sh=42a2687121d2
306 https://www.giz.de/en/downloads/giz2022-0011en-accelerating-women-entrepreneurs-handbook.pdf
307 Tackling Childcare Pakistan: Creating Family-Friendly Workplaces / A market study on the benefits and challenges of employer-sup
308 https://blogs.worldbank.org/psd/incentivizing-equality-investment-led-development-win-win-all
309 Source: Primary data collection: FGD (2022)

LENS 2: IMPROVE WOMEN'S ACCESS TO FINANCE

Women's access to finance can be improved by addressing the lack of financial literacy and **spreading awareness about available financial services.**[310] To achieve this, banks can partner with women business associations to host events for female entrepreneurs and provide awareness of products and their cited benefits. For instance, the 'Safe and Smart Savings Products for Vulnerable Adolescent Girls' is an ongoing initiative in Kenya and Uganda, whereby local banks host weekly group meetings for women, to provide financial education on beneficial products e.g. accounts that require zero opening balance and have no monthly fees.[311]

Moreover, banks should **diversify mediums through which financial products are advertised**. A study shows that in Bangladesh 57% of women cited financial institutions as their primary source of information on financial products, however, at the same time banks did not utilize online media channels as a source of creating product awareness.[312] The increased use of digital media in Pakistan, along with mobility constraints for women is evidence that banks should make greater use of online channels such as social media, to ensure that women are aware of available lending products. In addition to this, since across Pakistan, socio-cultural norms dictate women's daily lives, **banks need to make a conscious effort to make a traditionally male-dominated environment more female-friendly and welcoming towards women**. Karandaaz Pakistan reports that in Pakistan women only constitute 13% of all bank staff (including head offices, branches and branchless banking agents).[313] Financial institutions can create specialized female-only sections at banks, where all bank staff is female. To enable this, banks need to encourage greater participation of women in branches and make their hiring policies and processes more gender inclusive.

Financial institutions also need to shift their focus on research and development to design products that are mindful of challenges faced by women. For instance, there is a need to create more lenient collateral requirements. In Pakistan, due to social, cultural and legal norms, men traditionally own assets as opposed to women, which automatically excludes the later from providing security for loans. Therefore, financial institutions should think innovatively and use alternate methods to check credit viability of women such as issuing loans based on - mobile phone transaction history; committee/ROSCA track record.[314] Lessons can be learnt from partnerships such as that between CARE and U Microfinance Bank to create loan products whereby women can provide their jewellery as collateral - given that gold is one of the few assets a woman can claim as her own.[315] At the policy level, the government can play an important role by widening the financial infrastructure with credit bureaus and collateral registries to aid women in building credit histories to their name.

Also, **Digital Financial Services (DFS)** can be a game changer as in addition to increased internet penetration, mobile phone ownership is higher among women. Lessons can be learnt from Vietnamese fintech 'Canal Circle' which in partnership with CARE, has designed a mobile application that enables women entrepreneurs to digitally manage their entire loan cycle and stay on top of instalment payments.[316] This has resulted in a good credit history and therefore, larger loan amounts being disbursed in the future to women entrepreneurs.

310https://www.oecd.org/daf/fin/financial-education/TrustFund2013_OECD_INFE_Women_and_Fin_Lit.pdf

311 https://www.oecd.org/daf/fin/financial-education/OECD_INFE_women_FinEd2013.pdf

312 https://elibrary.worldbank.org/doi/epdf/10.1596/26433

313 https://karandaaz.com.pk/blog/financial-inclusion-increasing-gender-disparity/

314 https://www.weforum.org/agenda/2019/06/women-finance-least-developed-countries-collateral/

315 https://www.mastercardcenter.org/insights/give-her-credit-expanding-womens-access-to-finance

316 Ibid

LENS 3: DESIGN SUPPORT SERVICES SUITED TO WOMEN'S NEEDS

ESOs can prepare women to raise investment through desgining bespoke curricula that considers their business needs; intricacies of sectors that women are concentrated in; and the financing instruments which would be the most suitable for their enterprises. **There is also a need to build women's capacity to access this funding**. Female entrepreneurs often suffer from lack of confidence or imposter syndrome - which becomes a barrier to engaging with investors. Modules should be incorporated to address these issues. Salman Shahid, CEO of Kamayi (a Startup that works to create recruitment solutions for SMEs) shared that 'women tend to have imposter syndrome more than men, because they are brought up in an environment which constantly challenges them - which is why you won't see that many female entrepreneurs'.[317] Additionally, even though 'pitching' to the investor is an important part of the process towards raising investment, women are socialized to be less comfortable in this soft skill. Some incubators and accelerator programmes deal with this by removing the pitching process from investment decisions altogether.[318]

ESOs should make a concerted effort to actively scout **female mentors**. For instance, 'Start Co' - a venture capital firm, dedicates a lot of its time to locating professional women in fields like marketing or accounting, which it eventually grooms as mentors for female founders.[319] Since female mentors are fewer in number, once ESOs identify *potential mentors*, they can work with these women to polish their skills over a couple of months, before they are *ready* to engage with enterprises. For ESOs in Pakistan this could translate into engaging with institutions such as the Women Chamber of Commerce and Industry, or associations such as She Loves Tech or Astia (formerly Women's Technology Cluster) to access female mentors. There are also opportunities to digitally connect women entrepreneurs with female mentors. A good application of this is The World Bank's digital 'Rapid Fire Series' [320] as part of its WeRaise program, which focuses on digital dissemination of information from female mentors and industry experts.

It is also important to **incorporate solutions that ease the burden of women's household responsibilities.** Co-working spaces can **provide day-care facilities** to allow women to focus greater energies towards their businesses. **Transport facilities** can also help women overcome an important structural barrier i.e. mobility. A female participant from the focus group discussion suggested that a workaround to co-working spaces (which are usually located in the center of the city) could be a dedicated space in the locality. This can be converted into a meeting room where women can come together and support one another. This way, families would not be weary of women's safety while close proximity to their home would mean the women could fulfill their familial obligations as well.[321]

Particularly true for rural areas, where the very concept of entrepreneurship is gendered, some women may not see themselves as 'entrepreneurs'. ESOs can **consider re-framing and removing jargon** that is not relatable for certain women founders.[322] At a broader level, ESOs should work towards shifting the cultural perception of women's role in societies by publicizing success stories of successful female-led enterprises, which would serve as motivation for current female participants in the program. ESOs should also invest in building their internal capacity by enrolling themselves in 'train the trainers' programs. An example of such a program is the World Bank's we-fi program, in partnership with Village Capital and Invest2Innovate which builds the capacity of ESOs to support women entrepreneurs in Pakistan.[323]

317 Primary Interviews: Shahid, S.(2021)

318https://www.jpmorganchase.com/content/dam/jpmc/jpmorgan-chase-and-co/documents/icic_jpmc_incubators_r7.pdf

319 Ibid

320 https://www.linkedin.com/company/weraisebywbg/posts/?feedView=all

321 Source: Primary data collection: FGD (2022)

322 https://www.giz.de/en/downloads/giz2022-0011en-accelerating-women-entrepreneurs-handbook.pdf

323 https://we-fi.org/enabling-women-entrepreneurs-in-pakistan-through-training-and-legal-reform/

CASE STUDY: ECOENERGY

Industry:
Green Solution
Founded in:
2013
Founder:
Shazia Khan & Jeremy Higgs
Reported amount raised in USD (2019-2022):
None

EcoEnergy aims to solve Pakistan's energy crisis through provision of high quality and reliable solar solutions to a range of customers including rural homes and offices etc. Since it has been operational, the Startup has served 20,000 customers and installed over 1.2 megawatts of power in the last two years. [324]

140 million people
have no access to electricity or suffer from over 16 hours of load-shedding every day [325]

70 million
approximate off-grid people across Pakistan[326]

4%
reported contribution of renewable energy sources towards total electricity production[327]

1.16%
current composition of electricity Pakistan produces through solar power [328]

ECOENERGY'S POWER CARD

Exemplary after-sales service

Pakistan has enormous solar potential and according to estimates, utilizing just 0.071 % of the country's area for solar photovoltaic (solar PV) power generation, would meet the current electricity demand (World Bank, 2021).[329] Working towards this scenario, since 2013, EcoEnergy has provided solar energy to over 20,000 customers across Pakistan.[330] Eco-Energy does not produce its own solar systems, rather operates as a distribution network to schedule installations and ensure product upkeep through on-ground staff. Through its monthly subscription based service called 'Itemad', EcoEnergy strives to provide its clients i.e. off grid businesses and households with a zero electricity bill every month. The company stands out from the crowd through its meticulous and extremely diligent after-sales service, which involves fully guiding customers through the transition into adopting clean energy.

> 'We are not just going and dumping a product and then disappearing. It is really important to us to work with the customer to make sure that we continue to meet their needs month after month, which is why after-sales is an absolutely crucial component of our business '.

324 https://www.linkedin.com/company/eco-energy-finance/
325 https://www.techjuice.pk/meet-ecoenergy-a-startup-aiming-to-solve-energy-crisis-in-pakistan/
326 Ibid
327 https://www.dw.com/en/why-doesnt-pakistan-tap-its-solar-power-potential/a-57392297
328 Ibid
329 https://blogs.worldbank.org/energy/huge-potential-solar-and-wind-pakistan
330 https://www.linkedin.com/company/eco-energy-finance/

APPROACH

This exceptional and reliable after-sales service that EcoEnergy offers has only been possible through a stellar customer service team. The Startup has actively hired talent that understands the market, is fully immersed in local context and can unlock an appetite for solar energy in Pakistan, particularly in areas where literacy is low and behavioral changes are needed. Building this team has been a labor of hard work and the strategy behind the scenes has been to promote from within. Team members who consistently embody and display certain core values i.e. customer centricity and quick response time to queries, have been accelerated into leadership positions. For instance, Shazia mentions a core team member who had a major role in building and optimizing the customer service team. He was eventually promoted to a position in the sales team, because of his invaluable experience in interacting with customers on-ground and understanding their needs, most frequent complaints and challenges. Shazia beams when sharing a popular quotation from the same team member which the entire company often cites:

'We're not just selling a bottle of water, we're selling every single sip in that bottle of water'.

This focus on customer service has been the driving factor behind increased business traction. Shazia confirms that 85% of the company's new business comes through referrals from existing customers, primarily because of the outstanding customer service that they have been provided.

RESULTS

12,000
clean energy products sold till date[331]

22,000
customers served[332]

Over 85%
repayment rate on solar system monthly instalments[333]

LOOKING FORWARD

EcoEnergy is keen on micro-grid installations in high-rise buildings i.e. solving load-shedding in apartment buildings. Other areas that excite Shazia include smart-home technology and the prospect of powering electric vehicles such as bikes and rickshaws through solar energy.

331 https://ecoenergyfinance.org/history/
332 https://www.linkedin.com/company/eco-energy-finance/
333 https://www.dawn.com/news/1420155

GENDER | KEY ACTION ITEMS

KEY ACTION ITEMS | GENDER

ESOs should recondition investor perceptions that woman-led businesses are better suited for low risk capital. This can be done through formalizing an inclusive investment philosophy within their mandate, educating investors on successful female led enterprises and conducting diversity and inclusion trainings to erase any biases.

Investment firms should make a concrete effort to diversify their staff to include more women. Ultimately, this can lead to a greater share of investments in women led businesses as women investors are twice as likely to invest in female enterprises.

Financial institutions need to understand the socio-cultural constraints faced by women and design bespoke credit products such as digital loan applications that make debt finance more accessible for female founders.

ESOs should develop tailored programs for female led founders who often fare behind men when it comes to soft skills such as pitching and presentation.

ESOs should increase their pool of female mentors to cater to the needs of those female founders who are more comfortable conversing with women. Female mentors will also typically better understand the difficulties that women in business experience, and accordingly provide adequate guidance.

7

CONCLUSION

CONCLUSION

The recent surge in Startup and SGB activity,[334] on the backbone of greater technological adoption and digital consumption has proved the potential for entrepreneurship in Pakistan.[335] However, this potential is yet to be fully unlocked.[336] For instance, in 2021 Pakistan ranked 97 on The Global Index of Digital Entrepreneurship Systems,[337] i.e. behind comparable ecosystems such as Vietnam (63), Indonesia (71) and the Philippines (79).[338] However, this is not to discount important reforms in recent years, which have led to greater investment activity, employment opportunities and disposable incomes providing a better quality of life for communities. Still, in order for the growing ecosystem to fully lift off, significant changes are required.[339] To fulfil its true potential there needs to be an enabling environment for Startups and SGBs in Pakistan. These enterprises should be able to access finance with greater ease and through multiple streams, hire skilled local talent, and engage with support organizations which provide them with tailored services. Additionally, there needs to be a greater focus on women entrepreneurs vis a vis recognizing roadblocks faced by female founders and catering to their specific needs that trickle down from the broader social and cultural challenges. Whereas some might argue that with its fair share of recent political and financial challenges, Pakistan has been left in a cloud of uncertainty, still, both Startups and SGBs have put their foot on the accelerator and continued to satisfy consumer demands across the country.[340] Putting things into perspective, if these enterprises have sustained their operations in the current climate, the possibilities - given that they operate in a more conducive and enabling environment created by the state of finance, human capital and support services - seem endless.

334 https://www.aljazeera.com/economy/2022/3/16/pakistans-startups-take-center-stage

335Starting up: Unlocking entrepreneurship in Pakistan

336Entrepreneurship in Pakistan: Three pathways to energizing the start-up ecosystem | McKinsey

337 This index focuses on the the national digital entrepreneurship systems of 21 economies in developing Asia. GIDES 2021 captures general, systemic, and digital financial conditions at the economy level.

338 https://www.adb.org/sites/default/files/publication/825166/ado2022-update-theme-chapter.pdf

339Starting up: Unlocking entrepreneurship in Pakistan

340 Ibid

AUTHORS AND ACKNOWLEDGEMENTS

This report was authored by the Invest2Innovate Insights team, notably Duaa Amina Noor and Ambareen Baig. The primary data was gathered by Duaa Amina Noor, Ambareen Baig and Umar Farooq. Secondary data was utilized from Invest2Innovate's Pakistani Startup Ecosystem Report (PSER 2021), Khyber Pakhtunkhwa Startup Ecosystem Report (KPSER 2021), and the Deal Flow Tracker (DFT). The primary and secondary data were analyzed by the internal team including Minahil Zaidi, Ibrahim Iftikhar, and Ahmed Niaz. The design support was provided by Ibrahim Iftikhar, Sana Khalid and Sarwat Rattani. Detailed intellectual assistance, project supervision, editorial oversight, and technical help was provided by Ambareen Baig and Sana Khalid.

GLOSSARY

Accelerator	Support Program focused on supporting startups as per the potential criteria below: Stage: Product Launch/Early Growth (Angel Round/Seed) Model: Cohort-Focused Program Timeline: Less than One Year (often Three to Six months) Physical Workspace: Varies Development Focus: Growth-oriented (Mentorship and Fundraising Support)
Angel Investor	Usually a high net worth individual who provides financial backing for small startups or entrepreneurs.
Acquisition[341]	When one company purchases most or all of another company's shares to gain control of that company.
Average Ticket Size	The average investment amount raised during a certain funding round.
Branchless Banking	The mode of rendering financial services through a distribution network without having a conventional branch brick and mortar set up.
Co-working Space	A business services provision model that involves individuals working independently or collaboratively in a shared office space.
Deal Flow	A term used by investment bankers and venture capitalists to describe the rate at which business proposals and investment pitches are being received[342].
Deal Flow Tracker	An open source and adjustable tool created by Invest2Innovate's research arm, i2i Insights, continually updated as new deals and/or information is reported.[343]
Debt Financing	When a company borrows money to be paid back at a future date with interest it is known as debt financing. It could be in the form of a secured as well as an unsecured loan. A firm takes up a loan to either finance working capital or an acquisition.
Early-Stage	A company at this stage should have begun to generate revenue and regularly take on new customers.
Entrepreneurial Ecosystem	A product of the surrounding environment, in particular business environment, key actors, investment climate, and the evolving culture and attitudes.
Equity Financing	The process of raising capital through the sale of shares[344].
Financing	An amount of capital or the sum of money provided to an organization with the expectation to repay, and organizations are liable to pay back the capital amount along with a certain percentage of interest. Therefore, the repayment also includes an interest component. It is usually provided by financial institutions like banks, or investors like venture capitalists, business angels, shareholders, etc.

341https://www.investopedia.com/terms/a/acquisition.asp
342 Deal Flow Definition
343 Deal Flow Tracker - Invest2Innovate
344https://www.investopedia.com/terms/e/equityfinancing.asp

Founding Team Uni Characteristics	Used to categorize where the members of the founding team of a startup went to university. Categorization options (currently) include: founding team with all international degrees, founding team with at least one international degree, and founding team with no international degree.
Frontier Market	Capital markets located in developing countries that are less advanced. In countries where investable stock markets are not as established as those located in emerging markets.
Funding	Funding is the amount of money provided by the organization or government on the basis of an agreement. It is usually free of charge. There may be certain contractual requirements in that agreement, but there are no requirements to pay back the capital. The most common facilitators that normally fulfill the funding needs of an organization are the donations made by governments, or philanthropists.
Grant	Refers to a sum of money offered to a startup or company to assist them with their growth and work.
Incubator	Support Program focused on supporting startups as per the potential criteria below: Stage: Ideation/Post-Ideation (Pre-Seed) Model: Non-Cohort Focused Program Timeline: One Year or More Physical Workspace: Provided to Startups under Support Development Focus: Creation-oriented (Capacity Building)
International Investor	Any type of investor (VC, angel, etc) that is based outside of Pakistan and not locally-focused.
Innovation	The economic application of a new idea. Product innovation involves a new or modified product; process innovation involves a new or modified way of making a product. Innovation sometimes consists of a new or modified method of business organization (Oxford Reference).
KSE 100 Index	The KSE-100 Index is a stock index acting as a benchmark to compare prices on the Pakistan Stock Exchange over a period.[345] Local Investor: Any type of investor (VC, angel, etc) that is based in Pakistan and/or locally-focused.
Merger	A merger is an agreement that unites two existing companies into one new company[346].
Microfinance	The lending of small amounts of money at low interest to new businesses in the developing world.
Network Clusters	Prominent startups from which employees go on to found other companies. In the context of Pakistan, these would include Careem, Swvl, etc.
Non-Network Cluster(Non-NC)	Startups where no founding team members are part of an identified network cluster.
Pakistani Startup	Startups with operations in Pakistan.

345https://www.psx.com.pk/psx/themes/psx/documents/BrochureKSE100_Idx.pdf

346https://www.investopedia.com/terms/m/merger.asp

Pre-Seed	An early investment round, usually raised to help a (pre-product) startup with its initial foundation and operations. Pakistani startups typically raise between $5,000 and $6,000,000.
Return on Investment	A measure of the efficiency of a single investment or multiple investments against each other. Return on investment is calculated by measuring the investment's cost against its benefit.
Seed	An early investment round, usually raised to help a (pre-product) startup with its initial foundation and operations. Pakistani startups typically raise between $15,000 and $15,000,000 at the Seed stage.
Series A	An investment round that is usually a company's first significant round of venture capital financing. Pakistani startups typically raise between $1,000,000 and $11,000,000 at the Series stage
Series B	An investment round raised after Series A. Pakistani startups typically raise between $13,000,000 and $85,000,000 at the Pre-Series A stage.
Series C	An investment round raised after Series B.
Small and Medium-size Enterprises	Enterprises with employees up to 250 people, paid-up capital up to Rs.25 million and annual sales up to Rs.250 m.
SGB (Small and Growing Business)	For the purpose of this report, based off an extensive literature review, the following definitional characteristics for SGB were developed: ● Employs between 5-250 people. ● Moderate growth and scale potentia. ● Targetts niche markets or customer segments. ● Generally backed by debt financing
Startup(s)	For the purpose of this report, based off an extensive literature review, the following definitional characteristics for Startups were developed: ● Innovation profile ● Disruptive business model ● High scale potential ● Market growth potential ● Incorporates technology
Ticket Size	The amount of money put in by an investor in a deal. Unspecified Angel Unspecified angels that were part of an investment round. Valuation Refers to the analytical process of determining the current (or projected) worth of an asset or a company.
Valuation	The analytical process of determining the current (or projected) worth of an asset or a company.
Venture Capital	Financing that investors provide to startup companies and small businesses that are believed to have long- term growth potential. Venture capital generally comes from well-off investors, investment banks, and other financial institutions.
Experienced Founder	Founders with either experience working in a prominent startup/ company; or founding their own startup in the past

ANNEXURE 1: LIST OF PARTICIPANTS FOR PRIMARY DATA COLLECTION

INTERVIEWS FOR THIS REPORT	
Name of business	**Interviewee**
Dawaai	Furquan Kidwai
Rider	Salman Allana
Roomy	Asad Samar
Edkasa	Fahad Tanveer
Ricult	Usman Javaid
EcoEnergy	Shazia Khan
Greenovation	Saad Bin Azam
Yak Grill Passu	Rashid Ali Tariq

ANNEXURE 2: THE ANALYTICAL HIERARCHY PROCESS: CASE STUDY SELECTION METHODOLOGY

The version of the analytical hierarchy framework that was created for this report is based on the hierarchy structure taken from the research paper 'A Method of Assigning Weights Using a Ranking and Non-hierarchy comparison (Song and Kang, 2016). [347]

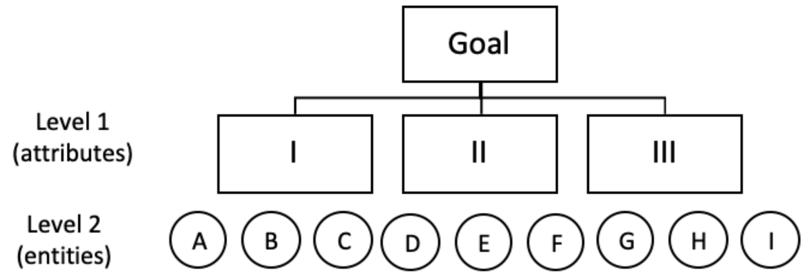

Figure : Hierarchy structure. Song and Kang (2016)

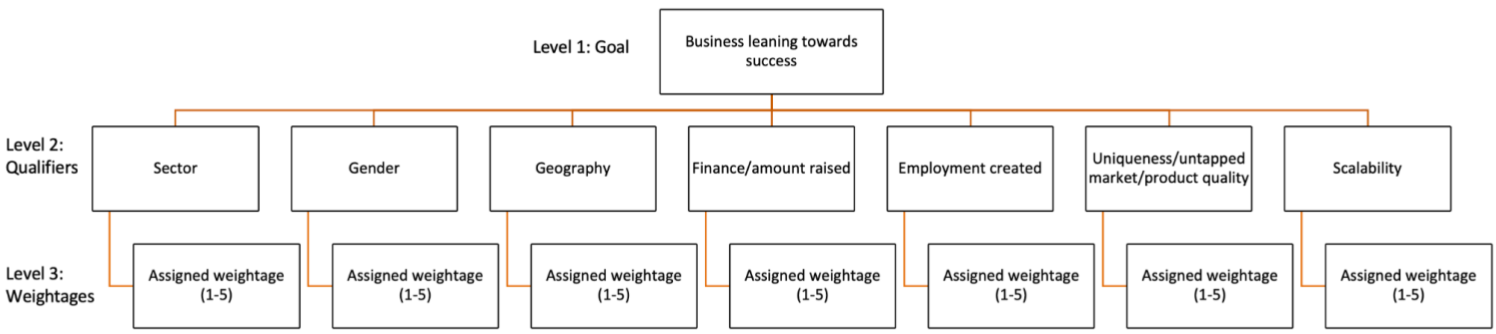

Figure :Analytical Hierarchy Framework for case study sampling

347https://www.researchgate.net/publication/301719119_A_Method_of_Assigning_Weights_Using_a_Ranking_and_Nonhierarchy_Comparison

ANNEXURE 3: CASE STUDY OUTLINE

The following outline was developed for executing case studies, prior to conducting in-depth interviews with founders.

ACCELERATE PROSPERITY | ECOSYSTEM STUDY| CASE STUDY OUTLINE

Case study outline/framework

Note: The purpose of this outline is to organize the incoming case study data into distinct thematic areas as well as to help guide areas of inquiry during the case study interviews. We are using this outline to draft interview Qs for the case studies. The case study interview Qs would be finalized once the case study sample is decided upon as the questions would vary vastly depending on the company being interviewed and factors that make them successful. Sections such as market dynamics, business classification, business profile will not form part of the actual interview, rather, we will collect and compile findings for these sections through secondary research before interviews are set.

Market dynamics	Overview / Business Profile	What are the key metrics that determine companies leaning towards success?	What factors enabled the company?	What factors stifled the companies? [Roadblocks to success]	Untapped sectors and barriers to entry ***(Only for companies working in untapped sectors)***	Future opportunities and/or Industry Trends
Factors to consider: - Customer demand - Sales trends - Competition - Inflation	Brief description of what the company's core value proposition is	Facts that support the narrative that the company in question is in fact leaning towards success **Qualifiers for startups leaning towards success:** - Financial performance - High potential for market growth and scalability -Develop high quality products/solve for an actual problem - High potential for IPO and/or acquisition **Our qualifiers for SGBs leaning towards success:** - Financial performance - High quality products - Employment creation **Sample Question(s):** **What are some of the key areas within the business where the company has been thriving?** - Traction - Quality of products, services etc. - Entering an untapped market - Access to new markets/new partnerships - Scalability - Access to finance	**What were some of the core enabling factors that helped them to thrive in the areas (preferably limit these to 2) pointed out earlier?** **Sample Questions:** - Did you incorporate/integrate technology solutions into your business to make more efficient? - Did any business support programs help you in this area? - Any specific business decisions you made that helped you increase your company's traction? - Did you make any partnerships in the industry either locally or internationally that helped you access new markets and customers? - If you have been able to scale your business locally or internationally, what were the contributing factors that helped?	**Were there any key roadblocks that your company faced during this process?** **Sample Questions:** - Did you face any challenges in terms of raising investment? Or in finding good/founder centric investors? - Did you face any challenges while entering a new market (geographically) or sector-wise? - Did you run into any problems while looking for business support services suitable to your unique needs? - Did you face any roadblocks in terms of building and retaining a qualified and skilled team? - Do female founders face more roadblocks than their male counterparts?	**If you are working in an untapped market, what are the barriers to entry that you have faced or that exist in general?** **Sample Questions:** - How did you overcome these barriers?	**Sample Questions** - Are there any future opportunities for business growth? - Are industry trends expected to change? - How will changing industry trends impact current businesses as well as businesses looking to establish themselves in the sector?