Development Advocate Pakistan provides a platform for the exchange of ideas on key development issues and challenges in Pakistan. Focusing on a specific development theme in each edition, this quarterly publication fosters public discourse and presents varying perspectives from civil society, academia, government and development partners. The publication makes an explicit effort to include the voices of women and youth in the ongoing discourse. A combination of analysis and public opinion articles promote and inform debate on development ideas while presenting up-to-date information.

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Is Pakistan Ready for the Future of Work?

With a strong digital and innovation policy and implementation framework in place, Pakistan can adopt an inclusive and forward-looking work ecosystem.

The world of work as we know it has undergone seismic shifts in recent years – from the work tools we use to the workplaces we inhabit. Influenced by increased connectivity, automation, and the accelerated adoption of digital technologies, the evolution of work is continuing at an astonishing rate and becoming more digitized. This has been all the more significant in the wake of COVID-19, with accelerated deployment of digital systems, user-friendly apps release, and digital infrastructure expansion.

Pakistan’s digital footprint, having grown rapidly in recent years, is not yet strong enough to respond to the demands of a rapidly transforming work ecosystem. Its total population of nearly 225 million comprises approximately 82 percent cellular mobile connections, 37 percent active internet users, and 32 percent active social media users. Access to the internet, affordability, and literacy remain significant barriers to future readiness for a digitized workplace.

The country ranks 79 out of 100 countries on the Inclusive Internet Index 2022 and the last of 22 countries in Asia. In addition to raising questions about inclusion, technology has also raised new concerns about workforce redundancies. Around 63 million jobs are expected to be lost to automation by 2040 in the Asia-Pacific region alone, with more than 247 million jobs defined as ‘at risk’. This is especially relevant for sectors like agriculture, which employs 39 percent of Pakistan’s labour force.

The work we do also informs and influences our standard of living, access to facilities, and ability to manage socio-economic shocks. As COVID-19 has demonstrated, the future of work will impact livelihoods and the well-being and resilience of workers, especially women and vulnerable groups. For example, on average, women face a greater risk of losing their jobs due to automation – 1.9 percent compared to the nine percent faced by their male counterparts.

Interestingly, the digital sector also shows growth and opportunities for Pakistan’s evolving labour market. In 2021, for instance, the country generated $500 (USD) million entirely from freelancing, ranking as the fourth fastest-growing market in the world for freelancers. Pakistan is also the third largest seller on the Amazon Marketplace, with its e-commerce market projected to generate $767 (USD) billion in revenue in 2022.

It points to Pakistan’s capacity and potential for harnessing future-ready work opportunities for its skilled labor force to enable them to graduate from ‘earning a living’ to ‘earning a new kind of living’. Hence, digital reskilling – especially for women and marginalized groups – is critical to future-proof Pakistan’s socio-economic development.

Pakistan has undertaken some impressive digital inclusion initiatives in recent years. For instance, NADRA’s Digital Identity platform offers access to financial assistance programmes for the country’s most vulnerable groups. However, digitizing identities in this way is crucial if we harness technology as a platform for economic development and social progress. For example, this has reduced barriers to digital entry and improved the ease of doing business for small firms, women, and vulnerable groups. Efforts are also afoot to enhance the country’s digital economy through branchless banking and smart payment solutions – a vital building block for financial inclusion.

In this evolving national ecosystem, the future of work in Pakistan is not a clinical endeavor only concerned with KPIs, efficiency, and automation; instead it is as much about the inclusion, growth, and development of people. Virtual and remote work possibilities have unlocked substantial opportunities for marginalized and remote workers – including women, persons with disabilities, and youth.

The overall impact of Pakistan’s recent floods has opened a new set of challenges and opportunities that require a coordinated recovery and development response to provide sustainable livelihoods to communities ravaged by uncertainty and inequality of opportunity. Harnessing the transformative power of innovative and digital solutions should be a key approach to developing Pakistan’s resilience and Build Back Better, especially as gig economy and remote work opportunities increasingly become the norm.

In its upcoming National Human Development Report 2023 on Digital Transformation, UNDP will explore, extrapolate and frame these challenges and opportunities to offer a digital profile and policy framework for Pakistan to adopt and implement to achieve its larger development goals. UNDP’s next five-year (2023-2027) programme for Pakistan envisions these transformative changes as enablers for SDGs. Through curating an integrated policy and programme portfolio on digital transformation, UNDP will leverage strategic innovation and digitalization to invest in systems thinking, portfolio logic, foresight, and experimentation to create development solutions for Pakistan. This will help address digital divides for inclusive development, focusing on expanding the digital economy, strengthening resilience, and training women in essential digital skills for the future of work.

To meet the future of work head-on, Pakistan must leverage its dynamic youth demographic, upskill its workforce, and improve access and affordability of digital tools across the board. With a strong digital and innovation policy and implementation framework, Pakistan can adopt an inclusive and forward-looking work ecosystem.
The country must prepare itself for a future of work shaped by technological development, climate change, demographic shifts, and globalisation.

Who knew that life, and ways of doing work would change, how we socialise would change? The COVID-19 crisis made the world realise that nothing is constant and everything demands continuous reform. Future of work is as volatile which is why stakeholders must plan ahead to handle disruptions and adapt in a timely manner.

The pandemic affected vulnerable populations the most: women, youth, migrant workers, and the elderly continue to face long-lasting challenges generated by non-conducive policy and institutional environments, high rates of informality, low levels of productivity, skill mismatches, inadequate social protection, labour right violations, insufficient wage growth, and reduced purchasing power in a context of high inflation, limited social dialogue, and various forms of discrimination. Gender disparities persist. Women and youth struggle to enter and thrive in the labour market.

At the same time, multilateralism is at a crossroads. First the pandemic, and then the food and energy crises exposed a more interconnected and interdependent world than ever before. The risks of a fragmented multilateral response are increasingly visible, and international trade, investments and policies promoted by international financial institutions may unintendedly come into tension with the goal of social justice when, in fact, delivering on the 2030 Agenda requires the opposite.

In this demanding context, the stakeholders of the ‘World of Work’ need support to harness their total capacity as key actors and drivers of positive change.

What was surprisingly positive across the globe was the role of digital labour platforms in transforming the world of work. Pakistan too, witnessed the boom of the ‘platform economy’, from transportation or food delivery services to online freelancing platforms, more and more businesses and consumers became increasingly reliant upon them. Today,
in 2021, Pakistan generated an amount of USD 500 million entirely from freelancing, and has ranked as the 4th fastest growing markets in the world for freelancers.

Platforms enable flexibility to businesses to access a workforce with varied skills anywhere in the world, while also expanding their clientele. But surely, there is a downside to the platform economy. While concepts such as taxi or delivery services, or online web-based platforms are not new, the innovation lies in the new forms of technology that have massively altered the facilitation and dispensation of services.

The reality for workers in Pakistan and other developing countries is that an online worker not only needs to own a computer, but must be able to bear all operating costs including but not limited to, good internet, productive working space, etc. These challenges impact the quality of work that a ‘work from home’ based online worker churns out.

Then, there is also a large workforce pool where the workers are typically categorized as self-employed or independent contractors and often do not actually receive any benefits. This has a significant implication for the future of work.

Platform labour economy is much less regulated, as far as acquiring certain benefits is concerned. Be it social security, regularity of work and income, getting paid or sick leave, receiving assistance in case of a work injury or occupational health hazards etc., employee welfare is immensely compromised.

Despite these downsides, the platform economy is seen as a reason of hope, given its benefits to inclusivity outweigh the cons. For many women and men workers, working digitally has provided them the flexibility to tend to their care responsibilities. Likewise, it is also an essential source of income earning for migrants, refugees, and people with disabilities, whether mental or physical.

Organisations have also started inching towards this model of work. In trying to cut costs during the COVID-19 pandemic, many companies moved many of their offline work onto the online labour market.

With the bloom of the platform economy via digital working spaces and flexible work models, the new set of challenges must be addressed. An international policy and a social dialogue among platform business operators, workers, and the government is needed to chart plausible solutions. Such a discourse is important to nudge stakeholders to gauge the capacity of our existing institutions and policies, to provide people with the future they want.

The ILO facilitated a global commission to recommend the course of action for a future of work that facilitates an equitable transformation for all. Accordingly, the ILO calls for a human-centred agenda for the future of work that strengthens the social contract by placing people and their work at the centre of economic and social policy and business practice.

This agenda consists of three pillars of action, which in combination would drive growth, equity, and sustainability for present and future generations:

- Increase investment in work institutions to support collective representation, establish a universal labour guarantee, and adopt technology for decent work.
- Increase investment in decent and sustainable work to advance gender equality, create jobs and new opportunities for micro, small and medium enterprises, and direct investment to high-quality physical and digital infrastructure to close the divides and support high-value services.
- Increase investment in people’s capabilities to support life-long learning to help through life transitions and to ensure gender equality.
- Increase investment in digital labour platforms enable flexibility to businesses to access workforce with varied skills anywhere in the world, while also expanding their clientele.
Making Pakistan Future-Ready

In our efforts to achieve the Sustainable Development Goals and keeping in line with our Vision 2025, the focus remains on building a sustainable economy with inclusive growth as a key pillar, so each member of the society can partake in national development.

With the global transition to a new work normal, what trajectory do you see for Pakistan on social, economic, and political fronts?

Pakistan, like other developing nations, is significantly impacted by global changes. COVID-19 exerted tremendous economic shocks, exacerbated by the Russia-Ukraine war. Increasing food, fuel, and commodity prices have aggravated the country’s import bill and worsened the balance of payments. All these factors have surmounted fears that Pakistan may be the next Sri Lanka. However, several antidotes are in place to build the nation toward recovery.

To achieve stability, emergency measures were taken to deal with the deteriorating situation by reengaging with the International Monetary Fund (IMF) and attracting international investment. The current government’s motive is to pull the country out of the looming economic crisis, and onto a sustainable path of growth.

How important is it for Pakistan to embrace diversity and inclusivity for sustainable development?

Pakistan is an incredibly diverse nation. The strength and success of the federation depends on the availability of equal opportunities to the people. To embed a future framework of inclusivity, it is not only important to integrate people of different ethnicities, languages, religions, races etc., but also to ensure that equal opportunities are available for marginalized and vulnerable groups.

For equality to foster, action must be taken to address development challenges in the least developed districts. The government has launched a landmark project of investing nearly PKR 40 billion in the 20 least developed districts in the country. However, inequality within any economy can be an obstacle to sustainable growth. A sustainable path can only be crafted by ensuring an equality-based platform for sustainable development, with equal opportunities for all classes and citizens.

Moreover, the country cannot achieve its goals without the engagement of its women, who constitute nearly half of the population. In our efforts to achieve the Sustainable Development Goals and in keeping in line with our Vision 2025, the focus remains on building a sustainable economy with inclusive growth as a key pillar, so each member of the society can partake in national development.

What is needed to equip Pakistan’s human capital to meet future challenges?

A large chunk of Pakistan’s population is the youth. Equipping this force with the right skills and education can foster a massive productive force for Pakistan’s economy. Initiatives such as the US-Pakistan Knowledge Corridor offer approximately 500 Ph.D. scholarships to youth in universities based in America in emerging fields. Imparting the right set of skills for the future is essential to utilize this demographic dividend before it becomes a demographic disaster for Pakistan.

Reforms are needed in the education system to tailor it to future needs. The government introduced the Curriculum Reforms Program a few years back to align the curriculum with emerging needs. That program is now being taken forward. Moreover, teacher training is also essential to ensure their alignment with modern technology and techniques. The Higher Education Commission is currently reviewing the university curriculum to align it with industry demands. Last but not least, several research funds have been established to support research with commercial applications.

Where do you see Pakistan in 2047?

As we delve deeper into the Fourth Industrial Revolution, we are increasingly moving toward the digital economy. The labour force must be reskilled and upskilled with skills of the future, such as artificial intelligence, big data, cloud computing, cyber security, etc. if we want to ensure that Pakistan remains future-ready and future-relevant.

In moving towards this, we must try to ensure political stability and promulgate suitable policies to support the transition to the new normal. For Pakistan to effectively utilize its indigenous natural resources, consistency, stability, and a focused economic direction are key for an enabling environment. Once an enabling environment is in place, Pakistan can then attract even more international investment. Simultaneously, we must use our geographic location wisely and the large segment of the middle-class population to our advantage. All this will take time, but if we work slowly but consistently, we will get there.
Scanning the Horizon: What Jobs and Skills Can We Foresee?

The world today is in a constant flux. Natural calamities, pandemics, economic insurgencies, technological development, demographic shifts, and globalization have altered the way things work, propelling the world of work into an unknown space. The future of work is volatile, and stakeholders must plan ahead to be able to handle disruptions and timely adapt.

To assess what possibilities lie ahead and how the transition will pan out, UNDP Pakistan conducted a perception survey on jobs and skills of the future. The survey maps out what people think the future of work looks like, and lists out focus areas for further research.

The first section highlights the participants’ profile, while the second section delineates the results.

SECTION 1: PARTICIPANTS’ PROFILE

<table>
<thead>
<tr>
<th>Gender</th>
<th>Male</th>
<th>Female</th>
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<tbody>
<tr>
<td>%</td>
<td>62%</td>
<td>38%</td>
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</tbody>
</table>

<table>
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<tr>
<th>Sectoral Affiliation</th>
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</thead>
<tbody>
<tr>
<td>Education &amp; Research</td>
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<tr>
<td>Development Sector</td>
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<tr>
<td>Environment</td>
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<tr>
<td>Public Sector &amp; Governance</td>
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</tr>
<tr>
<td>Media</td>
<td>3.63%</td>
</tr>
<tr>
<td>Healthcare</td>
<td>7.26%</td>
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<tr>
<td>Science and Engineering</td>
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<tr>
<td>Manufacturing &amp; Retail</td>
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<tr>
<td>Finance &amp; Banking</td>
<td>9.68%</td>
</tr>
<tr>
<td>Ai. Data Science &amp; Technology</td>
<td>3.63%</td>
</tr>
<tr>
<td>Human Resources</td>
<td>6.05%</td>
</tr>
<tr>
<td>Other</td>
<td>19.63%</td>
</tr>
</tbody>
</table>

SECTION 2: SURVEY RESULTS

<table>
<thead>
<tr>
<th>Emerging Professions (Ranking)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advertising &amp; Public Relations</td>
<td>9.9%</td>
</tr>
<tr>
<td>Business Development Professionals</td>
<td>10.7%</td>
</tr>
<tr>
<td>Digital Marketing &amp; Strategy Specialists</td>
<td>6.6%</td>
</tr>
<tr>
<td>Financial Services</td>
<td>18.2%</td>
</tr>
<tr>
<td>Mechanics &amp; Machinery Repairers</td>
<td>13.2%</td>
</tr>
<tr>
<td>Digital Transformation Specialists</td>
<td>2.5%</td>
</tr>
<tr>
<td>Data Analysts &amp; Scientists</td>
<td>18.2%</td>
</tr>
<tr>
<td>Software &amp; Applications Developers</td>
<td>9%</td>
</tr>
</tbody>
</table>
EMERGING SKILLS

22.3% Leadership & social influence
12.4% Quality control & safety awareness
9.1% Creativity, originality & initiative
1.7% Technology design & programming
9.9% Resilience, stress-tolerance, & flexibility
9.1% Others
9.1% Active learning & learning strategies
3.3% Critical thinking & analysis
18.2% A.I & machine learning
5% Reasoning, problem solving, ideation
9.1% Analytical thinking & innovation

ADDITIONAL PERCEPTIONS

Technology Use & Monitoring
Digital Marketing
Conflict Resolution
Energy Tech Expertise
Cloud Computing
Communications
Digital Literacy
Digital Freelancing
Handmade Products
Social Scientism
Solar Technology
Online Remote Working
Tech Savviness
Innovation
Digital Education
GIS
System Thinking
Political Agilty/Political ‘Correctness’
Entrepreneurship & Entrepreneurial Mentoring
Cyber Security
Negotiation
Computational Thinking
Numerical Thinking & Innovation
Resilience, stress-tolerance, & flexibility
Analytical thinking & innovation
Reasoning, problem solving, ideation
A.I & machine learning
Critical thinking & analysis
Active learning & learning strategies
Leadership & social influence
Quality control & safety awareness
Creativity, originality & initiative
Technology design & programming
Resilience, stress-tolerance, & flexibility
Others

RESKILLING AND UPSKILLING

There is no ‘one size fits all’ approach to bridge the skill-gap and devise a forward-looking strategy. Digital reskilling and capacity building must be tailored to a variety of individual and societal contexts.

- Tariq Malik, Chairman NADRA
(Read his full interview ahead)
The digital future of Pakistan will provide opportunities to flourish and excel while reducing costs, bringing efficiency, and innovating the 'new tomorrow'.

Pakistan must invest in a digital future to boost its economy and strengthen democracy. This is only possible through a combination of technology and public digital goods. Technology that does not empower people has no future in the digital world!

What does the 'digital future' look like for Pakistan?

The digital future is knocking at our door. Consider the digital future through the lens of investment. It was projected that the global digital transformation market will grow from USD 469.8 billion in 2020 to USD 1 009.8 billion by 2025, which is around a 16.5 percent Compound Annual Growth Rate (CAGR).

Natural disasters or crises expose state fragility but also present a valuable opportunity for change. They are creative moments to transform how we do business and govern state institutions by testing innovative digital public goods. Pandemics, natural disasters, and conflicts around the globe triggered the rapid shift toward digital transformation. It urges governments and businesses to transform their governance and business strategies to remain competitive quickly and fulfill citizen and customer expectations as reflected in investment – often called investment in the ‘future of world’.

Pakistan is already a bit late in reclaiming its fair share in the world's digital economy. Let’s be honest, we must do more than mere ‘sloganeering’ and realize the tremendous benefit of intensive care. Pakistan must invest in its digital future to boost its economy and strengthen democracy. In this milieu, looking at digital Pakistan through the lens of technology would result in merely setting up various technology theatres, however, perceiving it through the public digital goods angle will bring true digital transformation. Technology that does not empower people has no future in the digital world!

History teaches us that even the most uncomplicated technological innovations can profoundly affect society. This is particularly true of connective technologies - like railways, the internet, or mobile phone - that have massive societal spillovers. However, I believe that citizen-centric application of digital technologies carries a similar potential.

The digital future of Pakistan is linked with three building blocks: Achieving universal coverage (SDG 16.9) through robust digital foundational systems (Digital ID, Digital Census, and Digital Civil Registration and Vital Statistics System), reducing the digital divide (connectivity, digital skills, energy, infrastructure), and rolling out digital public goods developed through public input. Pakistan is working on all three building blocks in parallel, well-aligned with United Nations Secretary General’s foundational systems will create spillovers in the form of digital public goods if the digital divide is reduced. The digital future of Pakistan provides opportunities for everyone to grow, flourish and excel while reducing cost, bringing efficiency, and innovating the ‘new tomorrow.’

Digitalisation can close governance gaps and enhance state capacity in ways that reconnect citizens with the state. As we continue to make strides in developing and shaping our digital future, we must be conscious that there are still some gaps that need to be filled to fully reap the dividends of digitalisation. Pakistan ranks 153 among 193 countries surveyed in 2020 for the UN E-Government Development Index.² Similarly, according to the Inclusive Internet Index³, Pakistan ranks 79 out of 100 countries globally, and ranks last out of 22 countries in Asia. The country’s overall ranking goes down for poor scores on availability (84th) and relevance (80th). The provision of internet access to those who lack could unlock numerous possibilities for Pakistan’s socioeconomic development. Digital Literacy and skills are yet other significant milestones that must be achieved quickly and effectively, specifically by focusing on involving women in the workstream. The digital economy offers tremendous opportunities that can help increase Pakistan’s per capita income if equitable opportunities for digital development are given to women and girls.

Footnotes:
We have already witnessed how technology has enabled continuity of life during severe disruptions of COVID-19. The state relied on digital ID for essential social and economic services: PKR 179.2 billion were transferred to 16.8 million beneficiaries, identified after successful biometric verification, and issued 36.4 million covid/vaccination certificates. Likewise, Pakistan also enrolled 147.3 million beneficiaries in the healthcare program. These digital interventions were possible because of the inclusive digital ID system, which has covered almost 137 million individuals. Not only this, going digital because of the inclusive digital ID system, which has covered Pakistan also enrolled 147.3 million beneficiaries in the state relied on digital ID for essential social and economic continuity of life during severe disruptions of COVID-19. The Customer) requirements by providing verification services for the applicant’s identity using advanced biometric verification compliant photographs of the applicant using a smartphone service that successfully captures fingerprints and ICAO-enabled digital on-boarding of 32 banks and financial institutions. Fulfilled e-KYC requirements by providing verification services for 727.4 million transactions.

NADRA’s Biometric Remote Authentication Service

Enabled digital on-boarding of 32 banks and financial institutions

Fullfilled e-KYC requirements by providing verification services for 727.4 million transactions

NADRA’s Inclusive Digital ID System

Enabled disbursement of PKR 179.2 billion to 16.8 million people

Enabled enrolment of 147.3 million people for the healthcare program

Provided legal identity to 137 million people

With payments and other business domains would also create transparent governance and regulatory system. Besides all the benefits the digital future may offer, it requires due diligence and a targeted approach to transform. By experimenting with technical interventions and data, I believe we can make Pakistan a role model for digital innovations.

How will digitalisation impact employment and skills in the future? Is there a need for ‘digital reskilling’ in the current labour force?

Digitalisation has introduced new work patterns such as remote working, co-working, freelancing, etc. This has the potential to create huge job opportunities. It is also expected that a major chunk of the current labour force may lose their jobs owing to the skill gap. According to labour force survey of Pakistan, the current employment-to-population ratio of Pakistan is 42.3 percent. What would the situation be if most of these lost their jobs? More alarming is that Pakistan falls in the last quartile of countries (ranks 85 out of 100) that receive minute government support for digital literacy. Therefore, Pakistan needs to prioritize upskilling and re-skilling to deal with such brittleness. The focus must be shifted from supply-driven capacity building to demand-based capacity building.

What does going digital mean for inclusivity?

Digital leaders must prioritize optimizing citizens’ experience and enhance outcomes of digital public goods across multiple channels, connecting people, data, and systems – only then can the gaps be recognized.

Facial Recognition Infrared Thermometer

NADRA has walked in their shoes and crafted inclusive registration mainstream under the Inclusive Registration Department. We recognized. Inclusivity is key to ensuring digital transformation otherwise we are just setting up a ‘digital theater’!

Pakistan needs to prioritize upskilling and reskilling: focus must be shifted from supply-driven capacity building to demand-based capacity building.

The World Economic Forum has listed e-commerce and digital trade, big-data analytics, and cloud computing as the top three essential technical skills to gauge the benefits of digital transformation in Pakistan. The current digital skill level among the active population is 50.7 percent. Similarly, soft skills like social influence, analytical thinking, and innovation, initiative and problem solving, etc., are also the most sought after in the emerging work environment. It is high time that universities impart these critical skill sets needed to meet the demands of the employment market in the digital world. New employment models in technical fields are more likely to bring significant changes in wages and remunerations as well. Hence, companies must revisit all aspects of the work environment, including culture, safety, competitiveness, and growth.

There is no ‘one size fits all’ approach to bridge the skill gap and devise a forward-looking strategy. Digital re-skilling and capacity building must be tailored to a variety of individual and societal contexts. An immediate shift to a digital work environment may backfire, therefore, going hybrid before a complete shift may make it easier. We have also brought technological interventions in our routine practices at NADRA. Instead of physical meetings, we hold daily online meetings, perform monitoring of our offices through intelligent bots and advanced video analytics, and measure customer satisfaction through semantic analysis of our social media. At NADRA, we push digital content to employees and encourage them to register for digital programs that ensure policy is implemented at the last mile. To fully capitalize on the digital work environment, we need collaboration and implementation platforms to design for agility, redefine talent, mobilize careers, and embrace digital transformation.

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Going digital means ‘no one is left behind’ – it requires addressing the digital divide. Digital leaders must prioritize optimizing citizens’ experience and enhance outcomes of digital public goods across multiple channels, connecting people, data, and systems – only then can the gaps be recognized.

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NADRA has walked in their shoes and crafted inclusive registration mainstream under the Inclusive Registration Department. We recognized. Inclusivity is key to ensuring digital transformation otherwise we are just setting up a ‘digital theater’!

Pakistan needs to prioritize upskilling and reskilling: focus must be shifted from supply-driven capacity building to demand-based capacity building.

The World Economic Forum has listed e-commerce and digital trade, big-data analytics, and cloud computing as the top three essential technical skills to gauge the benefits of digital transformation in Pakistan. The current digital skill level among the active population is 50.7 percent. Similarly, soft skills like social influence, analytical thinking, and innovation, initiative and problem solving, etc., are also the most sought after in the emerging work environment. It is high time that universities impart these critical skill sets needed to meet the demands of the employment market in the digital world. New employment models in technical fields are more likely to bring significant changes in wages and remunerations as well. Hence, companies must revisit all aspects of the work environment, including culture, safety, competitiveness, and growth.

There is no ‘one size fits all’ approach to bridge the skill gap and devise a forward-looking strategy. Digital re-skilling and capacity building must be tailored to a variety of individual and societal contexts. An immediate shift to a digital work environment may backfire, therefore, going hybrid before a complete shift may make it easier. We have also brought technological interventions in our routine practices at NADRA. Instead of physical meetings, we hold daily online meetings, perform monitoring of our offices through intelligent bots and advanced video analytics, and measure customer satisfaction through semantic analysis of our social media. At NADRA, we push digital content to employees and encourage them to register for digital programs that ensure policy is implemented at the last mile. To fully capitalize on the digital work environment, we need collaboration and implementation platforms to design for agility, redefine talent, mobilize careers, and embrace digital transformation.

What does going digital mean for inclusivity?

Going digital means ‘no one is left behind’ – it requires addressing the digital divide. Digital leaders must prioritize optimizing citizens’ experience and enhance outcomes of digital public goods across multiple channels, connecting people, data, and systems – only then can the gaps be recognized. Inclusivity is key to ensuring digital transformation otherwise we are just setting up a ‘digital theater’!

Currently, only 40.6 percent households are connected to the internet⁴. Gender gap between male and women’s access to internet in Pakistan is almost 67 percent. Discrimination in provision of digital services and opportunities is not limited to women, it also extends to the queer community, persons with disabilities, refugees, and internally displaced persons etc. If we do not respect diversity, intersectionality, and socio-cultural norms in the policy design, I fear we may create digital imperialism.

It is also important to recognize shortcomings or vulnerabilities of digital technologies for these groups. For example, compliance of universal standards in development of persons with disabilities includes creation of inclusive digital content and webpages, establishing telecentres in near urban areas for easy access to internet, optimizing girls’ technical capabilities at school etc. We must also consider lawful use of data and technology so that it cannot be used to erode human rights or liberty. At present, the government and private sector both have begun to adopt an inclusive approach for growth and development.

NADRA, the civil registration authority of Pakistan, is among the pioneers of developing an Inclusive ID system. Knowing the importance of legal identity in striking a strategic partnership between citizens and the state, I formulated a team to cater to the problems of people generally excluded from the mainstream under the Inclusive Registration Department. We walked in their shoes and crafted inclusive registration strategies with a targeted approach, executed awareness

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The government must realize the importance of policy making and regulation that encourages innovation and investment, ensures public trust in the technology sector, and is built on an inclusive framework.

Digital technologies powered by intelligent data analytics can help empower individuals, exercise universal human rights, and eradicating systemic prejudices in policies. I applied a gender lens to resolve algorithmic biases that restricted married women from printing their husbands' names on their identity cards. I also introduced a procedural reform to allow child registration with unknown parentage. Consequently, 5,798,318 children are registered with single parents (3,067,750 registered with single mothers and 2,730,568 registered with single fathers). Practices that aggravate inequalities are abnormal and non-congruent with sustainable, inclusive development. While designing digitally transforming infrastructure, inclusivity has to be a design principle for policymakers to avoid the digital divide.

We must keep in mind that while technology is central to the shift to digital, it is not all that is involved. Setting Pakistan on the road to digital development entails multi-stakeholder efforts. The government must realize the importance of policymaking and regulation that encourages innovation and investment and ensures public trust in the technology sector. The government also needs to digitize essential government services for citizens. Incentivizing digital initiatives and introducing a ‘digital first’ policy reform may tweak the adoption rate of e-services. NADRA has already started providing digital services and apps for widespread public use. We have captured valuable insights that would enable us to roll out more reliable and secure products in the future. However, we must keep in mind that while technology is central to the shift to digital, it is not all involved. Bureaucrats, parliamentarians, and business leaders will need to nurture the right culture of innovation and talent to truly transform into a functional digital business model.

To meet the ever-rising demand for data-intensive services, robust connectivity, and digital infrastructure is essential. Cross-sector collaborations, the establishment of software technology parks with access to world-class digital content, and national incubation centres backed by mutual investment funds may work as seedbeds for fintech, start-ups, and entrepreneurship. Easy and affordable digital payments and regulatory sandboxing have a multiplier effect on fostering
digital space in the services sector. It can channel tech firms’ creativity to experiment and innovate. Furthermore, synergizing on cloud technology can create economies of scale in both the public and private sector. If the government develops a centralised stack of digital services and liaisons with the private sector by providing open-source Application Programming Interfaces (APIs), it can create greater value for the public. Above all, academia is responsible for producing tech-savvy and skilled graduates for the market. Universities can join with technology associations to capitalize on research and development so that indigenous software and digital public goods can be designed. This is the Triple Helix Model of Innovation, which takes into account a trio of academia-industry-government interactions. It can provide a comprehensive framework to pursue a new technological path of development.

Digital transformation does not happen in silos, and it is a multi-stakeholder effort. So we all have to collaborate and innovate. For me, this country does not have a growth problem, it has an innovation problem. Only value-creating innovations can sow the seed of a prosperous digital future for Pakistan.
Pakistan’s Digital Footprint

SNAPSHOT

TOTAL POPULATION
227.3 MILLION

INTERNET USERS
186.9 MILLION

ACTIVE SOCIAL MEDIA USERS
71.70 MILLION

CELLULAR MOBILE CONNECTIONS
82.90 MILLION

Source: Data Reportal, Digital 2022: Pakistan. This portal puts together data from a multitude of sources. All the data is as of February 2022. Read more at https://datareportal.com/reports/digital-2022-pakistan.

MOBILE MONEY ACCOUNT HOLDERS
6.9%
Female 0.8% Male 12.6%

DIGITAL FINANCE

MADE OR RECEIVED DIGITAL PAYMENTS
17.7%
Female 6.3% Male 29.2%

MADE A PURCHASE ON THE INTERNET IN THE PAST YEAR
0.9%
Female 0.5% Male 1.2%

USED ONLINE BANKING IN THE PAST YEAR
7.6%
Female 1.0% Male 13.8%

USED THE INTERNET TO PAY BILLS IN THE PAST YEAR
7.3%
Female 2.8% Male 11.5%
Disruption in Jobs and Skills
The Evolution of the Ecosystem

As political, economic, and environmental factors continue to evolve more rapidly than ever, it is inevitable that the world must evolve accordingly to ensure a holistic and sustainable future of work trajectory.

THOUGHT PIECE

Technology is changing the face of work at an alarming pace, and waves of advancement and demographic changes have led to increased prosperity, productivity, and job creation.

Asim Shehryar Husain
Chief Executive Officer
Ignite (National Technology Fund)

Inclusive Growth through an Innovation Ecosystem

Technology is changing the face of work at an alarming pace, and waves of advancement and demographic changes have led to increased prosperity, productivity, and job creation. Ignite performed comprehensive research to determine the direction of the future of work through multiple initiatives to engage with all key stakeholders. Owing to mass digitization, a large number of people have become marginalized. Providing opportunities to this marginalized segment through online freelancing can massively reduce unemployment.

Pakistan ranks 4th in the global freelance marketplace.¹

Building a robust innovation ecosystem in Pakistan for freelancing, startups, and entrepreneurship is critical for establishing a solid foundation for inclusive growth.

Startups and innovative projects must utilize the 4th industrial tech wave (Figure 1) to solve local problems and target global opportunities in health, education, energy, agriculture, telecom, finance, and other verticals. The national incubation centers across Pakistan nurture startups and engages them with investors and corporations. The country must prepare itself for a future of work shaped by technological development -

including ICT-enabled smart agriculture, education, health, transport, innovations in energy, a booming digital sphere fostering connectivity, climate change, demographic shifts; and globalisation.

Reskilling and Upskilling

To compete at the global level, it is imperative that skills match the demand. Instruments such as DigiSkills.pk², an online portal created to impart one million trainings over two years for new and existing freelancers in the country, are effective ways of reskilling and upskilling. The portal used the Learning Management System (LMS) accessible from anywhere, to deliver programs designed around 15 themes (Figure 2).

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² DigiSkills.pk has been established by Ignite.
Shifting Paradigms
Following COVID-19 and the recent floods catastrophe in the country, changes in how work will be performed over the next decade, influenced by technological, generational, social, and climatic shifts, affect three major dimensions of the future of work (Figure 3). The new realities created by these forces of change present us with complex questions including ethics around human-machine collaboration, how we plan for 50–60 year careers, and how we unleash organisations through a continuum of talent sources.

New realities created by the forces of change present us with complex ethical questions around human-machine collaboration, how we plan for 50–60 year careers, and how we unleash organisations through a continuum of talent sources.

Adopting or changing the culture is a huge concern when it comes to in-office and work-from-home policies for knowledge workers, and HR leaders suggest that the most challenging aspect of the hybrid strategy is adjusting the current culture to be supportive of the workforce. Each organisation is unique and hence requires a tailored sustainable working arrangement. Reinventing the future of work must bear in mind a variety of factors (Figure 4).


As political, economic, and environmental factors continue to evolve more rapidly than ever, it is inevitable that the world must evolve accordingly, at double the speed. For this transition to pan out, public and private entities must unite to form a comprehensive strategy that effectively utilizes the youth potential in the country, while ensuring a holistic, unified, and inclusive future of work trajectory.
The Future is Green Jobs

By Zehra Ali
Strategic Platform Leader - Circular Economy Solutions, Borealis (Austria)

Today, the interdependence between the environment, employment, and economic growth has reached an inflection point. From the inevitable loss triggered by a foreseeable environmental decline to a USD 10.1 trillion opportunity to reset the biodiversity crisis, decarbonize, and revitalize the economy via ‘nature positive solutions’ that will also create an additional 395 million jobs by 2030. Human capital is critical for the transition to a green economy, which also warrants a broader rethink of its role and what jobs it entails. In essence ‘green jobs’ can be defined as those that are aimed at improving environmental sustainability by making existing and traditional industries greener, helping conserve or restore the natural world, or creating employment in new clean sectors. The shift can already be seen across some sectors and the fight for talent is already underway. Platforms such as LinkedIn are already reporting that in countries like the United States, jobs related to renewables and the environment sector will exceed those of oil and gas as early as 2023. Investors and customers require businesses to be proactive in managing their environmental footprint and addressing the climate crisis. In parallel, employee loyalty and engagement are increasingly correlated with purposeful work, and with sustainability at the forefront of how companies operate.

If Pakistan is to change its predicament from being in the top ten countries impacted by climate change, it must accelerate the transition to a green economy. This will require significant investment, endorsement, and commitment from policy makers and businesses.

3. Pakistan is ranked 8th on the long-term Climate Risk Index (CRI).
4. Pakistan is ranked 156 out of 160 on the Green Economy Index which tracks progress on performance of 18 indicators across 4 sectors of climate change & social equity, sector decarbonisation, markets & ESG investment, and environmental health.

António Guterres
United Nations Secretary General
UN Climate Action Summit 2019

1.2 billion jobs or 40 percent of the world’s employment relies directly on a healthy and stable environment. Business cannot succeed on a planet that fails. Jobs cannot be sustained on a dying planet.

1. United Nations Secretary General António Guterres
2. LinkedIn Economic Graph, “Global Green Skills Report 2022.”
3. Pakistan is ranked 8th on the long-term Climate Risk Index (CRI).
The Fintech Leap

The leap towards the growing fintech ecosystem is even more imperative now as consumer behavior has shifted towards seamless adoption of digital products and services.

The financial services industry sits on the precipice of significant transformation. Changing customer expectations, technological innovation, global disruption, and new business models will propel a decade of change set to redefine the industry for good.

If we dive deep into what we are experiencing today, it is basically a multitude of burning platforms, followed by ‘Strategic Inflection Points’ – a term coined by Andy Grove (former founder and CEO, Intel), for a time when companies have to redefine their business models overnight or lose massive market share to competitors.

Taking COVID-19 as the ultimate burning platform, there was a 95 percent increase in consumer spending on e-commerce platforms, out of which 35 percent of the users were brand new to the digital economy. Furthermore, broadband usage in Pakistan jumped to 103 million subscribers amounting to 54 percent of the adult population. Mobile banking users have also grown by 42 percent, whereas Inter Bank Fund Transfers (IBFTs) have grown by 534 percent in volume and 434 percent in number through mobile banking applications alone over the last 2.5 years.

We are living through the ‘Great Reshuffle’ - a moment of change unlike anything seen before. This is the time where everyone is thinking and rethinking, leading to new partnerships, new regulations, and new distribution networks.

These new partnerships are quickly evolving in the banking industry. More than half the planet is unbanked, and 90 percent of small and medium enterprises (SMEs) are under-banked or unbanked. Almost three-quarters of the pie is vacant, and for banks to capture this opportunity, they must move away from vertically integrated silos towards horizontal integration by establishing platforms and partnering with pure-play fintech.

Embedded finance appears to be propelling a paradigm shift in the banking business model in the country. Embedded finance is currently leading the Baas/BaaP interplay in the industry, and with the advent of new technology such as artificial intelligence (AI), banks are now moving towards providing real-time contextual experiences for their customers. Moreover, digital technology complimented by mobility, radically lowers transaction costs in financial services and at a macroeconomic level, contributing to an increased gross domestic product (GDP) for Pakistan.

Similar transitions in agriculture and other fragmented supply chains will allow new-age players (Farmdar, Ricult etc.) to reduce points-of-value extraction through AI/data consolidation, and offer fierce competition to established structures.

Therefore, the leap towards the growing fintech ecosystem is even more imperative now as consumer behavior has shifted towards seamless adoption of digital products and services. This is the time to bridge the gap between the banked and unbanked systems. The future of the financial services industry truly lies in banking and fintech collaboration.
There are loads of opportunities if you have decent internet access, and an employer who is willing to support a productive work environment for individuals or teams. There are positive and negative impacts. The positives: we are creating environments for people to work where they can afford to live, or increase their earning power by finding work that pays more, while still living in their local environments. Online learning has really created an affordable marketplace to learn new skills, network with different peers and contacts, and allow individuals to create a more global presence for employment opportunities.

How does the future of work impact diversity and inclusivity? It also means that these conversations are in the mainstream, and we are empowering more people and organisations to think about what the future could mean. This then extends to conversations about wage growth, parental or sick leave, taking breaks, or exploring new career and entrepreneurial activities. Juggling remote work and in-person work may be a challenge, but I think there is an opportunity to do things differently. How do you view a ‘work day’ of the future? I think the biggest conversation within the ‘future of work’ space is built around remote working. I believe the ‘work day’ of the future will be very much like it should be today: rooted in choice. People and companies should have the choice to determine what models can work best, and it should allow people to have good options available to them.

There are times when working from home will, and can be suitable. There are times when teams need to meet face-to-face to get the job done. There are days when it might be best to have a hybrid of both. It is unfortunate that the conversation today, especially post COVID-19, has become a battle between working from home or coming to the office. This divide has resulted in some pretty fierce arguments between individuals, leadership, and organisations.

My hope is that there will be better conversations moving forward as we learn more about hybrid working models and how they can best help people with their productivity. Leadership in companies and organisations really has an opportunity to create working cultures that are formed out of real consultation with their workforce instead of simply directing people to conform to working styles that only suit a select few.

All tests the ability of people, teams, and organisations to ensure there is trust, connection, and knowledge sharing. I am optimistic that this will happen over time because we are only just now seeing such large populations globally deal with this opportunity, as well as the challenges that come out of this journey. How do you view a ‘work day’ of the future? I think the biggest conversation within the ‘future of work’ space is built around remote working. I believe the ‘work day’ of the future will be very much like it should be today: rooted in choice. People and companies should have the choice to determine what models can work best, and it should allow people to have good options available to them.

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Are employers and employees ready for the future of work models and dynamics? It is a mixed bag, really. There are some companies and organisations that make a proactive effort to rework the future of work. They are experimenting, making mistakes, and then adjusting to find an organisational setup that works best for their people. It is a focus point for the types of businesses or groups they are trying to create and run.

Then, there are employers who had no choice but to react to the future of work thinking in the span of a few months back in 2020, when COVID-19 hit. Even though remote work is a concept that has been in action or researched for decades, it really only hit mainstream understanding over the past two years. How does the future of work impact diversity and inclusivity? It also means that these conversations are in the mainstream, and we are empowering more people and organisations to think about what the future could mean.

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There are positive and negative impacts. The positives: we are creating environments for people to work where they can afford to live, or increase their earning power by finding work that pays more, while still living in their local environments. This then extends to conversations about wage growth, parental or sick leave, taking breaks, or exploring new career and entrepreneurial activities.

There are loads of opportunities if you have decent internet access, and an employer who is willing to support a productive work environment for individuals or teams. The negative aspects are mostly centred around access and inclusion. So if you do not have access to a good internet connection, a space to work that might not be your home, or you have to navigate disability challenges - then you are limited in what can be on offer.

What is needed to align present work practices and skill sets, with those required for the future? This is a hard one because we cannot predict the future, but we can prepare for what comes our way. For employers, the talent pool has also gone global. Companies can find highly skilled or emerging talent in all sorts of places worldwide, and they can look beyond their local physical environment.
Nurturing Digital Talent

"The power of e-commerce is an opportunity that must be fully seized."

Contributed by: Daraz Pakistan

Since 2012, Daraz Pakistan, one of the leading e-commerce platforms in Pakistan, has grown to about 4000 workers. Given the e-commerce sector is a highly driven industry, and following the COVID-19 pandemic, it has become even more challenging to find the right talent with adequate competencies to meet business needs.

To address this discrepancy, Daraz has implemented initiatives that help hire, groom, and retain talent in the company. Hiring is no longer a simple feat, especially to meet the skills needed for the future workplace. New hiring strategies are required for the ‘new normal’, and Daraz brings hirings to potential candidates through open houses and career fairs, rather than waiting for applications to come in.

To nurture the next generation of leaders, Daraz launched the 18-month Daraz Future Leaders Programme (DFLP) in 2018. As demand for tech talent continues to be a global challenge, the DFLP has expanded to groom the next batch of data science leaders. Since 2018, Daraz has trained over 80 future leaders. Likewise, to build future-ready skills across Daraz’s workforce, team trainings in data analytics and personal branding are also a usual practice.

As Daraz grows, it does so while remaining extremely cautious about inclusivity and diversity. For example, managers were encouraged to hire women in roles in operations traditionally conducted by men. As a business that is focused on diversity and inclusion, Daraz Pakistan launched the ‘Women of Daraz’ initiative to create a working environment that enables women to progress professionally. This initiative revolves around providing work flexibility to mothers, as well as childcare allowances and subsidized office commute. Beyond these benefits, Daraz commits to offering women more opportunities in their professional lives.

Cross-functional mission assignments allow women to take on projects in different departments/functions to expand their knowledge base. In addition, Daraz offers skills development initiatives such as mentorship, training, and certification programmes to help women accelerate their careers. In 2021, Daraz Pakistan’s ‘Women of Daraz’ efforts were recognized by the IFC and the Pakistan Business Council as the Employer of Choice for Gender Diversity Awards.

Retention plays a crucial role at Daraz Pakistan. Besides offering hybrid work arrangements and flexible working hours in transitioning towards future of work models, Daraz motivates its employees through recognition certificates and gift cards as acknowledgments for their efforts and loyalty.

An extension of Daraz is the community of sellers and entrepreneurs growing Pakistan’s e-commerce ecosystem. The company believes in education as a critical enabler to uplift the local community, and prioritizes it by making education accessible to everyone. The company launched Daraz University, which equips entrepreneurs with the skills they need to unlock their business online. The online learning centre provides personalized and localized courses covering all areas of e-commerce, and allows sellers to gain free certification from leading universities. Daraz also empowers women sellers by providing women with targeted training. The efforts have paid off, and over 4000 women entrepreneurs have onboarded the platform.

Through these initiatives, Daraz develops the skills and employability of its employees and contributes to an inclusive digital society where all Pakistanis can benefit from the growing digital economy.

"Through its 'Daraz Future Leaders Programme', the company continues to nurture the next batch of future data science leaders in efforts to bridge the demand for tech talent."

"Hiring is no longer a simple feat, especially to meet the skills needed for the future workplace."

"Through its Daraz University initiative, the company effectively bridged the distance between customers' demands and Daraz's product offerings."

"Through these initiatives, Daraz develops the skills and employability of its employees and contributes to an inclusive digital society where all Pakistanis can benefit from the growing digital economy."

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Integrating Innovation and Automation

We are currently in the midst of a rapid digital transformation due to the unexpected rise in remote working, and the shift in customer preferences towards real-time data.

Technology drives the economy, captivates ideas, and holds out incredible possibilities. As technology changes our personal lives, it also changes work. For generations, economic change has replaced products, jobs, and industries with innovative new models. Pakistan’s economy has transitioned from agrarian to industrial, service to digital, and with each evolution, Pakistan has prospered even as it battled with the profound challenges of change.

The COVID-19 pandemic has significantly accelerated this trend towards digital over the past two years. We are currently in the midst of a rapid digital transformation due to the unexpected rise in remote working and the shift in customer preferences toward real-time data. Businesses that previously had the luxury of months or even years to digitally change are now forced to offer real-time service and support online, at scale. Simultaneously, every industry is compelled to depend more heavily on technology to promote productivity and manage rising customer demands.

Construction, agriculture, field service, manufacturing, energy, financial institutions, logistics and transportation, and many others. All these industries have one thing in common, they all need to connect and automate their operations, monitor their assets for efficient and optimum utilization, require software solutions for ready reports and decision ease, and are all the while enjoying incremental savings on many fronts. However, automation must be done carefully without compromising safety, productivity, or profitability.

In the service industry, to stay ahead of the competition, the most important factors are speed and convenience. Speed means reduced turn-around time for customers, faster services, reaching the desired result in the shortest possible time, and that too in the most convenient manner possible. Automation acts as an enabler for these processes.

Today’s world is one of big data analysis. Technology has enabled us to be acquainted with multiple permutations and combinations of data which provide very pertinent information for businesses, analyzing all sorts of trends to support future decisions.

By
Syed Salman Hussain
Group Chief Executive Officer, iTechnotlogi Group of Companies
While some businesses use technology to progressively improve traditional systems and processes, others are introducing entirely new consumer and employee experiences that create additional monetary advantages. The most progressive businesses are utilizing automation and innovation as competitive differentiators to not only keep their current customers, but also win new ones. Presently, automation and innovation are some of the most effective ways to accelerate time to value and fast-track change, while fixing problems where existing processes and procedures could not scale to meet rising demand.

Digital adoption is being fueled by the prevalence of IoT connectivity, vehicle intelligence, improvements in optical technology, artificial intelligence, and software as the backbone of robust process automation and efficiency. We believe a profound digital shift is about to sweep over the field of industrial operations. These are the ways we are investing in technology to deliver better outcomes for our customers, our employees, our shareholders, and the market in general.

“Presently, automation and innovation are some of the most effective ways to accelerate time to value and fast-track change, while fixing problems where existing processes and procedures could not scale to meet rising demand.”

Pandafly is the first commercial Pakistan-made drone for food delivery.

Source: Deloitte

**Is the Asia-Pacific Region Ready for Automation?**

Automation preparedness score in selected countries in the Asia-Pacific region (2021)

- Australia: 72%
- Singapore: 70%
- Japan: 69%
- South Korea: 66%
- Thailand: 61%
- Philippines: 56%
- India: 44%
- Pakistan: 40%

Source: Deloitte

Pandafly is the first commercial Pakistani-made drone for food delivery.
The key to making any new paradigm or innovation widely adopted is to remove friction within the overall system, and create as much resonance as possible with the underlying drivers of a particular sector. Today, it is hard to understand the gig economy without understanding the underlying factors that drive it and how, in turn, they manifest the same fundamental principles in other ways, such as remote work, part-time engagements, hybrid workplaces, and distributed teams. These phenomena have truly started to take hold and permeate the global economic system in recent years, whether that may be through new companies, large conglomerates, or informal freelance groups.

The recent proliferation of the gig economy has established that contrary to conventional wisdom, entire organisations can operate remotely and effectively. The COVID-19 pandemic has forced corporations to arrive at the conclusion that remote, distributed, and hybrid work is viable and in some cases, very attractive possibility across all industries for the average knowledge worker. Regardless of employee demographics, entire organisations have worked remotely to some extent since the start of 2020, primed to accommodate the influx of the new generation of talent, which cites flexibility as an essential feature for their well-being and motivation. This worldwide sociological shift has clarified a few things: contrary to conventional wisdom, entire organisations can operate remotely and effectively. Additionally, this helps the workforce save on time and money lost in commuting long distances. Consequently, a global talent pool is now easily accessible to companies that previously came with a high overhead cost. This sort of flexibility has resulted in companies optimizing their permanent payrolls while at the same time allowing their talent to explore other opportunities for remote work in order to maximize their engagement and income sources.

At its core, the spirit of the gig economy is fundamentally entrepreneurial. Generating their own economic opportunities, workers in the gig economy are becoming micro-entrepreneurs in their own right. Through fostering the gig economy, we are really creating hotbeds for innovation and future enterprises to take shape. The freeflow of new technology, collaboration across borders, and practical insight into different markets, sets up an exciting foundation for future growth. What’s even more interesting, is that the gig economy has a very low failure rate since the aim is not to build multi-billion dollar enterprises in a day. A product or a company that may take the formal structure from this exercise, may propel the whole industry forward monumentally—a high-return investment with no downside.

From an infrastructural point of view, the last decade or so has also seen a widespread proliferation of coworking spaces the world over. In Pakistan, coworking spaces began to open up in 2016. Today, there are hundreds of coworking facilities in every metropolitan city. This sudden rise has mostly been demand-driven, as businesses—old and new—have pivoted towards shared workspaces that enable their teams to interact and collaborate with each other constructively: in-person, remotely, or both. After having had a long, hard look at the corporate expense sheet, organizations will continue to opt for more flexible solutions for their office infrastructure, potentially taking shape...
The overall mainstreaming of the gig economy and remote work is also going to produce a step-change in the quality of the workforce available, as it will enable a purely meritocratic spike in employability. Regions, genders, marginalized groups, and entire economies that could previously not compete on the basis of their location, mobility or marginalization, will suddenly find themselves in a position to be able to contribute. On the flip side, companies will find themselves able to employ such talent and benefit from their unique expertise, optimizing the cost of employment and encouraging a potentially high rate of retention significantly impacting their bottom line. All in all, this new equilibrium is going to be a huge positive step forward for all stakeholders and will steadfastly remain in place. At least until the next big jolt, when we are forced to re-evaluate everything.

In the form of large companies setting up clusters of office spaces in various locations across the cities the bulk of their team resides in. As a result, businesses will be able to optimize cost, minimize capital tied up in infrastructure, keep expenses dynamic in case of growth or consolidation, and seek out the best middle ground for their team to curtail their commute, using their time and energy more effectively.

From a consumer standpoint, the gig economy offers a kind of cost optimization that cannot be conceived in more traditional structures. The elimination of geographical constraints results in work being done by the most suitable resources at the ideal cost possible. Furthermore, global demand also ensures local skills and expertise continue to grow and evolve. This push towards, and the influx of new skills, when mingled with local contexts, drives innovation in exciting unforeseeable ways.
Diving into the Metaverse

By Dr. Imran Batada
Chief Technology Officer and Director
Centre of Information Technology, IoBM.

Metaverse is a collection of virtual worlds built using different technologies. The beauty of it lies in how normal people can contribute to it, and participate in it. The metaverse is now increasingly transitioning to a more global nature, without any restrictions, with ownership resting in the hands of multiple stakeholders. In essence, the metaverse is like a mirror to the real world. It can be used to travel across different networks of virtual landscapes without a passport, and, right from the comfort of your home! Blockchain technology makes it possible for users to manifest as an avatar in the metaverse. There are costs associated with entry into each virtual world. The metaverse uses cryptocurrencies as its form of finance, and each virtual world owns a distinct one.

The Sky is the Limit

The metaverse, if used and adapted wisely and in a timely manner, can open an array of possibilities for Pakistan. The following sectors can hugely benefit from the potential of this new universe, while also unleashing employment opportunities:

- **Engineering and Architecture**
  Engineers will play a key role in crafting the virtual world along with architects, through a very detail oriented approach that will completely mimic real spaces.

- **Retail**
  The invention of online stores made it easier for people to make purchases without physically going to one. Digital currency in the metaverse will further aid in the development of the virtual economy, products, and services. As a result, purchases will be made online and delivered physically.

- **Agriculture**
  The metaverse can aid research and development in the sector thereby allowing a foresight exercise for future practices. Farmers will be able to estimate their next harvest time, explore the efficacy of tools before making the purchases, use augmented reality tech to monitor their plants, animals, and data, undertake virtual surveys to check soils, appropriate crops, and crop production etc.

- **Medical**
  The use of augmented and virtual realities will make it easier for doctors to carry out certain surgeries, and for medical students to learn how procedures are done in real-time. This will bring transparency and support the onset of new inventions in the healthcare industry.

- **Education**
  The metaverse will increase immersive learning through the use of virtual reality (VR) headsets. These headsets will support detail oriented learning, especially in fields that require practical demonstrations.

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More research is needed to develop safe protocols in the metaverse, especially around health safety with regards to augmented reality glasses and virtual reality headsets.

The metaverse is the future of the internet. With the massive social media platform Facebook shifting to the metaverse, the increasing power of this virtual reality remains clear. Moreover, it is breeding the rise of the digital economy. Giants like Meta and Microsoft are building tech as infrastructure to create a better virtual world.

While this universe provides a limitless array of opportunities, it comes with several challenges. For one, the promotion of the use of virtual reality headsets may not be right. This is because most people experience motion sickness or physical pain after prolonged wearing. This is the same for augmented reality glasses. Therefore, more research is needed to develop safety protocols and practices in this alternate universe.

Metaverse may have a huge impact on the growth of the digital economy. It is estimated that by 2030, the digital economy will be at USD 700 billion. However, this is only with the right investments to increase the economic and social growth of Pakistan. For it to truly venture out into the metaverse, Pakistan must upskill its online labour force and educate the masses on the concept, as well as possibilities.

1. This is not an exhaustive list of industries/sectors that can benefit from the metaverse.

Travel the world, without a passport, and from the comfort of your own home! This is the beauty of the metaverse.
The Asia-Pacific Horizon: Transformation, Innovation, and Globalisation

The future of work can enable job-rich and sustainable inclusive growth.

By Devika Iyer
Economic Policy Specialist – Employment
Inclusive Growth Team
UNDP Regional Hub for Asia-Pacific

The future of work is being shaped by two main transformations: the digital transition linked to the emergence of new technologies, and the green transition impelled by climate change. The convergence of new and emerging technological breakthroughs is fueling the potential for automation. The pursuit of increased productivity, cost optimisation, and improved quality of goods and services is driving the development and adoption of new technologies in the workplace.

Estimates based on the potential of automating occupations indicate that a significant percentage of jobs could be automated in the coming years. Forecasts for the five largest economies in Asia-Pacific suggest that by 2040, 63 million jobs are expected to be lost to automation, with more than 247 million jobs expected to be at risk across industries more susceptible to automation, including construction and agriculture.¹ Concern about job loss or the inability to find one is also mounting. A World Values Survey found that almost two thirds of respondents in the region worry about losing their job or not finding one (Figure 1). Almost 82 percent of survey respondents in Pakistan indicated that they are worried. Overall, among those employed, the worry about job loss is significantly higher among unskilled, semi-skilled, and agricultural workers.

With increases in demand for skilled labour and wage premiums for skilled workers as automation progresses, medium- and low-skilled workers will be left behind, including those in the informal economy. Even among high-performance countries in the region, the low skill level poses a challenge with up to 40 percent of the population lacking basic ICT skills.² This figure is more than 90 percent in Pakistan.

The lack of skills to support the green transition could also exacerbate inequality. As countries adopt measures to support the green transition, the sectors that will be most impacted employ about 52 percent of the workforce.³ A green transition in the agriculture sector, for instance, could result in 100 million job losses in the region.⁴ Among workers in the agricultural sector, over 75 percent have a basic or below basic level of education which can impede the adoption of green technologies and acquisition of relevant skills.⁵

1. Forrester Research Inc. (2020), “Future Of Jobs Forecast, 2020 To 2040 (India, China, South Korea, Australia, And Japan).”
5. Ibid.
Evolving technologies have connected people to jobs and income opportunities in innovative ways. The rise of digital platform-enabled companies has been transformative, fundamentally changing traditional business models.

Digital transition can have tremendous impact on growth, export, and employment: analyses indicate that if the global digital sector expands such that its size is 20 percent higher than the baseline by 2025, global GDP will increase by about USD 4.3 trillion per year.

While there are challenges related to the future of work which need to be addressed, opportunities abound. Evolving technologies have connected people to jobs and income opportunities in innovative ways. The rise of digital platform-enabled companies has been transformative, fundamentally changing traditional business models. These platforms have enabled micro, small, and medium-sized enterprises (MSMEs) to conduct their business online, facilitated global reach and access to new markets, and helped them scale faster and at lower cost than traditional firms. The Chinese company Alibaba, for instance, reached one million platform users in two years, amassed more than nine million online merchants, and earned annual sales of USD 700 billion in 15 years. Digital platforms also contribute to the principle of leaving no one behind. For instance, inclusive credit programs, agriculture extension services, education, and health initiatives enabled by digital platforms create extensive opportunities for the promotion of sustainable and inclusive growth within the region. The use of telehealth, for example, accelerated during COVID-19, and its adoption is expected to grow.

The digital transition can have a tremendous impact on growth, export, and employment. Simulations by Asian Development Bank (ADB) show that if the global digital sector expands such that its size is 20 percent higher than the baseline by 2025, global GDP will increase by about USD 4.3 trillion per year. Over 40 percent of this increase will be accounted for by Asia-Pacific; where output will increase by more than USD 17 trillion annually. Employment in the region is also projected to increase by more than 65 million annually from baseline levels. To ensure that everyone reaps the benefits of the future of work, countries need to: 1) improve the quality of the education system, including through upgrading the use of technology, strengthening curricula in science, technology, engineering, and mathematics (STEM), and increasing investments in TVET to support the skilling of the workforce. In addition to technical skills, support should be provided to strengthen core skills, including basic digital and green skills, and social and emotional, cognitive, and metacognitive skills transferable across occupations and professions, as well as between low- and high-level jobs. Skills programs need to specifically target marginalized groups, including women and informal workers; 2) support life-long learning, including through e-platforms, to enable workers to adapt to technological change; 3) improve access to digital infrastructure, including affordable and better quality high-speed broadband service in both urban and rural areas; 4) include labour standards and employment protection measures in future of work plans, and update regulations and legislation accordingly; and 5) support MSMEs transition to a digital and green economy through an enabling environment that fosters innovation, access to finance and credit, business development, and access to markets.

What is needed to fully reap the benefits of the future of work?

- Support the transition of MSMEs to a digital and green economy.
- Improve access to digital infrastructure.
- Support life-long learning through e-platforms and adaption to technology.
- Including focus on technical, vocational, and core skills.
- Include labour standards and employment protection measures in future of work plans.

Support the transition of MSMEs to a digital and green economy.

Support life-long learning through e-platforms and adaption to technology.

Improving the quality of the education system, including focus on technical, vocational, and core skills.

Include labour standards and employment protection measures in future of work plans.

APAC companies are looking to bounce back post-pandemic by adopting automation tools.


Going Remote

Hybrid working facilitated by the right technological infrastructure has proven to be the game changer at Careem.

Contributed by: Careem Pakistan

As a ‘remote-first’ company, Careem has been able to adapt to the new normal in a mission to simplify the lives of its people.

Following COVID-19, Careem has introduced several transitioning modalities to adapt to the new normal. From hybrid working modalities to re-designing spaces that facilitate collaboration and team building while also providing flexible workspaces for individual colleagues, all are being actively practiced in the organization. We truly believe that the new normal requires new protocols and practices. These practices must be incredibly flexible — for instance, working from anywhere around the globe for up to two months is also a new policy that has been introduced in the organisation. These changes have added agility and flexibility whilst enabling cost-cutting.

Not only that, as a remote-first company, Careem is able to hire world-class talent from across the world without having to worry about travel or relocation expenses. This allows people to work on their own hours, beat the traffic (especially at peak timing), be close to their families, and enjoy a better work-life balance while continuing to create an impact and perform their jobs. Careem is on a mission to simplify and improve the lives of people, beginning right with its own employees.

Being one of the fastest-growing tech companies in the region, Careem has realised its potential to support an initiative like remote-first. The impacts of shifting to this model of work have been tremendously positive: overall engagement levels have increased since being fully remote, and are higher than they were in early 2020, and continue to show an upward trend. Peer relationship scores are the highest they have been despite limited face-to-face interactions. Self-reported productivity continues to increase, and remote onboarding endeavours have been favourable. In the year 2022, as we move towards a post-COVID era, Careem has announced the official launch of phase two of its Remote-First strategy, which will build on the success of the first phase of the initiative, while expanding to cover the need of employees that prefer to meet in person for brainstorming and target-setting sessions. This includes attending the office physically once a week, when staff attendance is highest. People engagement teams have taken additional steps to make this office day full of engaging activities, ensuring maximum collaboration amongst teams.

We truly believe in the power of empowering people, and hybrid working, facilitated by the right technological infrastructure, has proven to be the game changer at Careem.
What Women Want: Navigating the New Normal

The one positive that seems to have emerged post COVID-19 is the disruption to the ‘nine-to-five’ work culture with endless meetings, long working hours, caught in gridlock during peak traffic hours, all replaced with hybrid work models.

As scientists ambled to tame the surge of the pandemic, employers came up with quick, out-of-the-box solutions for employees to break free from traditional work norms.

“The pandemic forced us to reimagine our ways of working as there was no blueprint for navigating the challenges brought by it,” said Hafsa Shamsie, managing director at a pharmaceutical company.

During the pandemic, she claimed, her company was able to quickly move towards a hundred percent work-from-home (WFH) model without affecting the business, health, and safety needs of the employees thanks to its global information technology infrastructure.

For working women especially, the work-life balance (WLB) turned topsy-turvy at the beginning of the pandemic. In particular, mothers with young children said they found it exhausting to juggle constant babysitting, keeping up with the online school regimen of their kids, and carrying out domestic chores that were previously relegated to hired domestic help.

But once life normalized (almost) and school started, day-care centres opened, and maids returned to work, many women working in offices contemplated continuing with the hybrid and flexi-work schedules. Although both men and women enjoy flexi-hours, more women working in multinational companies (MNCs), the financial sector, NGOs and INGOs covet hybrid or flexi-hours saying they now know what it is like to be less tired by the end of the week.

It is clear to Mehreen Ansari, a human resources manager, that there is no going back to the pre-COVID-19 work culture, at least “not for the next few years,” she predicts, for men and women both. “Not only has it led to a huge mindset shift of both employees and employers, it has provided women with an opportunity to join the workforce,” she added.

“As scientists ambled to tame the surge of the pandemic, employers came up with quick, out-of-the-box solutions for employees to break free from traditional work norms.

For journalist Sabina Qazi, flexi-hours has allowed her space to manage both work and home. A mother of three young kids, she admits that with ‘intermittent women domestic’ help, going to ‘office only to attend meetings and check in with the team’ works best for her. “Everything else can be done from home,” she said.

The same was endorsed by Amneh Shaikh Farooqui, Chief Executive Officer of a brand that connects local artisans and small businesses to the global market. Flexi-hours make “juggling of responsibilities, domestic and otherwise, easier,” she said.

It seems the nine-to-five work model will be a thing of the past.

By Zofeen T. Ebrahim
Independent Journalist
“Saves on energy and fuel, and is good for the health of employees as well,” pointed out Asma Ibrahim, who works at a fully digitized government institution in Karachi, which is experimenting with keeping two designated days as WFH, till September, to see if the arrangement works.

Lawyer Ayla Baig’s working hours are from 9:30 am to 7:00 pm throughout the week, with Friday as WFH. But she continues to work way past midnight after dinner with family. Heading the legal department of an MNC, she prefers the hybrid work model as it is less tiring. “I focus better at home as I’m alone and can supervise home chores as well.”

But the downside to the flexi-hours and hybrid style of working, pointed out Lahore-based lawyer Aliya Khan, also a young mother, that “the work never ends.”

“Saves on energy and fuel, and is good for the health of employees as well,” pointed out Hafsa Shamsie, who works at a fully digitized government institution in Karachi, which is experimenting with keeping two designated days as WFH, till September, to see if the arrangement works.

There are many, she said, including physical and mental wellbeing. “The downside to flexible hours is that the work never ends.”

According to financial expert, Ali Aamir, a former banker, the work culture in Pakistan has not transformed to the extent it has in the west. “The cost of office space is not prohibitive in Pakistan as it is there, so companies were less concerned on that front.” Further, he said, offices generally provide a better working environment, including uninterrupted power supply, air-conditioning, internet connectivity, better seating, and maybe even subsidized meals and endless cups of tea on the house.

A senior human resource manager at a leading company in Karachi foresees the hybrid working model as most suited to Pakistani companies. “A couple of days at home, rest at the office” is a good balance, according to him. But he emphasized that “This should be regulated, and employees should not be allowed to come up with their own schedules.”

“Focus should be on deliverables, as opposed to physical presence.”

Endorsing the same, Rashida Dohad, executive director at an Islamabad-based non-profit, said, “Flexi-hours but with fixed core timings, say between 11:00 to 3:00 pm for team-work, and one day allocated for WFH.” But for Tanya Khan, a water security expert, “Focus should be on deliverables, as opposed to physical presence,” with in-person meetings scheduled with stakeholders whenever necessary.

But how do employers surmount the trust issue? According to Humera Ahmed, senior human resource professional, there has been a significant mindset shift in the last two years. “Companies are realizing that the WFH and hybrid models are not only possible, but very productive when outcomes of employees are clearly defined.”

At the same time, she said, during and after the pandemic, the mental wellbeing of employees is taken seriously. “Many companies have started offering well-being programmes and are creating emotional health awareness. “The availability of telemedicine has enabled employees easy access to confidential counselling sessions and health helplines.”

For some, a laptop and a steady wifi connection is all that is needed to get started from distant shores, or in a park, or the beach. Studies have shown that working outside and closer to nature is healthier, and allows one to be more creative or focused. Exposure to nature makes people happier, empathetic, and trustworthy, qualities employers would like their employees to have. But if that is not possible, simply working from home and being near family is good too.

““With the surge in digitisation, it makes sense to reduce the eight-hour working day.”

“Flexible working saves on energy and fuel, and is good for the health of employees.”

No doubt today’s digital age offers undeniable perks. “From digitizing the relationship between the business and the customer, we are now digitizing the relationship between the employer and the employee,” said Shamsie. Organizations, she said, which capitalised on the “new working model” will be better equipped to “retain and attract talent.”

And precisely because of digitization, many say, it makes sense to reduce the eight-hour working day too.

Uzma Yaqoob, executive director at a non-profit, is rooting for a five-hour working day (excluding tea and lunch breaks), four days a week, but insists employees should come to work.

Researcher Zeenia Shaukat, director of a Karachi-based think-tank, favours “a five-hour working day, five days a week, with all meetings taking place on one day only.”

For some, a laptop and a steady wifi connection is all that is needed to get started from distant shores, or in a park, or the beach. Studies have shown that working outside and closer to nature is healthier, and allows one to be more creative or focused. Exposure to nature makes people happier, empathetic, and trustworthy, qualities employers would like their employees to have. But if that is not possible, simply working from home and being near family is good too.
And the need is dire. Pakistanis are finding it increasingly difficult to overcome limitations imposed by biases against their social identities, perpetuating inequality throughout generations. In conjunction with negative cultural perceptions, people groups such as persons with disabilities, ethnic and religious minorities, gender minorities, undocumented persons, and refugees, find additional barriers to decent employment because of insufficient acknowledgment by the National Database and Registration Authority (NADRA), and the Pakistan Bureau of Statistics. In turn, stereotypes and stigma against them continue to persist, which enables a cyclical disposition to poverty and ostracization.

On the other hand, for minority groups such as people with disabilities, quota systems are implemented at the federal and provincial levels to facilitate their formal employment. However, due to stigma against disabilities as well as failure on part of regulators to recognize the full range of disabilities that exist, companies find it very challenging to identify and retain employees. Sindh mandates a higher quota of persons with disabilities – five percent as opposed to the federally-mandated two percent– yet as of 2021, NADRA recorded less than 70,000 people in the province to fulfill the legal requirement, to say nothing of their suitability to the roles available.

The Urgency of Diverse Workspaces

The urgency of diversity has been recognized in Pakistan; some overarching strategies are currently underway, such as sensitization training, inclusive messaging, and infrastructure support to facilitate the productivity and well-being of employees. The future should be focused on adding nuance to our understanding of the needs of Pakistan’s citizenry, and reporting on the progress and challenges faced by the formal sector in complying with the law. Otherwise, formulating a way forward will remain impossible because what needs to be addressed has not been measured, recognized, and incorporated by businesses in Pakistan.
Technological progress is key to the economic growth and prosperity of Pakistan – a laggard in the domain of science and innovation. Sheer apathy of the state and relevant public agencies is primarily responsible for preventing Pakistan’s scientific progress and developing the requisite manpower that can utilize technological advances. Resultantly, Pakistan’s workforce, in general, is ill-equipped for the effective use of modern-day technologies that can deliver value at the workplace and produce superior goods and services.

A major challenge for the state of Pakistan will be to overcome the bureaucratic inertia in the Ministry of Science and Technology, which has led to the paradigmatic shift in the technology and innovation policy of the country. The political leadership needs to assign due importance to the Ministry and place professionals along with strong managers, on merit within the Ministry and its subordinate institutions.

A well-crafted technology and innovation policy with a robust and resilient implementation plan is the need of the hour in Pakistan. The foremost objective of this policy should be the redesigning of the knowledge infrastructure of the country, especially universities – public and private – operating in the areas of science, technology, engineering, and mathematics. Public finance needs to be pumped into higher education institutes to develop a future-ready workforce with the right set of skills. Government should also act as a bridge between the universities and the private sector to bring them closer. This will help universities churn out graduates with industry relevant skills for not only adopting modern technologies, but also reverse engineering them for local production and consumption.

The political leadership needs to assign due importance to the Ministry and place professionals along with strong managers, on merit within the Ministry and its subordinate institutions. Unfortunately, focus on adoption and transition towards sci-tech has been missing from the agendas of any of the past three democratically elected governments. Pakistan’s future is closely linked to fast progress in science and technology, a dream that cannot be achieved without an appropriate innovation policy framework.
The informal labour industry in Pakistan is massive. The informal economy is neither taxed nor monitored by any government entity. A large part of the informal economy is the care industry in Pakistan. This includes family labour, which is neither paid nor attributed due recognition.

The informal sector in Pakistan is estimated to employ over 20 million home-based workers, of which 12 million are women. There are no laws to protect home-based workers in Pakistan. The country has not ratified the ILO Convention C177. Home-based workers contributed almost PKR 400 billion through their wages to the economy, 65 percent of it came from women.¹ This amount is nearly 3.8 percent of the GDP.

There are various forms of labour, including paid, unpaid, formal, and informal. In unpaid family labour, the 'payment' is made in kind (e.g. remuneration for cooking, cleaning, care work of the family etc). Unpaid care work does not receive any recognition in the national economy. Women and children are largely the ones handling most of the work.

There is an urgent need to develop a legal framework for informal work, including the care economy.

¹ As of 2016

“ By Farhat Parveen
Executive Director
National Organisation for Working Communities

The irony is that work that is paid when done outside the house – for instance cooking and cleaning – is not paid when done by family members inside the house. The unpaid family labour makes the largest share of the informal economy. There is a gender dimension to it too; if a woman does cooking and cleaning, she will be paid much less than the man.

Another form of unpaid labour comprises of the family working for the head of the household, usually a man. This includes work at a brick kiln, agriculture labour etc. Only the head of the house receives remuneration in this form of work, despite the entire family working.
A free workers’ representative union is essential for the implementation of labour conventions and constitutional guarantees.

Informal sector work. At present, care work or informal labour comes without contracts and rights. The main purpose remains to earn as much as possible, sometimes at the expense of the health and wellbeing of the worker. Even in instances where contracts are given to informal workers, they fail to define the responsibilities of the employer. Moreover, several workers in formal establishments are also not issued contracts; instead, they are simply issued duty cards for entry and exit. Such type of informal work is called sub-contract, piece rate, or daily wage work. These workers, despite working at a formal workplace, cannot demand social security, organization, and equal rights.

With digitalization witnessing a boom, the space for work opportunities has drastically increased. However, even in such instances, security of employment and payment is not guaranteed. Since the mode of production is very new, therefore, there is a need to develop a legal framework for it.

Being a signatory to several UN Conventions on labour rights, Pakistan must guarantee fair and equal rights to all its labour force. At the time of independence, Pakistan had inherited the Trade Union Act 1926, which was formulated by Quaid-e Azam Muhammad Ali Jinnah. The Trade Union Act 1926 allowed workers to form unions without any restrictions. This has been reversed with the introduction of the Industrial Relations Ordinance 1969. The law was initiated and enforced by the first martial law regime in Pakistan. Democratic governments have done very little to ensure the right to organize and collectively bargain.

What does the future of informal work in Pakistan require?

A free workers’ representative union is essential for the implementation of labour conventions and constitutional guarantees. Presently, only a minority of permanent workers recognized by their employers are liable to form a union and legally undertake collective bargaining.

The state must play a role to regulate the unregulated sections of the labour market. If data of all workers including informal and unpaid labour could be compiled on a single database, it could grant workers a recognition that may be used to extend labour rights, including social security and the right to organise and bargain.
The Entrepreneurial Ecosystem
Pakistani startups remain a rare bright spot for the country amidst the political uncertainty, macroeconomic challenges, and the floods disaster.

By Aatif Awan
Founder and Managing Partner
Indus Valley Capital

Just a few years ago, Pakistani startups were raising a meager USD 10 million in Venture Capital (VC) annually. In 2019, nobody would have believed you if you insisted that top-tier VCs would soon be investing in Pakistan, or that a Pakistani startup could raise USD 100M+ in follow-on funding, or that a Pakistani company would be bought by a publicly listed United States (US) firm in a major exit. Things started changing in 2019 as founders and VCs alike began to realize the potential of the Pakistani market. Since then, VC funding for startups has grown exponentially.

Pakistani startups raised USD 500+ million in VC funding in the 12 months ending in March 2022, more than they have raised in all prior years combined. Many top global investors, including Sequoia, Kleiner Perkins, First Round, Tiger Global, Prosus, and Dragoneer have already invested in Pakistan. As have companies like Stripe, Visa, Flexport, and Nubank, and the founders of Twitter, DoorDash, PayPal, Rappi, and Plaid. Not one but two Pakistani startups raised USD 100+ million in follow-on funding. Cloudways, a subsidiary of Pakistan’s Gaditek group, was acquired for USD 350 million by US-based Digital Ocean.

This transformation is already happening in many ways. Hundreds of thousands of merchants order their inventory online via mobile apps from startups like Bazaar, Dastgyr, Jugnu, Retailo, and Tajir. Startups like Nayapay, Sadapay, and DBank are challenging traditional banks with much larger balance sheets due to their superior user experience. BridgeLinx and TruckItIn are organizing a deeply fragmented b2b logistics industry to provide businesses with reliable freight operations. Similar stories of transformation are playing in healthcare, education, shopping, transportation, and other industries.

As the winners emerge in these verticals and scale up, they will attract even more venture capital to the country. As the competition and innovation driven by startups will lead to a more efficient, productive, and larger economy.
virtuous cycle continues, we expect to see more than a billion dollars in annual VC funding in Pakistan by 2026, growing 100-fold in less than a decade. With more capital being available, we will see even more founders take on a wider array of problems and inefficiencies. The competition and innovation driven by startups will lead to a more efficient, productive, and larger economy.

The halo effect from the rise of startups will benefit Pakistan in a few other ways as well. The validation from top-tier VCs investing in Pakistan and the success stories of startups will improve the country’s image globally. It will create more business for the country’s software services firms, freelancers, and tech talent wanting to work remotely for foreign companies. All of these generate positive cash flows in foreign currency, thus improving the current account deficit which remains a gating factor for GDP growth.

Pakistan’s political and economic challenges have a history of repeating themselves, keeping the nation stuck in a vicious cycle that holds it back. Startups can be the counteracting force that can propel us out of this cycle and help Pakistan realize its true potential.

The recent funding crunch experienced by local startups has led to a sense of doom and gloom, and fear that the startup boom was a mirage. The pessimism is misplaced, however.

One of Pakistan’s biggest startups, Airlift, recently closed down amid financial crunch.
Pakistan is a frontier market that has entered the acceleration phase. This phase is defined by significant changes in the ecosystem across three themes, which are critical mass, venture capital (VC) dollars per capita, and strategic engagement.

Critical mass is the number of available customers of technology products on a recurring basis. As society becomes more digitally active, opportunities in previously unprofitable sectors become doable, and localization of solutions becomes clearer. For example, as farmers become more accessible through smartphones, solutions such as agri-financing and crop insurance start gaining visible traction.

Pakistan is in the bottom 10 percent of the VC dollar per capita list, but over the next five years, this position is expected to improve to levels enjoyed in the Middle East and North Africa (MENA), India, and South East Asia (SEA). This means a lot more capital will be available to service new critical mass opportunities as a greater bandwidth of investment will be available both in terms of sector focus and stage focus. For example, we see later-stage investors participating in a greater number of start-ups in Pakistani companies currently raising their pre-seed, seed and pre-series A, and early series A rounds. We also expect valuations to stabilize with a larger focus on local comparable companies as start-ups exit, plus local corporate giants become technologically competitive.

Strategic engagement from local corporates, government entities, and large private businesses will become pronounced; therefore, new forms of customer acquisition, revenue streams and servicing infrastructure are likely to emerge. For example, fintech will be driven by changes like greater adoption of payment systems like Raast, and greater access to shared Know Your Customer (KYC) protocols.

Scaling these three themes requires local capital markets, labour, and infrastructure development. Countries that have developed nonpartisan frameworks for ecosystem development have benefited significantly, such as India and Indonesia. Regulators like the Securities and Exchange Commission of Pakistan (SECP) and State Bank of Pakistan (SBP), along with development partners such as UNDP and Bill and Melinda Gates Foundations, are playing a crucial role and will continue to do so. Significant improvements in women participation in the labour force, financial inclusion, and technology infrastructure are expected to be force multipliers for the foreseeable future.

In conclusion, Pakistan is at the cusp of paradigm shifting growth, but this will only be sustainable through both development and support of shared objectives. In venture capital, the driving idea of investing in frontier markets is a long-term secular thesis around digital adoption in a society over the next twenty five years, therefore continuation of policy and focus on sustainable development goals is a continuous process with evolution of the approach expected over time. This evolution will be driven largely by strategic engagement within the local and external ecosystem, thus completing the cycle of innovation.
Cryptocurrency: Future Money

Requiring only an internet connection and a smartphone, cryptocurrency presents a unique opportunity for the average Pakistani investor to plug into the world’s best-performing asset over the past decade.

Cryptocurrencies have picked up traction globally in recent times. Pakistan ranked 3rd in the Global Crypto Adoption Index in 2020-21, trailing behind Vietnam and India. This unique tool has the capacity to provide an unmatched return on investment. This, in turn, will not only help in boosting economic prosperity across households, but also accelerate the local economy in the form of local demand, and generate tax on capital gains.

The potential of cryptocurrency in the local market is massive. In 2020-21, Pakistan recorded around USD 20 billion of cryptocurrency value.¹ This figure alone exceeds the entire national foreign exchange reserve.²

With this new form of virtual currency, there come several challenges that accompany. A decentralized technology-backed segment currently parked in the grey area, requires legal and formal regulation to fully reap the benefits.

It is important to channelize the accumulated virtual currency assets of Pakistani investors. This will not only surge reserves, but also pump in additional capital into the local economy.² To ensure transparency, a one-time asset declaration can be considered.

Above everything, a regulatory framework built along a national cryptocurrency strategy, is needed to align the long-term benefits of this digital currency with Pakistan’s domestic and foreign portfolio investments. This will enable the Pakistan Stock Exchange to regain its status of an emerging market. Any undue delay in converting these into solid assets may divert them to other more convenient countries.³

1. According to the Federation of Pakistan Chambers of Commerce and Industry.

© ProPakistani

Pakistan’s first fast charging station for electric cars in Karachi.
Intrapreneurship – an emerging concept of work – aims to promote disruptive thinking, challenge old assumptions, promote risk taking, and create more value.

Monis Rahman  
Co-founder and Chief Executive Officer, Dukan

What is the potential for intrapreneurship in Pakistan? Can it be seen as a major ‘work model’ of the future?

Intrapreneurship is a hot corporate buzzword. The intention is to promote disruptive thinking, challenge old assumptions, take risks and create more value. However, in many cases, asking employees to be intrapreneurial in a corporate structure is akin to asking them to run with their legs tied. Unless corporations give employees true ownership of their ideas (equity or other significant upsides), the motivation to shake the status quo may not be seen as worth the risk to their careers. Also, intrapreneurial ventures are usually set within the same corporate structure with bureaucracy, intra-company politics, and limited control over execution.

Employment, workforce growth, and increased jobs are much better accomplished by companies spinning out startups with the proper incentive structure. At the end of the day, it is the people who take the risks and need to be rewarded disproportionately because the probability of failure is higher than pursuing the course of a steady job. The risks are that projects will be initiated, funded internally, and employees will not be incentivized or properly enabled to take risks and execute. Employees also churn for better opportunities, and successful ventures are often the result of founders burning the midnight oil. It is very difficult to expect a salaried employee to do this, especially since the average tenure of employees, who are dominated by millennials, is around one year.

What role can the startup space provide to foster intrapreneurship in Pakistan? What other supporting mechanisms are needed?

Startups are great vehicles for organisations to further their goals. As startups collaborate with corporations and build out disruptive ideas, the corporation’s employees will naturally need to liaise with startups and absorb the culture and speed of these ventures. This can be infectious and great training to further “intrapreneurship” within organizations.

Organisations must nurture intrapreneurship through fostering relevant skills and providing support to their employees.

1. Dukan is a digital commerce, payments, and lending ecosystem for small businesses and their supply chain.
People Management
The widespread impact of the pandemic has revealed a significant vulnerability in the corporate value creation system. The global economy is transforming from physical to service and intellectual capital. Ninety percent of the value of S&P 500 companies comes from intangible assets, and only 10 percent is attributable to tangibles (Figure 1).

The world has suffered severe crises since World War II. The COVID-19 pandemic has exposed the fragility of the global economic system. Leaders in every sector across the world are standing at a crossroads. Environmental, social, and governance challenges exacerbate underlying economic and social inequalities. The widespread impact of the pandemic has revealed a significant vulnerability in the corporate value creation system. The investor community is now at an inflection point on how to assess vulnerabilities in the corporate value creation cycle. While everybody is preoccupied with the negative impact on the global economy, the

By
Zahid Mubarik
Chief Executive Officer, HR Metrics
President, SHRM Forum Pakistan
Chairman, Pakistan HR Standards Technical Committee

Figure 1: Market Value of S&P 500 Companies

Source: Ocean Tomo, LLC Intangible Asset Market Value Study
*Interim study update as of 7/1/2020

1. The Standard and Poor’s 500, or simply the S&P 500, is a stock market index tracking the stock performance of 500 large companies listed on exchanges in the United States. It is one of the most commonly followed equity indices (Source: Wikipedia).
post-pandemic situation demands widespread urgency in implementing environmental, social, and governance reforms to ensure the sustainability of organizations and communities.

With the emergence of the Environmental, Social, and Governance (ESG) framework (see Figure 2), workforce has become highly important for investment analysis, both from the social and financial impact perspective. Workforce is now recognized as one of the most important drivers of competitiveness, value creation, and sustainable competitive advantage. Worldwide investors are engaging with board directors to improve workforce risk assessment and disclosure to cope with rapid environmental and technological changes.

While ESG provides pillars of sustainability, the “S” is the central pillar. “S” - social criteria - addresses the relationships companies have, and the reputation they foster with people and institutions in the communities where they do business. “S” includes human capital relations, diversity, and inclusion.

Pakistan being a signatory of the UN SDGs, is pursuing the global ESG framework. The Pakistan Stock Exchange is committed to encouraging institutional investors and companies alike to understand the scope, relevance, and importance of ESG reporting. In Sep 2021, the Pakistan Stock Exchange (PSX) and Pakistan Institute of Corporate Governance (PICG) jointly formed an ESG Task Force to develop ESG guidelines for listed companies that can be useful to analysts, investors, consumers, employees, civil society, and regulators alike. In June 2022, based on the recommendation of the Task Force, Securities and Exchange Commission of Pakistan (SECP) published a position paper on ESG Regulatory Roadmap² to encourage ESG practices for sustainable investment (Figure 3). The ESG Roadmap brings to light the aspects relevant to the work, workforce, and workplace in Pakistan. Business companies are now expected to pay special attention to these areas by disclosing data in a way that can show some relationship between investment in these areas and corresponding outcomes.

The International Organization for Standardization is developing global standards for workforce management. 27 global HR Standards have been published so far. The goal of these standards is to improve the quality of human resource with a focus on productivity, by improving efficiency and effectiveness of the workforce.

Pakistan Institute of Corporate Governance (PICG) jointly formed an ESG Task Force to develop ESG guidelines for listed companies that can be useful to analysts, investors, consumers, employees, civil society, and regulators alike. In June 2022, based on the recommendation of the Task Force, Securities and Exchange Commission of Pakistan (SECP) published a position paper on ESG Regulatory Roadmap² to encourage ESG practices for sustainable investment (Figure 3). The ESG Roadmap brings to light the aspects relevant to the work, workforce, and workplace in Pakistan. Business companies are now expected to pay special attention to these areas by disclosing data in a way that can show some relationship between investment in these areas and corresponding outcomes.

The Future of Work

Post-COVID requires companies to scale remote work, digitalize, and automate. According to the World Economic Forum’s Jobs Reset

Figure 2: ESG Indicators

<table>
<thead>
<tr>
<th>Environment</th>
<th>Social</th>
<th>Governance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environment Management</td>
<td>Workforce Training</td>
<td>Independence of Board</td>
</tr>
<tr>
<td>GHG Emissions</td>
<td>Workplace Safety and Employee Wellbeing</td>
<td>Internal Controls and Audits</td>
</tr>
<tr>
<td>Energy Management</td>
<td>Diversity and Inclusion</td>
<td>Executive Compensation</td>
</tr>
<tr>
<td>Water and Wastewater Management</td>
<td>Human Rights and Community Engagement</td>
<td>Shareholders’ Rights</td>
</tr>
<tr>
<td>Waste and Hazardous Materials Management</td>
<td>Data Security</td>
<td>Business Ethics</td>
</tr>
<tr>
<td>Impacts on Biodiversity</td>
<td>Global Health and Safety</td>
<td>Anti-Corruption</td>
</tr>
</tbody>
</table>

Figure 3: ESG Regulatory Roadmap*

<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESG Guide and Disclosures</td>
<td>JUNE 2022</td>
</tr>
<tr>
<td>ESG Dashboard</td>
<td>JUNE 2022</td>
</tr>
<tr>
<td>SECP Sustain</td>
<td>JUNE 2022</td>
</tr>
<tr>
<td>ESG Mutual Funds &amp; ESG Index</td>
<td>DEC 2024</td>
</tr>
<tr>
<td>Impact Assessment</td>
<td>SEP 2033</td>
</tr>
<tr>
<td>JUNE 2022</td>
<td>SEP 2022</td>
</tr>
<tr>
<td>Increase advocacy/awareness of ESG considerations</td>
<td>JUNE 2024</td>
</tr>
</tbody>
</table>

² Position paper published by the Securities and Exchange Commission of Pakistan

"Glocal" (global + local) tectonic changes in the regulatory framework have far-reaching implications for the work and workplace. Technology is emerging as an enabler of sustainability measures. Technology adoption such as e-commerce, data analytics, cloud computing, encryption, cyber security, text and image processing, artificial intelligence, and power storage and generation, is replacing ‘human labour’.

The Future of Work

Post-COVID requires companies to scale remote work, digitalize, and automate. According to the World Economic Forum’s Jobs Reset

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The industry in Pakistan follows the global trend except for one area. Process automation is not a budding job in Pakistan, instead video editing is a growing skill in Pakistan and a significant number of jobs are attached to this field.

Summit, numerous new roles rely heavily on disruptive technology skills. The Future of Jobs Report projects that, by 2025, people and machines will work the same amount of hours. Automation will displace around 85 million jobs – mostly manual and repetitive roles, ranging from assembly factory workers to accountants.

The industry in Pakistan follows the global trend except for one area. Process automation is not a budding job in Pakistan, instead video editing is a growing skill in Pakistan and a significant number of jobs are attached to this field.

Jobs that are expected to become increasingly redundant over the next five years are mostly routine-based, middle-skilled white-collar roles. While a cluster of emerging roles will gain importance over the coming years, another cluster of job profiles is set to become increasingly redundant. Such a large-scale decline in some roles should ring alarm bells for people who are currently pursuing these roles or want to take them up in the future.

Workers affected by change in skill set need to reskill and upskill, as the future of work demands. As we emerge from the COVID-19 crisis, we can proactively shape more inclusive, fair, and sustainable economies, organizations, societies, and workplaces. To do so, we must mobilize the best of human capabilities, technologies, innovative policies, and market forces in service of new vision. Leaders from business, government, civil society, media, and the broader public can greatly influence the new agenda for growth, jobs, skills, and equity.

There is a greater need for institutions like the National Vocational Technical Training Commission (NAVTTC), Technical Education and Vocational Training Authority (TEVTA), Higher Education Commission (HEC), and Ministry of Human Resource Development at the federal and provincial levels should adopt an integrated approach to develop a future-ready workforce in Pakistan.

How to Improve Workplace Diversity

Despite commendable steps to promote gender equality in the workplace, some of the commitment still seems to be empty rhetoric.

In terms of legislation, issues of equality and diversity have received considerable attention in Pakistan (See Box 1). In addition to various articles of the national constitution (1973) covering race, religion, caste, gender, etc., and ratification of international instruments, miscellaneous laws are in place in Pakistan to protect women's rights to equal opportunity. Employers cannot discriminate against women employees based on sex and marital status, and are required to offer equal pay and allowances to women and men performing work of equal value. Similarly, to increase the retention of women employees, the law requires organisations to provide at least three months of fully paid maternity leave for both public and private sector employees.

However, despite these legal measures, the real landscape of gender equality in Pakistan seems to be much different. This is evident from the fact that the country has ranked second worst in terms of gender parity, placing 145 out of 164 states. Working women in Pakistan are reported to face a myriad of challenges such as social stereotypes, discrimination in pay, and lack of career advancement opportunities, as compared to men. Women's participation in the labour force declined from 23.8 percent in 2016 to 21 percent in 2021, and is well below the rates for countries with similar income levels, signifying a major loss of productivity and negative implications for women's empowerment.

Closing the gender gap in economic participation is vital for the country's much-needed GDP growth. By paying attention to gender equality, Pakistan could increase its GDP by 30 percent. To achieve this, increasing women's participation in manufacturing and related sectors, both as production and non-production workers, is of particular importance. Organisations across Pakistan are known to ignore laws on gender equality. For example, firms opt for less than three months of maternity leave and fail to offer fully paid leave, citing company exigencies and other reasons. While the law provides for action to be taken against non-compliant firms, it is extremely difficult for a working middle-class employee to fight a legal battle against companies that can afford the most competent lawyers to fight their case.

Moreover, there is societal and cultural pressure against women's participation in employment and leadership positions. In addition to blatant or subtle discrimination in hiring and promotions, a key issue is the frequent dropout rate of women owing to social and family pressures. In relative terms, multinational companies (MNCs) have shown more commitment to gender diversity as compared to local ones. Many MNCs and a few local organisations have diverse workforces in which talent acquisition and diversity

Box 1: Legislations on Diversity in the Workplace: A Run-Down

1973 Constitution

- Article 27. Ban on discrimination based on sex in employment
- Article 26. “No person otherwise qualified can be discriminated against in the matter of employment on the basis of race, religion, caste, gender, residence or place of birth.”
- Article 34. “Steps shall be taken to ensure full participation of women in all spheres of national life”
- “No citizen otherwise qualified for appointment in the service of Pakistan shall be discriminated against in respect of any such appointment on the ground only of race, religion, caste, sex, residence or place of birth.”

International Instruments (ratified by Pakistan)

- ILO Discrimination (Employment and Occupation) Convention, 1958 (No. 111) - (ratified in 1961)
- ILO Equal Remuneration Convention, 1951 (No. 100) - (ratified in 2001)
- Universal Declaration of Human Rights (1948)
- Sustainable Development Goals (2015)


“Working women in Pakistan are reported to face a myriad of challenges such as social stereotypes, discrimination in pay and lack of career advancement opportunities, as compared to men.”


By Dr. Jawad Syed
Professor of Organisational Behaviour and Leadership
Lahore University of Management Sciences

& By Areeba Mumtaz
Research Associate
Lahore University of Management Sciences

SNAPSHOT
management practices are followed. According to a report,7 companies belonging to the fast-moving consumer goods (FMCGs) sector, banking, pharmaceutical, and textile sectors have indicated gender diversity as one of their top five core business goals. About 50 percent of banks and pharmaceutical companies have women employees between 10 and 20 percent. More than 60 percent of companies face hurdles in attracting new women as employees. There remain a few perennial issues. For instance, only 50 percent of the companies offer training, leadership development, and mentoring schemes for women employees.8

To address gender disparity, the State Bank of Pakistan (SBP) has launched the gender mainstreaming policy - Banking on Equality Policy - with a focus on financial inclusion by bringing a shift towards women-friendly business practices in the financial sector. This policy was issued in view of the fact that the gender gap between men and women bank account holders has grown despite all efforts. The SBP as a regulator mandated all banks to increase women’s percentage in their workforce from the existing average of 13 percent to 20 percent.9,10 Simultaneously, the banking sector is aiming at 25 million active women bank accounts by the end of 2024.11 Similarly, to enhance diversity and inclusion, Habib Bank Limited (HBL) initiated the “Female Returnship Program” (Waapsi) to provide employment opportunities to women who have had a long gap in their professional life.12 This initiative is in line with the bank’s agenda to develop an inclusive and equitable environment.

Karandaaz Pakistan, a not-for-profit company, promoting access to finance for SMEs and individuals, has taken initiatives to improve women’s financial inclusion. One such initiative is to research, design and develop an agent banking model that will serve low-income women. Karandaaz, in partnership with the Information Technology University (ITU) of Punjab, initiated research projects to improve the existing knowledge on women’s use of digital financial services.13 Such interventions are also evident in other sectors. For example, in the telecom sector, Pakistan Telecommunication Authority (PTA) has collaborated with telecom operators and other stakeholders to reduce the digital gender gap in Pakistan via initiatives related to accessibility, affordability and digital skills.14 PTA

By paying attention to gender equality, Pakistan could increase its GDP by 30 percent. To achieve this, increasing women’s participation in manufacturing and related sectors, both as production and non-production workers, is of particular importance.15

Karandaaz Pakistan: Paving the Way for Women’s Financial Inclusion

11. Supra 9
12. HBL (2022), HBL Returnship Program (Waapsi). Available at: https://www.hbl.com.pk/converse/content/hbl_en_upg/updates/2200098#/lang=en

On International Women’s Day 2022, Engro Corporation reiterated its commitment to diversity, equity, and inclusion initiatives. The Chief Executive Officer of Engro Corporation said that his company is currently at 10 percent in terms of gender diversity. He added, “My personal goal is to ensure at least 35 percent of our leadership team is women by the year 2026.”²⁴

Engro has formulated and implemented several policies to empower women in the workplace.²⁵ For example, around seven percent of the company’s upper management positions and 18 percent of the positions directly reporting to the head of departments are held by women. In the current year, three women serve on the company’s Board of Directors. By 2025, the company plans to have 30 percent of women in leadership positions. In 2020-21, ‘WE Thrive’, a networking and capability development program for Women of Engro (WE), provided a platform for women at Engro to connect across seniority levels, departments, subsidiar- ies, and locations for authentic, trustworthy, and supportive connec- tions. Moreover, through programs like Break Ke Baad, a returnship program for women to restart their careers, and Uraan, a technical training program that inducted women from surrounding areas to increase the number of women working on the front lines from 12 percent to 42 percent, Engro has taken steps to increase women’s participation in the labour force and leadership positions.²⁶

In conclusion, despite a plethora of laws and policies to promote gender equality and sporadic interventions in various sectors, gender, at the macro-level, remains an unresolved issue in Pakistani workplaces.

Despite a plethora of laws and policies to promote gender equality and sporadic interventions in various sectors, gender, at the macro-level, remains an unresolved issue in Pakistani workplaces.

There is a need to create programs centering around women to equip them with soft and technical skills, and to create an inclusive environment at work.
Revamping the Ethics Paradigm

By Zulfiqar Shah
Labour Rights and Human Rights Activist

For Pakistan to ensure business continuity in the global market, local suppliers must adopt the laws and ethics that international corporations require.

Gone are the days when entrepreneurs were focused only on the quality, speed, and timely delivery of their goods. New and emerging business models require more attention on ethics, and just and humane practices at workplaces. Business and Human Rights is already a buzzword for over a decade, and with the adoption of the United Nations Guiding Principles on Business and Human Rights (UNGPS) in 2011, the export-oriented industry is required to do even more in the context of the latest and future legislation, particularly in Europe.

There is now immense pressure to promulgate legislations – such as the United Kingdom’s Modern Slavery Act 2015, French Corporate Duty of Vigilance Law 2017, German Supply Chain Act (LkSG) 2021, among others - at the European Union (EU) level, thereby binding EU-based corporations to ensure rights throughout their supply chain.

Over 60 percent of Pakistan’s total USD 25 billion exports in 2021 were textiles and garments produced by hundreds of factories in Pakistan for international brands, which are now required by law in their countries of origin to ensure rights throughout their supply chain.

This means that Pakistani suppliers would have to overhaul their employment patterns and the way they treat their workers, protect the environment and rights of local communities, and adopt a range of ethics if they would like to continue to do business with international corporations. This would require them to ensure the provision of safe workplaces, fair pay or at least minimum wages, no excessive working hours, and no sexual harassment, bullying, and violence at workplaces.

Social dialogue (employer-employee interaction) is also part of the deal. The new set of due diligence will likely shape up future of workplace ethics, thereby creating a win-win situation.

What is needed is to embrace the change and do away with old methods and resistance. The world has changed a lot, particularly with the increased use of social media, where everyone has a voice and power.

Better ethical practices also open up opportunities for employment, especially for the youth, who make up a sizeable portion of the country’s strong 71 million labour force. Likewise, retention levels also improve when ethical policies are implemented in true form and spirit.

A collective approach and collaboration among employers, employees and relevant government departments would make it easy to adopt new workplace ethics and implement emerging global market standards of human and labour rights.
Tailoring A Digital Fit for Pakistan

By Javeria Masood
Head of Solutions Mapping, Accelerator Lab, UNDP, Pakistan
Regional Innovation Analyst, RIC, Bangkok

COUNTRY SPOTLIGHT

Tailoring A Digital Fit
for Pakistan

Sixty-four percent of Pakistanis are below the age of 30, and 23 percent are between 15-29 years. Youth between 15-29 years make up 41.6 percent of Pakistan’s total labourforce. Four million Pakistani youth attain working age every year. To absorb this population into the job market, Pakistan needs to create 4.5 million new jobs over the next five years (0.9 million jobs annually).

With this bulk, it is significant to understand that in Pakistan, there is no ‘one’ future of work so our approach ought to be multifaceted as well.

Up until a few years ago, the future of work in Pakistan was practiced and understood in a limited way, and largely revolved around remote work (freelancing) and non-traditional careers (entrepreneurship). It was also very exclusive. Remote work only worked for people with digital literacy, access to technology, and job at an organization that accepted this modality which was often the case for short assignments and freelancing.

Recently, entrepreneurship and the start-up ecosystem has been blooming in Pakistan with heaving investments. Due to the risk of success, this is limited in catchment, growth, and investment.

An Innovation Disruption

COVID-19 acted as a disruption for all industries, primarily tech, and that has been a catalyst to accelerate, expand and disperse the future of work beyond automation, e-commerce, and remote work. Some of the trends that have surfaced in Pakistan include:

- Remote work – organizations had to function without physical presence in offices which did not disrupt work (minus few sectors where physical proximity is necessary).
- Expansion of the workplace – offices are no longer limited to desks and attendances. Employers have seen that remote working is not only possible, but also effective for employees with more responsibilities, such as women with young children.
- Accelerated digital transformation – due to the need, we see plans from public and private sector to maximize the digital reach and footprint.
- Digital finance – number of people using online banking increased significantly during the pandemic. Many services are accepting digital payments. The behaviour and system both became more accepting.
- Gig economies – the Global Gig Economy index ranks Pakistan at 4th in the top 10 countries in the world. We have seen many local examples such as Food Panda, Careem, Uber, etc. This concept is now main-

In Pakistan, there appears no ‘one’ future of work. This calls for a multi-faceted approach that is inclusive and leaves no one behind.

Emerging Skills of the Future

Innovation and Critical Thinking

Interpersonal and Communication Skills

Leading with Empathy

Data and Artificial Intelligence

Outlook

The background image shows the majestic ‘Minar-e-Pakistan’ (Tower of Pakistan) in the city of Lahore, Pakistan.

Next Steps for Pakistan

- Upskilling and Reskilling the Work Force: Pakistan needs to reimagine an entirely different world of work assisted by both machines and humans using very different skills and knowledge for the workforce of today and the future – with special attention to the marginalised community.

- Investing in Innovative Government Capacity: Reimagining policies requires a new set of skills for government counterparts that include strategic foresight, experimentation, and deepened collaboration with the private sector.

streaming through small and medium businesses as well. During the pandemic, we saw a surge of home delivery services that created many jobs as well.

These trends are here to stay and are making way for the digital transformation revolution. This is an opportunity to tap into, but in a more inclusive and sustainable way, so no one is left behind and opportunities are equally distributed.

Emerging Skills

The way organisations work is likely to continue to change. Our education system and curriculums are dated and unsuitable to train young professionals in skills required for the new world order. In addition to technical skills, there is a demand for soft skills and agile mental models. Moreover, two major streams of economies that are forecasted to be big and worth investing in strategically are the care economy and the green economy.

Innovation and the Way Forward

Examples like Estonia show how digital transformation mitigated the risks of pandemics by being future-ready and inclusive. Deep-rooted disparity in Pakistan makes work trends more complex to streamline. The disparity is visible in digital literacy, or lack of, infrastructure, market readiness, the culture of agility, and supporting policies. On the one hand we have AI, cryptocurrencies, and the transition toward web 3.0, while on the other, we still have a population without access or the ability to use a feature phone.

A more systemic and mission-oriented approach to public policy, as Mariana Mazzucato writes, is a way to make an investment in human capabilities and economic growth that is smart (innovation-led), inclusive, and sustainable. She proposes a framework for developing an institutional system of innovation, that should be applied to organize the need, challenges, and opportunities around work forces, and current and upcoming jobs. The key capacities of her framework are:

- Strategic foresight – a methodology that allows policymakers to think long term, identify strategies and pre-empt contingencies to develop policies today.

- Bottom-up experimentation - to co-create and develop a structure that focuses on learning and adjusting policies as needed, based on human behaviour.

- Public-private partnerships – to increase and de-risk investments, create more ownership, and foster better relationships in the process of funding innovators.

These are very interesting times, and our approach needs to be more systemic. Future of work does not need to limit to jobs and modalities: this opens a window to think long term and plan how specific modalities and structures allow for a shift in development and can push for the conditions required to bridge the gaps that exist in the local landscape, to allow equal distribution of opportunities, access, and growth potential.

Figure 1: Innovative Government Capabilities – By Mariana Mazzucato

© Pexels/George Milton

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“Lord how this world improves as we grow older”, “The March of Intellect.” William Heath, 1828

“At School.” Jean Marc Côté, 1899.
Ukraine’s Transformation

With the lives of Ukrainians drastically disrupted on a whole new level following almost eight months of war, prompt further investigation is needed to explore and map the future of work in Ukraine.

By Ievgen Kylymnyk
Head of Exploration, Accelerator Lab, UNDP Ukraine

For many people in Ukraine and around the world, 2020 was a year of remote work, increased stress, and disruption to our daily routines due to the COVID-19 pandemic. Today, the lives of Ukrainians are disrupted on a whole different level. On 24th August 2022, Ukraine marked its 31st Independence Day, but it was also the day that marked six months of war in the country. The war changed the lives of Ukrainians in all aspects, including work.

According to the UN, nearly 18 million people – 40 percent of the country’s population – need humanitarian assistance, and the situation is expected to deteriorate further in the winter months. As of end of September 2022, 7.4 million Ukrainians are seeking shelter in the European Union, mostly women and children. Overall, the war caused the displacement of over 14 million Ukrainians, both within and beyond Ukraine’s borders. This crisis pushed millions of people and businesses to adapt their work life and policies on a whole different level.

Back in 2021, we looked into how the world of work was changing. Our study investigated the nature of work, examining the situations at the European level as well as the local level. Based on collective foresight method, the study explored the likely future, searching for, and interpreting information related to changes around work in Ukraine. In 2022, more investigation followed into analyzing the reality of the work environment in Ukraine. ‘Mobile Economy’ emerged as a key trend, which referred to integrating new work models with enhanced flexibility to accommodate the situation that Ukrainians face now.

Employers now are looking for candidates with a specific set of soft skills focusing on flexibility. The war changed the requirements that are posted for vacancies. For instance, 35 percent of vacancies are seeking candidates that can ‘work under stressful conditions’, as opposed to 18 percent before the war. Likewise, ‘adaptability’ and ‘flexibility’ are also far more frequent now.

The government of Ukraine is stepping in to respond to amassing income problems, by offering grants for starting self-owned small businesses. The state programme called ‘eRobota’ (i.e. iHaveWork) is meant to create 300,000 workplaces in the country, and the first recipients have already received funds. The importance of entrepreneurship has been repeatedly highlighted and discussed. Next, the Parliament of Ukraine adopted several important laws to address gaps in employment legislation and adapt it to martial-law times. A significant one was regulating freelancers through establishing a clear legal framework and stipulating their social protection rights, such as sick leaves, annual leaves, and level of pay.

Another example of the future of work in Ukraine and its digital side is Dia.City – a virtual jurisdiction created by the Ministry of Digital Transformation in Ukraine. Launched in mid-February 2022, just before the onset of the war, the Dia.City currently has more than 300 residents supporting companies who seek a better regulatory environment, reduced administrative burden, and the opportunity to apply for gig contracts as a form of employment. Reflecting on the studies we did in 2021, it is possible to say that while there are urgent humanitarian needs that need to be met, the signals and response largely align with the identified 30 challenges, in particular with regard to new work models, disruption to jobs and skills, and entrepreneurship. However, conditions changed dramatically and negative signals exacerbated. We should acknowledge that the Ukrainian society is currently suffering from the immense impact of war at all levels, and this needs to be further investigated to explore and map the future of work in Ukraine.
COUNTRY SPOTLIGHT

Bosnia and Herzegovina:

By Head of Exploration, Accelerator Lab, UNDP, Bosnia and Herzegovina

Arijana Drinic

A Letter from the Future

Yours,

The blooming tech sector, I.T. companies, technological parks, digital twinning, and connecting industry with academia, led to the positioning of the country on the digital map of Europe. The gaming industry, as well as immersive technologies, are still booming. The country also became a digital nomads’ heaven, but the booming tech scene and the country’s digital transformation wasn’t the only reason they came; the quality of life and food were additional pluses, as well as nature’s abundant potential.

The happiness index is measured and included in the planning and development strategies of the country; it is the only metric of success regardless of the field. Today, as I enjoy my retirement mornings with a cup of organic coffee produced in the country (who would have thought that coffee can grow here, right?) coupled with a homemade breakfast fully grown in one of many urban farms that I visit every day in my neighbourhood, the majority of people are preparing to start their work day.

Unemployment is almost nonexistent, and work in general, is perceived as something that should help people reach their full potential, and support humans’ longterm isam in the country and globally. ‘Circular modernism’ based on circularity and open innovation principles are building blocks of the economy.

Nature and cultural tourism have significantly increased. Although Bosnia and Herzegovina also exist in the metaverse universe, there are still a lot of people who prefer to visit in person following their virtual journeys. Many young people are deciding to live on farms, combining technology with agriculture, and creating special touristic offers in their spaces.

Greetings from the Singapore of Balkans, as they call it these days, Bosnia and Herzegovina is a sustainable utopia welcoming everyone willing to enjoy life and work on something meaningful. Although Millennials still remember the ‘90s war and the post-war situation in the country, which impacted the larger part of their early adulthood, Generations Z and Alpha were leading the country’s transformation to what it is today.

Sometime around 2030, the overall situation began to improve for Bosnia and Herzegovina. The country started accelerating towards sustainable development. People, especially youth, stopped leaving the country in great numbers as the overall economic and social situation improved. The combination of different skills across generations contributed to this improvement, but entrepreneurial thinking was a common denominator within people of working age and in tertiary education.

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It was also recognized at an early stage that combining technological advancements with nature’s enormous potential can lead to fast transformations in the field of circular economy, energy efficiency, tourism, education, etc.

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Clean energy is accessible to everyone and everywhere in the country. There is no need to calculate people’s footprint, but we are still measuring our handprints on nature. Many people, especially the young, are working on designing and implementing new technologies to improve solar or hydro potential areas. Thanks to different research methods, skill sets, advanced technology, and biomimicry, hydro and solar valleys are now real living. Yes, they are entirely safe for nature and all living beings. A couple of coal mines left in the country are now museums.

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Education has seen a complete revamp with the curricula redesigned to embrace the future of work strategy in meeting the needs of growing industries such as I.T., tourism, agriculture, sustainable energy, and the digital and circular economy, and paving the register future-proof employment. Schools are leading hubs that promote ‘learning by doing’ through a combination of hands-on experience, and through using immersive technologies such as virtual or augmented reality. Life-long learning is widely dedicated and encouraged.

People are proud citizens of Bosnia and Herzegovina.

Yours,

Arijana from 2072

The background image shows the city of Sarajevo in Bosnia and Herzegovina.