A Report By Bytes For All, Pakistan

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The Internet Landscape of Pakistan is a flagship research product of Bytes for All, Pakistan (B4A). Here, we present to you the year 2022 report. This report is an annual permanent feature of our work. It serves as a reference document presenting critical information for all segments of society on the evolving trends around human rights and its intersection with information and communication technologies (ICTs). As an active part of Pakistani civil society with its scope of work in the Asia Pacific and advocacy at multilateral forums, including the UN and European Parliament, B4A engages with all important stakeholders relevant to its areas of work, and this document serves as an essential advocacy tool around digital rights in the country.

The digital landscape of Pakistan changed significantly in 2021-2022 for multiple reasons, including but not limited to improved access to internet and telecommunication services, the increased role of the state and intermediaries in content moderation, the massive spread of mis/disinformation and its misuse to harm democratic discourse on issues related to peace and social justice, economy, politics, elections, and national security.

On one side, access to the internet has started empowering the disadvantaged segments of society in exercising a range of civil, political, social and economic rights; the other side of the coin is gray. With increased access to the internet, digital governance to some extent has improved, such as within fintech, the banking industry, and rapid provision of other public services, for example, accessing National Database and Regulatory Authority’s (NADRA) services, issuance of passports, driving licenses, and others.

The government has also introduced a digital census this year, which is expected to be a mass-level data collection exercise digitally for the first time in Pakistan. However, the state, on the other hand, has failed to introduce a robust legal framework for the protection of the personal and private data of the citizen. Transparency remains a significant challenge when it comes to governance.

Issues such as hate speech, bullying, disinformation, censorship, privacy breaches, online crimes related to women, child pornography, and electronic forgery have risen manifold. The state’s role in this regard is highly questionable for primary reasons of their intentions, capacities and transparency.

Another important issue relates to the public’s engagement on various digital problems and their awareness of accessing remedial measures, particularly when they become victims of online crimes. The processes in this regard could be faster, and solutions so far have proven ineffective. The state is not ready to take on these responsibilities as ordinary citizens seemingly are not its priority.

This year’s internet landscape presents a thorough investigation of all these sectors and maps out the recently emerged trends impacting citizens’ lives. The purpose of this report is not only to highlight issues but also to generate discourse in society to find possible solutions.

This year’s publication has been made possible by a generous financial contribution from an anonymous individual donor. We massively laud the commitment and services of the lead researcher Mr Jahanzaib Haque, and his team in writing this report and giving it the shape of this informative and insightful publication. Mr
Haque has been authoring this report for the past several years. Without his and his team’s utmost commitment, publishing this year’s report was impossible. Taking this opportunity, we also wish to thank our partners, collaborators, and fellow researchers, who continue to contribute to our organizational learning and provide support for the organization to break new grounds and pioneer new areas of work in Pakistan.

We hope that this report will be beneficial for all the relevant stakeholders, including state institutions, lawmakers, academia, internet companies, civil society, media, and others.

Media and the other means of (mass) communications are generally recognized as highly important. This applies to the Internet as well: While early on it was developed for military use and comparatively few academics, today it is available for most people, and it is important for business development, research, entertainment, the shaping of opinion in a society, shopping, political activism, criminal activities, and political control by elites. When the Internet became a paradise for entrepreneurs, youngsters starved for entertainment, organizers of any kind of events, and intelligence agencies at the same time, it means that in a sense the internet became a jungle, with many animals, beautiful and ugly, peaceful and dangerous. These general observations very much also apply to Pakistan. The internet brought new opportunities for Pakistan to develop into a progressive society and a more democratic country, and it opened doors for more forms of criminal activity (like fraud, child pornography, etc.), more intimidation and the spreading extremism, and more information gathering on citizens by business and state agents. It will be highly important to Pakistan to more actively and more successfully develop the positive sides of IT technology, internet services, and the social media, while at the same time check its excesses, problems and abuses.

FES Pakistan is delighted to present the report “Internet Landscape 2020” It is providing an excellent overview of internet usage, and on its dangers and opportunities. We hope, the report will facilitate a broad discussion about the use and further development of the internet in Pakistan, to fully turn it into another means for Pakistan to utilize its full potential and develop into a more progressive, citizen-oriented country.
The year 2022 was defined by extreme political upheaval, playing out alongside an economic meltdown that saw Pakistan positioned just one step away from default. This situation, further exacerbated by devastating monsoon floods, led to instability, stagnation and a backslide for the country in almost every area, including its internet landscape.

The lofty dreams of a progressive and competitive ‘Digital Pakistan’ all set to redefine the future were truly dead, with only haphazard gains made in some areas, largely driven by private enterprise or the rulings and hard work of a few dedicated individuals or teams.

In terms of internet access and overall governance, Pakistan made some gains, but in the context of the world, the country remains among the worst performers, even within just Asia. And despite further penetration, around 15% of the population remains without any access, and the rest suffer through slow speeds and a lack of consistency in services, negatively impacting meaningful access. Add to this a lack of inclusivity and digital literacy, one of the biggest global gender gaps in access and a struggle to stay online due to loadshedding and blackouts brought on by an energy crisis and catastrophic floods, and a dismal picture emerges.

Cybercrimes saw a steady rise in Pakistan, with over 100,000 complaints registered by December - the highest number in the last five years. While this can be attributed to greater internet penetration and use of technology by citizens, it is still an alarming fact. Crimes against women, particularly in the form of harassment and blackmail are rampant. Many new forms of scams have emerged, and entirely new areas of concern such as that of data/audio leaks even from the highest offices in the country have picked up pace with no real response in sight.

The most heinous of online crimes - those that target children - saw a survivor-centric victory of sorts in the form of a landmark court ruling that introduced tougher punishments and more nuance as to how such crimes are prosecuted. However, this win came in a year which saw no resolute stemming of the tide of child pornography cases and other instances of abuse of minors in the digital space.

In a similar vein, cases of blasphemy accusations that emerged from, or were connected to the digital space in various ways saw no decrease and no meaningful action to address the issue. The online space remains dangerous with regards to the threat of blasphemy allegations, online campaigning and mob organizing, and the consequent violence - including lynchings - that occur. Added to this is the horrifying emerging trend of such acts of vigilantism being recorded and going viral in local online spaces. Another new and dangerous trend was the use of blasphemy allegations, including registered cases and online campaigns, to target opponents in the increasingly polarized political arena.

Disinformation was rampant online, and hit new levels of sophistication and reach as it appears that all stakeholders in the political tussle are resorting to such tactics. At the same time, it was also uncovered that disinformation operations originating in India were carried out against Pakistan. Given the existing environment created by the state and local actors, it is easy to see why such attempts would take root and succeed.
In all this, there was perhaps only one area that saw coordinated, and often very public action i.e. censoring online speech and access to information by any means necessary. This year saw cybercrime laws used in tandem with the Pakistan Penal Code to register cases against journalists, activists and political opponents repeatedly, often resulting in arrests and court procedures. Voicing a strong opinion on social media is now fraught with risk, especially if it critiques established narratives of the current government - irrespective of which party is in power - or that of other state institutions. In addition to this, websites, and in some cases, entire platforms were blocked to curb speech as well.

Due to a global downturn and Pakistan’s own slough of crises, both local e-commerce and fintech sectors saw negative trends, particularly in the second half of 2022, where both funding and deal counts for startups dried up. The shutdown of e-commerce star Airlift and the end of fintech poster-child TAG also sent shockwaves through the ecosystem. This downturn was top-of-mind despite multiple positive indicators such as greater adoption of digital payment tools by local users and the arrival of digital banks.

As this report outlines in greater detail, there is little to celebrate when it comes to Pakistan’s digital front, and the future is at best uncertain, and at worst, set to devolve without comprehensive, sweeping changes in awareness, understanding and action.
Despite improvements in terms of access to the internet via mobile subscriptions, a host of challenges continued to hold the country back, ranking it among the worst performers globally, and within Asia in multiple reports.

PTA EFFORTS

As of December 2022, the Pakistan Telecommunication Authority’s (PTA) Telecom Indicators cited 193 million mobile cellular subscribers, putting total mobile teledensity at 86.34% of the country’s population. Of these subscribers, 122 million i.e. 54.43% were subscribed to mobile broadband, while other broadband subscribers totalled 125 million i.e. 55.81% of the population. Both statistics indicate at least half of Pakistan’s population has some form of access to the internet. In terms of telco market share, Jazz was in first place with 38.23% of total subscribers, followed by Telenor, Zong and Ufone.

For those that had access, meaningful internet access and a consistent experience remained a challenge. A PTA benchmarking survey across the provinces found that all telcos performed quite poorly in data services, scoring between 21-52% points. Ufone secured the highest score, followed by Zong, Jazz and finally Telenor with the lowest overall score.

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PTA INDICATORS

*Figures are updated as on December 2022

**TELEDENSITY**

- **Mobile Cellular Subscribers**
  - 193 million
  - 86.34%

- **Fixed Telephone Subscribers**
  - 3 million
  - 1.17%

**PENETRATION**

- **Mobile Broadband Subscribers**
  - 122 million
  - 54.43%

- **Broadband Subscribers**
  - 125 million
  - 55.81%

**CELLULAR MARKET SHARE**

- **SCO**
  - 0.87%

- **PMCL (Jazz)**
  - 38.23%

- **PTML (Ufone)**
  - 12.22%

- **CMPAK (Zong)**
  - 23.57%

- **Telenor**
  - 25.11%
PTA BENCHMARK SURVEY

TELCO PERFORMANCE

Overall

<table>
<thead>
<tr>
<th>Telco</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jazz</td>
<td>503</td>
</tr>
<tr>
<td>Telenor</td>
<td>384</td>
</tr>
<tr>
<td>Ufone</td>
<td>634</td>
</tr>
<tr>
<td>Zong</td>
<td>541</td>
</tr>
</tbody>
</table>

Voice

<table>
<thead>
<tr>
<th>Telco</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jazz</td>
<td>280</td>
</tr>
<tr>
<td>Telenor</td>
<td>256</td>
</tr>
<tr>
<td>Ufone</td>
<td>323</td>
</tr>
<tr>
<td>Zong</td>
<td>316</td>
</tr>
</tbody>
</table>

Data

<table>
<thead>
<tr>
<th>Telco</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jazz</td>
<td>223</td>
</tr>
<tr>
<td>Telenor</td>
<td>128</td>
</tr>
<tr>
<td>Ufone</td>
<td>310</td>
</tr>
<tr>
<td>Zong</td>
<td>225</td>
</tr>
</tbody>
</table>

Notably, the PTA reviewed the Broadband Quality of Service Regulations, 2014 this year and issued revisions, with a name change to “Fixed Broadband Quality of Service (QoS) Regulations, 2022”. Among other changes, the regulations increased internet speed requirements for downloads to 4Mbps (up from 256 kbps) and 2Mbps upload, with internet service providers (ISPs) required to provide the advertised speeds at least 80% of the time. Other regulations introduced improved Key Performance Indicators (KPIs) related to internet speed and quality, with an emphasis on net neutrality i.e. service providers cannot slow down/degrade internet speeds or delay/block specific parts of the internet as all must be treated equally.

ABYSMAL SPEED

As of December 2022, Ookla’s Speedtest Global Index saw Pakistan ranked a low 118 out of 141 countries in terms of mobile internet speed, and 150 out of 178 countries for fixed broadband speed. Averages of download speed in the country for both ranged from 10.15-15.5Mbps.

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News reports suggested that “serious differences” had developed between PTA and internet service providers (ISPs) over alleged attempts by the regulator to implement a central DNS (Domain Name System) that would bypass global DNS and allow blocks to be placed centrally. The proposal was floated by the PTA to all the ISPs including Nayatel, PTCL, SCO, Jazz, Zong, TWA, Wateen, Multinet, Nexlinx, Cybernet and KK Networks. The PTA asked them to provide DNS server IPs which will be white-listed at web-filtering gateways of cable systems supplying internet to Pakistan. Other IPs will be blacklisted to enable the regulator to block all DNS traffic from the country, a report said. Industry figures voiced concern that the DNS blocking could have a huge impact on internet services, increasing costs and slowing speeds. Analysts warned that it would be a “terrible practice”, and that in PTA’s quest for total control over what people see, “they might break the internet altogether across the country.”

The PTA insisted that the measures would not slow down the internet, “rather it will improve the name resolution time as it will be done locally by the ISP’s DNS”. It also said it would “save the foreign exchange used to buy the bandwidth being utilised on useless illicit content”. With regard to privacy, it said it would not undermine the privacy of users in any way as there is no monitoring system in place.

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LACK OF INCLUSIVITY

The Inclusive Internet Index of 2022, commissioned by Meta and executed by Economist Impact, saw Pakistan ranked last out of 22 countries in Asia overall, and 79 globally across the key indicators of Availability, Affordability, Relevance and Readiness. A massive gender gap in both internet access and mobile phone access for females was noted as a major issue in the country. The country’s overall score was negatively impacted largely due to issues in availability of the internet and relevance to citizens, with only affordability showing good performance.

The better rank in affordability was also reflected in a global survey of mobile data pricing conducted by Cable.co.uk, which found Pakistan to be among the countries with the cheapest mobile data plans in 2022. The survey, which looked at 233 countries and over 5,000 mobile data plans, ranked Pakistan 13 out of 233 with the average price of 1GB of data coming to $0.36 after an analysis of 47 locally available plans.

PAKISTAN INCLUSIVE INTERNET RANKING 2022

Source: Inclusive Internet Index 2022

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MASSIVE GENDER GAP

Similar to the Inclusive Internet Index results, the GSMA Mobile Gender Gap 2022 Report also highlighted Pakistan’s poor standing in terms of access for females, though noting that the gap had narrowed slightly over time[5]. In summary, Pakistan had the widest gender gap in mobile ownership of all countries surveyed with just half of women owning a mobile phone, as compared to over 75% of men.

MEN’S & WOMEN’S MOBILE OWNERSHIP & MOBILE INTERNET USE, BY COUNTRY

<table>
<thead>
<tr>
<th>Country</th>
<th>Mobile Ownership(%)</th>
<th>Gender Gap</th>
<th>Mobile Internet Use(%)</th>
<th>Gender Gap</th>
</tr>
</thead>
<tbody>
<tr>
<td>Egypt</td>
<td>83%</td>
<td>8%</td>
<td>63%</td>
<td>12%</td>
</tr>
<tr>
<td>Kenya</td>
<td>94%</td>
<td>6%</td>
<td>59%</td>
<td>38%</td>
</tr>
<tr>
<td>Nigeria</td>
<td>92%</td>
<td>5%</td>
<td>54%</td>
<td>36%</td>
</tr>
<tr>
<td>Senegal</td>
<td>83%</td>
<td>7%</td>
<td>68%</td>
<td>16%</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>84%</td>
<td>23%</td>
<td>36%</td>
<td>48%</td>
</tr>
<tr>
<td>India</td>
<td>83%</td>
<td>14%</td>
<td>51%</td>
<td>41%</td>
</tr>
<tr>
<td>Indonesia</td>
<td>79%</td>
<td>8%</td>
<td>55%</td>
<td>8%</td>
</tr>
<tr>
<td>Pakistan</td>
<td>51%</td>
<td>33%</td>
<td>36%</td>
<td>38%</td>
</tr>
</tbody>
</table>

Source: GSMA Mobile Gender Gap 2022 Report

The GSMA report noted that lack of family approval was a top barrier for women to get access to mobile phones in Pakistan. Additionally, unlike other countries surveyed, it found that only 46% of female mobile phone owners in Pakistan felt that a mobile provides access to useful information they could not otherwise access easily.
In one attempt to address the issue, the PTA announced a collaboration with GSMA to reduce the digital gender gap\textsuperscript{12}. As part of the collaboration:

- GSMA would facilitate PTA by sharing data/insights/expertise in identifying target-oriented projects to reduce digital gender gap

- GSMA would also support PTA in designing SMS/WhatsApp/IVR based consumer surveys

- GSMA would also share the best practices/guidelines and internationally recognized data indicators on gender inclusion in ICTs

- GSMA would provide a Mobile Internet Skills Training Toolkit (MISTT) in Urdu

\textbf{STILL ‘NOT FREE’}

Freedom House’s 2022 Freedom on the Net report ranked Pakistan a low 26/100 “Not Free”, with an overall improvement of just one point over the previous year\textsuperscript{13}. The report cited excessive state control over the internet as one of the major reasons holding Pakistan back, with issues ranging from increased taxation to forced internet shutdowns/blackouts, blockage of specific content, extended power breakdowns as well as a poor response to the floods and infrastructure issues that led to internet outages.

\textbf{FREEDOM ON THE INTERNET 2022}

\begin{center}
\begin{tabular}{|c|c|}
\hline
\textbf{Pakistan} & \textbf{26/100} \\
\hline
\textbf{A. Obstacles to Access} & 6/25 \\
\textbf{B. Limits on Contents} & 13/35 \\
\textbf{C. Violations of User Rights} & 7/40 \\
\hline
\end{tabular}
\end{center}

\textbf{LAST YEAR’S SCORE & STATUS} 25/100

Scores are based on a scale of 0 (least free) to 100 (most free)


THE INFRASTRUCTURE CHALLENGE

As outlined in a detailed working paper by local thinktank Tabadlab, while mobile internet access is often talked about, the issues of the fixed broadband ecosystem - such as outdated infrastructure and fibre network - remains ignored and unaddressed, although it directly impacts mobile internet experience as well.

As cited in the report, “It isn’t possible to roll out next-generation technologies on existing and (in many cases) outdated infrastructure, which is why investment into a fibre optic infrastructure is essential. Such an infrastructure would not only connect major urban centres and metropolitan areas, but also tier 2 and smaller towns, at equivalent speeds to those enjoyed by users in tier 1 areas, levelling the playing field and making it easier for innovations and ideas to come out of places that may not have the most resources.”

Key challenges and issues noted in the paper were:

- 9% of cell towers are connected to fibre compared to international benchmarks of 40%
- Less than half million FTTH subscribers in a market of at least 10 million potential subscribers. This means Pakistan has only 4% FTTH penetration
- Sub-optimal levels of investment at USD 150 to 250 million per annum
- Limited market competition and little to no sharing of infrastructure
- Unfavorable policy and regulatory environment with high fees, slow implementation, and Right-of-Way issues

Recommendations to address the infrastructure issues included:

- Raising the importance of fixed broadband by establishing broadband as a critical infrastructure
- Developing a national broadband strategy by creating a national fibre plan, reducing barriers for expedited rollout, and enhancing accountability
- Improve the investment climate and availability of financing across the digital ecosystem
- Improving administration at all tiers of the government to speed up implementation

The Information Technology Ministry said it aimed to roll out 5G by 2023. A concrete timeline of July 2023 was given by IT minister Aminul Haque for the launch. However, GSMA’s Asia-Pacific head Julian Gorman said that Pakistan still needed huge investments to develop an enabling environment and the required infrastructure to launch 5G.

Furthermore, in early 2022, telecom sector executives were less than enthusiastic about 5G. That malaise would continue throughout the year. Later, the IT minister met the chief executives from three providers — Jazz, Ufone and Telenor — to address their concerns. Only the China Mobile-owned Zong indicated that it was on board with the 5G rollout.

The executives, meanwhile, drew attention to the damage the catastrophic flooding had on telecom infrastructure and requested urgent policy interventions that would allow them some fiscal space.

### RUDDERLESS 5G LAUNCH PLAN

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### TUSSLE WITH TELCOS

Throughout 2022, telecom companies and the state had frequent disagreements over tariffs, taxes and regulations. The industry chafed under intermittent government measures to staunch the flow of foreign exchange, like barring imports and direct carrier billing.

The Pakistan Telecommunication Authority (PTA), the telecom sector regulator, had considered restricting free-will tariff increases and utilising their profits for other telecom services.

PTA had also sought feedback on a draft bill ‘Tariff for Telecommunication Services Regulations, 2022’ which would bind all telecom operators to provide access to ‘Emergency Services’ to their consumers without any charge. It would also authorise the PTA to reject the tariff increase on telecom services by mobile services operators. It has yet to be tabled in parliament.

Ahead of 2022’s federal budget, the Overseas Investors Chamber of Commerce and Industry (OICCI) urged the government to rationalise taxes for the telecom sector in the budget. The telecom sector also lobbied for the reduction of advance income tax (a type of withholding tax) from 15pc to 8pc. Separately, the GSMA also called for AIT to be abolished. However, it did not happen. The budget instead, doubled regulatory duty on optical fibre cable imports to 20pc to encourage local manufacturing. The move led to alarm from industry players. Sales tax was also increased on the import of completely knocked down (CKD) kits for mobile devices.
Later in the year, the industry continued to lobby for a reduction in withholding taxes\textsuperscript{25}, as GSMA called on policymakers to gradually eliminate the 15pc AIT on essential telecoms services and the 19.5pc sales tax on mobile services, “which create additional barriers to digital inclusion for low-income households”\textsuperscript{26}.

**Cheaper power rates denied**

A request from the telecom industry to be billed according to the more affordable industrial electricity tariff was denied by the energy regulator National Electric Power Regulatory Authority (Nepra)\textsuperscript{27}. The industry is currently charged according to the more expensive commercial bracket.

Nepra rejected the request after the energy and finance ministries voiced their opposition due to an expected loss of over Rs20 billion in annual revenue and the resultant need to pass on this financial gap to other consumers or be booked against circular debt that already stood close to Rs2.5 trillion.

**Cash margin requirements**

Representatives of Jazz, Telenor and Ufone urged the State Bank of Pakistan (SBP) to reverse the “extremely detrimental” 100% cash margin requirement for the import of “almost all” telecom-related equipment that these companies source from abroad\textsuperscript{28}. The policy went into force in April to deflate the ballooning current account bill. A 100% cash margin requirement means telecom operators must deposit the total dollar amount of the transaction value with their banks before the opening of letters of credit. The central bank has since reduced the cash margins on imports from 100% to 25% and in some cases to zero\textsuperscript{29}.

**Handset registration**

The PTA developed a system with FIA and mobile phone operators to allow people coming from abroad to use one phone on Pakistani networks for a limited time without paying local taxes or duties. After registration, travellers can use their mobile devices for up to 120 days\textsuperscript{30}. Those who opt against registering their devices can use foreign-purchased handsets for 60 days\textsuperscript{31}. The PTA also temporarily unblocked non-approved phones to entice them to pay their dues to keep using them on local networks. The tax revenue generated was reportedly very lucrative\textsuperscript{32}.

\textsuperscript{31} ProPk Staff (2022, June 24). PTA Rubbish Rumors of Any Change in Registration and Taxes for Mobile Phones ProPakistani https://propakistani.pk/2022/06/24/pta-rubbishes-rumors-of-any-change-in-registration-and-taxes-for-mobile-phones/
\textsuperscript{32} ProPk Staff (2022a, March 4). https://propakistani.pk/2022/03/04/fbrs-revenue-collection-from-mobile-phone-imports-sees-huge-surge/
Foreign payments in apps stopped

To stem dollar outflows, the SBP restricted users from making international in-app purchases through direct carrier billing (DCB). DCB enables people without credit cards to make in-app purchases which are tacked to their mobile phone bills. The move led to fury from telecom companies and users.

There was some confusion, particularly with regard to Google Play Store payments. The SBP dismissed reports that it had withheld payments to Google as “baseless and misleading”, but the telecom industry insisted that there were some “unannounced restrictions”.

"The Telcos were allowing their customers to purchase above mentioned products through airtime and then remitting funds abroad reflecting such transactions as payments for acquisition of IT-related services,” the SBP said in a statement. “Thus, in effect the Telcos were acting as intermediaries/payment aggregators by facilitating acquisition of services by their subscribers.

"Therefore, in view of the violation of foreign exchange regulations, SBP revoked the designation of banks of Telcos for such payments.” Following the backlash, the plan was shelved.

INTERNET CABLES

A fault was reported in the international submarine cable, SMW4, operated by PTCL, due to which internet users faced a downgraded experience. A breakage was reported in Trans World Associates (TWA) submarine cable system, impacting many users.

Power reconfiguration activity on a section of international submarine cable, SMW4 resulted in internet degradation.

A major failure occurred due to faults in submarine cables that impacted Pakistan as well as other countries across Asia and Africa. Internet speed was impacted and citizens were unable to access many services and platforms.

A technical fault in data networks caused an internet outage in the country.

In one piece of good news, PEACE Cable International Network Co. Ltd (PEACE Cable) completed the construction of the PEACE submarine cable infrastructure in Pakistan in collaboration with local ISP Cybernet. The new cable, spanning 5,800km, would provide another route of fast connectivity for the country, from Karachi, Pakistan to Marseille, France.

The internet was disrupted due to a fault in one of the international submarine cables, leading to slow or no access to many major services and platforms.

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NO ELECTRICITY, NO INTERNET

This year saw the country face massive challenges in the power sector pertaining to supply shortages, as well as outages due to the disastrous monsoon floods (See section: Governance).

Electricity shortfalls in the summer climbed past 5,000 megawatts, with citizens across Pakistan facing crippling load-shedding power cuts upwards of 12 hours. This issue greatly impacted many aspects of daily life, including internet access. The shortfall issues persisted for months, with the crisis reaching as high as 7,000 megawatts gap in supply, with loadshedding of 15 hours and more, prompting protests in multiple cities.

As reported in the media, reasons for the crisis included mismanagement, inefficiencies, technical faults, unavailability of fuel, inability to purchase fuel, power theft, poor recovery of bills and politically-motivated appointments in power utilities.

During the peak of the crisis, the telecom industry sent a letter to the government warning of possible “connectivity loadshedding” i.e. cuts in cellular and data services if the electricity outages persisted. The letter also pointed towards high fuel costs and difficulties in the import of batteries exacerbating the issue.

“Despite having backup power available in the form of generators/batteries, the cellular operators still find it almost impossible to cope with the quantum of these power outages that are beyond their dimensioned backup capacity.”

Letter from telcos to the government

As pointed out in a Tabadlab report, “Tower costs have been driven even higher by continuous power outages that have forced mobile network operators to fall back on alternative power sources to ensure unhindered connectivity. Backup power is typically assured via diesel generators which are not only expensive to acquire and maintain, but also require constant refuelling. With the cost of diesel soaring by 82% – from PKR 144 to PKR 263 – in the first six months of 2022, MNO operating costs are under additional strain.”

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PTA, the state regulator, shared a public response claiming media reports on the letter were “incorrect and out-of-context”, adding that, “The mobile operators are governed under license conditions, rules and regulations issued by PTA. Operators are required to provide uninterrupted telecom services to the subscribers and in case they don’t, the regulator has relevant provisions to take appropriate action.”

The country did not witness, “connectivity loadshedding” as of the end of 2022.

**BLOCKING ACCESS**

There were several cases of access to the internet being willfully blocked in Pakistan across the year for a variety of reasons.

Some of the cases were related to alleged security issues e.g. in the case of the Pakistan Day parade, during which internet and mobile phone services were suspended in Islamabad and Rawalpindi. Certain districts in Khyber-Pakhtunkhwa such as Bajaur also saw internet suspension, with media reporting a worsening law and order situation across the province as the reason for closure. The blockage resulted in street protests, with Bajaur locals citing unavailability of the internet for two months at a time.

“Militants have staged a comeback in recent months and they are using mobile internet for connectivity so as a preventive measure it has been decided to ban 4G and 3G internet service in the district.”

District administration official, on internet outages in Bajaur

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Other cases appeared political in nature. In May, internet services were disrupted temporarily across the country at the same time as the government was attempting to disrupt rallies being led by ousted prime minister Imran Khan (See section: Censorship and Media).

**MAJOR CHALLENGE IN REMOTE AREAS**

Despite increasing penetration, around 15% of the population still remained without access to the internet, with no mobile or telecom services available. As noted in a ProPakistani report, the Universal Service Fund (USF) had spent around Rs. 93 billion to date (since 2006-07) to connect underserved, remote areas of the country, but many challenges were being faced, including rugged terrains, sparse population, harsh weather, lack of electricity, no backhaul, and poor logistics as well as security clearance.

Another report in Profit magazine cited insiders who alleged that, “cellular companies are reluctant to install new equipment and are instead making other arrangements in the remote areas keeping profitability in view.” It was also reported that the USF was reluctant to enter Gilgit-Baltistan (GB) and Azad Jammu and Kashmir (AJK) as the two regions are constitutionally not part of the country.

In November, the Islamabad High Court (IHC) gave PTA four months to decide an application submitted by ISP Nayatel seeking a licence to connect AJK with fibre broadband. Nayatel had applied for the licence in 2021 and said PTA held up its application citing the need for a security clearance. The petition said AJK had issued a right of way (ROW) permission — which was quickly withdrawn — and when another one was issued, Nayatel was asked to procure a no-objection certificate (NOC) from the Special Communication Organisation (SCO), a military-run organisation under the Ministry of IT and Telecom.

Across the year, the USF did however approve several large scale projects, releasing billions of rupees in funding to extend access to remote areas in Sindh, Balochistan, Punjab as well as KP.

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19 Staff Report. (2022, March 14). Seven projects approved to provide internet services to 2.5m people. Pakistan Today. https://www.pakistantoday.com.pk/2022/03/14/seven-projects-approved-to-provide-internet-services-to-2-5m-people/
In 2022, the United Nations E-Government Development Index (EGDI) assessed Pakistan’s progress in digital governance. The index measures the development of digital governments in areas such as e-services, telecommunications infrastructure, and human capital worldwide. Pakistan moved up three levels in the rankings, from 153 in 2020 to 150 in 2022, indicating progress. However, the Online Services Index (OSI) score decreased.

It is clear that OSI needs to be a particular focus. As such, the detailed questions mentioned in the 2020 UN Report were used as an implementation and monitoring guideline for Pakistan’s Digital Transformation journey.

To ensure a safe and secure Internet and address new challenges arising from emerging technologies, a national-level debate on Internet governance is essential. More than half of Pakistan's population has subscribed to 3G/4G service, with almost 125 million broadband subscribers. The Internet penetration rate is growing rapidly, resulting in unprecedented growth in the overall ICT sector. Regulatory and legislative activity related to Internet matters is also growing. However, emerging technologies and concepts introduce new challenges to the security and stability of the Internet infrastructure.
The Internet Governance (IG) Strategy builds upon the objectives of the Project Monitoring & Digital Transformation Cell (PMDTC) and aims to effectively address new and continuously evolving challenges and opportunities within the IG landscape. The strategy aims to ensure a well-thought-out and informed approach to IG at both the national and international levels. To this end, five strategic objectives have been identified:

1. **Launch of Internationalized Domain Name (IDN)**
2. Internet governance capacity building at national level
3. Engagement with ICANN, ISOC, APNIC, IGF, NRIs, etc.
4. Domain Name System (DNS) Industry survey/study
5. Domain Name System (DNS) industry development and uplift

Additionally formerly approved IT industry recommendations in February 2022 were aimed at facilitating FDI in the sector and IT export growth. The recommendations included:

- Opening Specialized Foreign Currency Accounts for the IT sector and freelancers
- Incorporating industry recommendations on tax mechanisms
- Reducing Capital Gains Tax on VC funding into startups to 0 (current 29%) during the next five years

The package was not implemented however due to a change in government, and work is underway to get approvals from the present government. Prime Minister Shehbaz Sharif is focused on the growth of the IT and Telecom Sector, and the successful implementation of these IT industry recommendations will be essential in achieving that growth.

With regards to the devastating floods, the government has been providing relief and help to victims in the aftermath with the IT Ministry utilizing its powerful technology and communication systems network to coordinate relief and recovery efforts, with cooperation from provincial governments. The government launched the National Flood Response Coordination Centre (NFRCC) portal/dashboard to ensure efficient and transparent distribution of humanitarian aid. The portal provides information about financial support and relief goods being distributed at global, federal, and provincial levels.
This year, both the federal and provincial governments introduced a number of online initiatives, but the momentum for a “Digital Pakistan” — championed by the previous government — was hobbled by political upheaval as well as existential economic and climate crises. The catastrophic floods in the second half of 2022 proved to be the greatest challenge for the government, with 33 million people affected and extensive damage to infrastructure — including telecom and the internet. This prompted a national-level response that showcased the capacity, as well as vulnerabilities, of the state.

Response to floods

An uncharacteristically long monsoon season led to catastrophic floods, which left over 1,700 people dead, affected 33 million others, inundated a third of the country and decimated the country’s infrastructure to the tune of an estimated $30 billion.¹

Pakistan’s telecom and internet infrastructure was badly damaged in the floods leaving thousands of flood affectees and relief workers without means of communication. At its peak, a maximum of 3,386 mobile sites were down by August 28, out of which 3,251 sites were restored by the end of September the PTA shared, adding that more than 120 cuts occurred to the nationwide optical fiber backhaul connectivity in different flood affected areas. These cuts resulted in rolling internet blackouts with a knock-on effect to many areas outside of direct flood devastation, including major urban centers. The situation was exacerbated greatly by power cuts as well as the ongoing economic crisis in the country.

According to an in-depth report by The Express Tribune, Balochistan was the worst affected region with regards to disruption of the internet and communications. The province was, “virtually shut off” from the rest of the country, and rescue attempts were hampered by power outages. As the situation worsened, the federal government also established a ‘Digital Flood Dashboard’ to give the public updates about relief measures. The dashboard was intended to provide direct information to the general public about financial support and the relief goods being received and distributed among the flood-affected people across the country. But the launch was rocky as Prime Minister Shehbaz Sharif refused to launch it for its lack of real-time updates. He publicly rebuked ministers for not meeting international standards. He called the dashboard a “joke” and said that it should be “trashed”.

With regards to relief and donations, the PTA in collaboration with National Highway & Motorway Police disseminated 84.5 million travel advisory SMS messages during the monsoon season and floods. Apart from that, 155 million SMSs were disseminated to create awareness among flood affectees to dial 911 in case of emergency. The government also launched a “9999” SMS service applicable to all cellular mobile operators platforms. Users who texted “fund” to “9999” were charged Rs.10/- excluding taxes. The contributions went to “Prime Minister’s Flood Relief Fund 2022” for flood affected people.

Call service tones across cellular networks also solicited donations for the flood affectees. They drew callers’ attention to the SMS number. Since August 26, 2022 a total of 716.12 Million SMSs have been disseminated so far for the promotion of PM’s Flood Relief Fund 2022. A ring back tone (RBT) was put in place on July 5, 2022 for issuing precautions and warnings during the monsoon season for a total of 138.65 Million subscribers. Additionally, an RBT, drawing attention to the PM’s flood fund, was implemented on all networks.

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4 Tahir, N. (2022, September 4). Network Error: you have been disconnected by the rain. The Express Tribune. https://tribune.com.pk/story/2374786/network-error-you-have-been-disconnected-by-the-rain
A report by Tabadlab said flood damage will have a “lasting impact” on core telecommunications infrastructure. It noted that, “While the floods’ impact on infrastructure is undeniable, connectivity interruptions over the last few weeks are both a consequence of the floods, and a reflection of the fragile state of our telecommunications sector. Had the underlying infrastructure been more robust, the industry would have been much more resilient in the face of a single large-scale event”.

It further pointed to the potential for a collapse in another crisis without immediate intervention, stating, “Such a collapse would devastate not just Pakistan’s broader digital transformation journey, but also the lives of Pakistan’s 195 million telecommunications subscribers and 123 million broadband subscribers.”

The report recommendations included: build a telecommunication resilience framework; focus on depth and not just breadth; treat the telecommunications industry as core public infrastructure; promote consumer behaviour change for long term benefits.

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The Ministry of National Food Security & Research (MNFSR) is developing a “future-ready food security information system” to monitor the supply, demand, and prices of essential agricultural food commodities and their seasonal availability for policy feedback and decision-making. The ministry intends to integrate the Pakistan Food Security Information System with the UN FAO’s Food Security and Nutrition Information System (FSNIS), to establish a single source of information which will be used by all internal and external stakeholders.

**E-GOVERNANCE THROUGH NITB**

This year, Parliament passed a law to make the National Information Technology Board (NITB) autonomous. The board was established in 2014 to promote and integrate an e-governance culture in the federal government. State media said NITB’s reorganisation “would not only enable harnessing the latest solutions ICT’s have to offer, but would also induct and mainstream these technologies in the process of the federal government while promoting the integration of digital technologies across the country”.

Across the year, the NITB executed a number of initiatives. It implemented an electronic filing system in all 40 ministries/divisions of the federal government. The initiative introduced a “completely paperless environment through a secure digital system” and was said to have saved approximately Rs300 million. The NITB also got its first data center - a Rs330 million “staging environment”. The center comprised eight data servers with a storage capacity of 500 terabytes. (See section: Data Protection)

Additionally, it joined hands with H3C, a Chinese company, to introduce hyper-converged infrastructure (HCI) solutions to replace traditional IT infrastructures. HCIs combine computing, storage and networking in a single system. Hyperconverged platforms include a hypervisor for virtualised computing, software-defined storage, and virtualised networking.

**PAKISTAN FOOD SECURITY INFORMATION SYSTEM**

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Khyber Pakhtunkhwa approved the ‘KP Print, Electronic and Social/Digital Advertisement Policy, 2021’, which allowed its public relations ministry to recruit social media influencers to highlight the government’s achievements.

**Key points included:**

1. Influencers with 100,000 followers on Facebook, Instagram, Twitter or YouTube with 10,000 and above daily visitors are eligible for government ads.
2. Websites must have been operating continuously for two years without a break under the same name and address to be eligible for government ads.
3. English websites should have 50,000 daily followers while Urdu websites require 100,000 daily visitors.
4. Advertisement rates for websites will be fixed on the basis of web traffic flow on cost per thousand impression basis. Besides, the standard rate to be fixed in Pakistani rupee equivalent to $2 per CPM for websites selected by the information department for home/landing pages.

In January, the National Database and Registration Authority (Nadra) announced plans to turn computerised national identity cards (CNICs) into digital wallets under the then-government’s “Digital Pakistan” vision. Nadra chairman Tariq Malik said the wallet would have a unique digital ID and would eventually feature as an update to the ‘Pak Identity’ mobile app in late 2022. There have been no updates to this plan so far.

The State Bank of Pakistan (SBP) launched its Easy Data Portal, which contains monetary, debt and all other related economic and financial data including the latest data from the Pakistan Bureau of Statistics. It also contains rich datasets for download. The central bank said the portal, which took almost 2.5 years to launch, would help bring transparency, accountability, collaboration and independence required to run the economy more efficiently.

Imran Khan, the then-prime minister, announced in February that there would be a zero tax rate for freelancers in the IT sector. Khan assured the youth of “all-out facilitation” by the government as he urged them not to miss the IT revolution. A 100% capital gains tax exemption was also announced for investments in IT startups, in addition to easing foreign exchange restrictions for the industry.
LIVE STREAMING COURT PROCEEDINGS

The Islamabad High Court test streamed judicial proceedings in April\textsuperscript{22}. Newspaper headlines said it was “all set to go live”. The court had installed the necessary equipment and a news report quoted an unnamed official as saying the live stream would be accessible to the general public the following month. Judicial proceedings were to be uploaded to the high court’s website if the trial run was deemed a success\textsuperscript{23}. There is no indication the project continued, and there was no further reporting on the matter. There were some claims that the project was abandoned\textsuperscript{24}.

IT PARKS

In December last year, the government committed to doubling the number of IT parks in the country from 22 to 40 by the end of 2022\textsuperscript{25}. As of November 2022, the information technology ministry claims to have established 30 software parks\textsuperscript{26}.

A software technology park was inaugurated in Gilgit in July — the territory’s first — which is said to provide free internet, basic facilities and co-working space to staff of over 20 tech companies\textsuperscript{27}. Work also began on new IT parks in Islamabad and Karachi. The IT park in Islamabad is expected to be completed in 30 months at a cost of Rs13.72 billion\textsuperscript{28}. The Karachi IT park, which is estimated to cost Rs41 billion, is set to become Pakistan’s largest: it will host 225 startups and provide jobs for over 20,000 IT professionals\textsuperscript{29}.

\textsuperscript{26} M. O. I. T. (2022). [Image tweeted by Ministry of Information Technology]. https://twitter.com/MoitOfficial/status/1589259461097081867?s=20&t=YuP4y3x4S5ysZLSQm-1A
\textsuperscript{29} The Newspaper’s Staff Reporter (2022, November 7). Rs41bn Karachi IT Park to provide 20,000 jobs after completion. Dawn.com. https://www.dawn.com/news/1719379/rs41bn-karachi-it-park-to-provide-20000-jobs-after-completion
GOVERNANCE

DIGITAL CENSUS

Pakistan announced that it would conduct its 7th National Census digitally and the next general election would be based on its results\(^1\). A National Census Coordination Centre (N3C) was set up\(^2\) and plans were in place to purchase 120,000 tablets. Initially scheduled to take place in June 2022, it was first delayed by four months\(^3\) reportedly due to equipment\(^4\) and funding\(^5\) issues. The exercise, for which Rs34 billion have been allocated\(^6\), will now take place in February 2023\(^7\) and the census data will be handed over to the election commission in April\(^8\).

RAHBAR

Nadra launched ‘Rahbar’, a mobile application that enables citizens across the country to find their nearest Nadra Service Centre\(^9\). It also provides real-time information on the number of people queued up, processing time and the location of all Nadra registration centres. Users can use filters to sort by female-only, 24/7 and regular and executive Nadra centres. The app also auto-fetches updated data every three minutes. Users can also search for all Nadra offices through city, name, or location. It works in both Urdu and English.

LAW ENFORCEMENT

Talash

The Sindh Police introduced Talash, a Nadra-linked app designed to aid crime fighting and improve policing\(^10\). The app can only be used on devices available to the police. It was introduced in Karachi in the first phase and will be expanded to other districts later. Initially, 50 Talash devices were handed out to police stations to train officials.

The app allows police to:

- Access data of 1.5 million criminals across Sindh
- Access data from criminal record offices (CROs) of Sindh and Punjab, Nadra, excise department, driving licence branches
- Access records of all mobile phones companies, of all hotels and of all registered domestic employees in Karachi
- Access police personnel records to identify imposters
- Use the device to take fingerprints to identify corpses
- Verify whether licence plates and licences are fake
- Access data of suspects on bail

“Talash is a moving online investigation centre for monitoring police and checking suspects’ credentials during raids and combing operations. There would be no need to bring ‘innocent’ persons to a police station as his credentials could be verified through Talash.”

DIG – Information Technology Parvez Ahmed Chandio

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\(^6\) Radio Pakistan (2022, December 6). Rs34b to be spent on 7th population census: Planning Minister. [https://www.radio.gov.pk/06-12-2022/rs34b-to-be-spent-on-7th-population-census-planning-minister](https://www.radio.gov.pk/06-12-2022/rs34b-to-be-spent-on-7th-population-census-planning-minister)


GOVERNANCE

**GO PUNJAB**

Punjab launched “Go Punjab”[^40] , an app that aggregates all citizen-centric apps launched by the province. It allows users to get copies of criminal complaints (first information reports), lost reports and registration of domestic help. It also enables people to get death, birth, marriage and divorce certificates. Users can also pay e-challans, fines and taxes like token and property and also transfer and register vehicles through it. The app will include the services of the private sector, which officials say will generate employment opportunities[^41]. As of early 2023, it has been downloaded over 100,000 times on Google Play.

**SAAF BAHAWALPUR**

Bahawalpur launched “Saaf Bahawalpur”, a mobile app linked to the Bahawalpur Waste Management Company (BWMC)[^42] to keep the city clean. It is said to be the first-ever mobile app launched by any waste management company in Punjab. It features auto-tracking, geotagging, dashboard and complaint alerts. Users can take pictures through the app and identify heaps of trash or any other issue pertaining to sanitation.

**E-STAMPS**

E-stamping systems were launched in Punjab, Sindh and Khyber Pakhtunkhwa to increase transparency and prevent forgeries.

Punjab replaced its system of stamp papers with an e-stamping system[^43]. The system was launched with hopes to eliminate fake stamp papers in the province. Stamp sellers will be registered online. Using special codes on prepaid stamp papers people can access the complete data of the stamp paper seller, including name, address, data, notary and stamp recipient. Applicants will be able to confirm details by checking codes online. Applicants can receive a stamp paper at home after biometric verification. The province hopes to save billions of rupees annually with the new system.

Sindh launched an e-stamping system developed by the PITB[^44]. Through the system, web-based challans (invoice) can be obtained online. The system was introduced in 22 branches of the National Bank of Pakistan which will be extended to 300 branches across the country[^45]. The online portal for the Board of Revenue[^46] allows generating and printing various forms, as well as paying stamp duty, fines or surcharges on e-stamps. It also enables users to calculate valuation rate of land and verification of e-Stamps.

Khyber Pakhtunkhwa also launched e-stamp papers with an aim to ease access to basic services, prevent land disputes, forgery of documents and issuance of back dated stamp papers[^47]. Nine visible and invisible features have been incorporated, and a central database will be maintained for verification, which can be done online by consumers. The initiative will help determine the actual cost of land, minimise the administrative cost of printing physical stamp papers, increase provincial revenue generation by Rs500 million annually and minimise the discretion of officials.

Online hate speech in Pakistan has become an issue of grave concern because of its real-life ramifications in the form of violent protests, destruction of public and private property, mob justice, lynchings etc. While all parts of society face this threat, it disproportionately affects the lives of disadvantaged groups, particularly religious minorities, women, the transgender community and other nonbinary people.

In recent years, we have witnessed incidents of lynching in Sialkot, attacks on the worship places of Ahmadis in Karachi, Sialkot, Sheikhupura, and desecration of graves and mandirs in Karachi, Rahim Yar Khan, and other places. Many of these real-life confrontations have roots in hatred being spewed online, which unfortunately continues unchecked in most cases.

Women often come under attack for their expression on issues related to equal rights, domestic violence, etc. The annual Women’s March in particular has become a flashpoint event in the country, with coordinated online campaigns run to portray participants and organizers as anti-Islamic. Online spaces are also filled with all kinds of slurs and false claims targeting religious and faith-based groups, particularly Ahmadiyya, Shia, Hindus, Christians and others.
Our online hate speech monitoring and geospatial study, "Hateful Places: Punjab, the epicenter of hate speech in Pakistan - a geospatial analysis of Twitter conversation" concluded that there has been an 87-fold increase in online hate speech when comparing March 2022 to a decade ago, with the number of unique users involved multiplied by a factor of 56. Disturbingly, three major cities i.e. Karachi, Lahore and Rawalpindi have been found to contribute up to 90% of all generated hate speech. Punjab is overall the largest contributor to online hate speech, with the maximum volume being generated in Rawalpindi, especially when it comes to targeting religious and faith-based groups. The only silver lining in this situation is that it’s relatively easier for authorities to target and counter hate narratives in urban centers.

To address the problem, there are a few critical steps that stakeholders must take:

**FIA:** The cybercrime wing needs to play a vibrant role, particularly keeping a close eye on the activities of groups that are involved in targeting marginalized groups. The government should also use hate speech laws indiscriminately because currently, these laws are being used to target marginalized groups instead of apprehending the real culprits.

**National Commission for Human Rights:** The NCHR needs to continue the work of its previous commission vis-a-vis amending the blasphemy laws, as they are currently misused as a tool to settle personal scores. The previous commission had presented amendments in the blasphemy law where, for instance, leveling false allegations on innocents would also be a crime. Also, the repentance provision should be included in the blasphemy laws.

**Political parties:** Currently, the leaders of political parties are often found involved in spewing hate narratives against disadvantaged groups to bag votes. Political parties should unanimously adopt a charter vis-a-vis promoting tolerance among their followers/voters with specific mention of not using hate speech as a tool for their interests.

**Social media companies:** Facebook, Google, Twitter and TikTok, among others, have algorithms that problematically bring like-minded hate groups together. YouTube in particular is full of videos where radical clergy openly target disadvantaged groups such as Ahmadiyya, Shia, Hindus, transgenders, and others. Social media companies should enable mechanisms on their platforms for the moderation of hateful commentary. However, this is a slippery slope because the line between legitimate speech and hate speech is not always easy to assess.

Pakistan’s online space remained inherently dangerous with regards to the threat of blasphemy allegations and the deadly consequences for those accused. The year witnessed a steady stream of blasphemy related cases, many of which contained a digital component, either in terms of being the platform for leveling accusations, the grounds on which to prosecute, or the space in which rumors fueled vigilantism, with some horrific scenes of violence going viral.
As tracked by Center for Research and Security Studies, a local thinktank, 1,415 people have been accused of blasphemy in Pakistan between 1947 and 2021, with 81 of the accused being killed¹. “The actual number is believed to be higher because not all blasphemy cases get reported in the press,” the report said².

The Center for Social Justice, a local public policy and advocacy group, cited a higher number of 1,949 persons who have faced allegations under the offenses related to religion, mostly under Pakistan Penal Code sections 295-B, C to 298-C i.e. the blasphemy laws, with 84 accused being killed extra-judicially³. Their report notes that the highest number of accused were Muslims (47.62%), followed by Ahmadis (32.99%), Christians (14.42%), Hindus (2.15%) and the remainder unidentified (2.82%) in terms of their religion. The highest number of cases were reported in Punjab (75.78%) followed by Sindh (18.37%).

The alarming situation was outlined by The United States Commission on International Religious Freedom in the Pakistan 2022 Country Update⁴ which found that, “Pakistan’s religious freedom conditions remain on a negative trajectory with religious minorities subject to frequent attacks and threats including accusations of blasphemy, targeted killings, lynchings, mob violence, forced conversions, and desecration of houses of worship and cemeteries. Members of the Shi’a Muslim, Ahmadiyya Muslim, Christian, Hindu, and Sikh communities face increasingly aggressive societal discrimination due to a rise in Sunni Islamist extremism and the continued threat of persecution via discriminatory legislation such as the blasphemy laws and anti-Ahmadiyya laws. These laws have enabled and encouraged Islamist extremists to operate with impunity, easily targeting religious minorities or those with differing beliefs, including non-believers.” It was also noted that laws were also “weaponized” in the broader political sphere this year in targeting former Prime Minister Imran Khan and his party members.

As of December 2022, law enforcement agencies — led by the Federal Investigation Agency (FIA) Cybercrime Wing and aided by the efforts of a number of faith-based organizations — cracked down on social media users, resulting in 62 people being put behind bars for

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blasphemy, of which, nine were sentenced to capital punishment by the trial courts and two sentenced to death by the high courts. The Senate was also informed that 580 cases under accusation of blasphemy were filed last year, an overall increase of 100%.

While the Council of Islamic Ideology (CII), a constitutional body that gives advice on Islamic issues, did declare violence against a person on allegations of blasphemy contrary to Shariah and Islamic principles, the forum members also suggested that delays in the punishment of those found guilty was the reason for a rise in incidents of vigilantism and violence.

BLASPHEMY ENTERS NATIONAL POLITICS

In an increasingly polarized political arena, accusations of blasphemy were used against the opposition, with the targets being former prime minister Imran Khan and his aides.

The accusations were based on videos that went viral on social media that captured pilgrims heckling Prime Minister Shehbaz Sharif and his delegation in Masjid-i-Nabwi during an official visit to Saudi Arabia. The videos, which contained chants of “traitors” and “thieves” were circulated by supporters of both the government and the opposition with each having widely differing viewpoints on the matter. Saudi authorities confirmed the arrest of several Pakistanis for their involvement in the incident, while officials in Pakistan confirmed that Imran Khan, along with 150 others, had been booked under the blasphemy laws. Interior Minister Rana Sanaullah defended the charges and said, “No one will be spared” further exacerbating the situation.

Complaining of a “planned conspiracy” by the PTI, one of the First Information Reports (FIR) filed in the case was registered under Sections 295 (harming or defiling a place of worship with intent to insult a religion), 295-A (deliberate and malicious acts intended to outrage religious feelings of any class by insulting its religion or religious beliefs), 296 (disturbing religious assembly) and 109 (abetment) of the Pakistan Penal Code. It named several of Imran Khan’s closest aides who had also served in various positions in the previous government.

While the cases ultimately led nowhere, criticism of the move and the harm it caused came from all quarters. Rights activists dismissed the charges as political victimization, with the Human Rights Commission of Pakistan stating that, “No government or political party can afford to allow allegations of blasphemy to be weaponised against its rivals.” Members of the Senate also condemned the misuse of the blasphemy laws, with the Senate Standing Committee on Human Rights urging great care in such cases. Discussions were also held on measures to eliminate the misuse of the blasphemy laws.

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On its part, the PTI used all platforms to criticize the “misuse of the blasphemy law” against Imran Khan and senior leaders of the PTI. The party also said it would pursue legal action against PML-N vice-president Maryam Nawaz for leading a social media campaign that could endanger Imran Khan’s life.

The Islamabad High Court (IHC) examined the matter and declared that registration of a blasphemy case was not required. It also observed that, “Religion has been exploited by organs of the state in the past and such exploitation has led to putting lives of innocent persons at grave risk. The misuse of, and registration of false/fake cases under offences described under Chapter XV of the PPC has created an environment of intolerance and has encouraged vigilante extrajudicial killings.”

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WhatsApp Status
A woman was convicted and sentenced to death by a Rawalpindi court for posting blasphemous content on WhatsApp. The Muslim woman had been arrested in May 2020 for posting blasphemous material as her WhatsApp Status. According to the accuser, when he told the woman to change the status, she forwarded the material to him instead. The accused had pleaded not guilty in the case, and shared that her accuser framed her after she refused, “to be friendly” towards him. They had initially connected on a popular online multiplayer game before moving to WhatsApp.

Granted bail
In what was hailed as a significant positive development, the Supreme Court granted bail to Nadeem Samson, who had been held in jail for four years in a case of alleged blasphemy. His lawyer Saiful Malook stated that the decision would serve as a precedent for other blasphemy accused, who in the majority of cases see a dismissal of their bail pleas. Samson had been detained for allegedly committing blasphemy on Facebook in 2017. He had been accused following a property dispute, and was reportedly tortured by police to obtain a confession. He was released on bail later in the month.

Lynching goes viral
Muhammad Mushtaq, a resident of a small village in Khanewal district, was stoned to death by a mob over alleged desecration of the Holy Quran. The gruesome act, carried out by hundreds, went viral on social media platforms. The videos caused shock and outrage but also led to the arrest of many suspects involved in the lynching, as the footage - recorded on mobile phones - was used to identify the culprits who provoked the crowd and led the torture. In all, 102 suspects were arrested.

Hindu teacher sentenced for life
This year, Notan Lal, a Hindu teacher in Sindh, was sentenced to life in prison for blasphemy based on a video that went viral on social media wherein his student accused him of blaspheming. The accusation, which was uploaded in 2019, also caused protests and riots in Ghotki which resulted in a Hindu temple being vandalized and Lal’s school being damaged at the time.
School teacher given capital punishment

An additional district criminal court in Azad Jammu and Kashmir (AJK) handed down capital punishment along with a Rs1 million fine to Hafiz Zahoor Ahmed, a schoolteacher, on charges of blasphemy. Ahmed was charged for sharing a social media post in Urdu in which he “described himself as a prophet”.

Death sentences upheld

Two Christian brothers, Qaiser Ayub and Amoon Ayub, who had been accused of posting blasphemous content on a blog website in 2011 had their death sentences upheld by the Lahore High Court (LHC) Rawalpindi bench. The case had been registered by a cleric who found a blog that contained blasphemous content as well as the name, phone number, email address and residential address of the perpetrators. The Ayub brothers' testimony stated that an argument had broken out with Muslim friends, whom they believe created the website to frame them.

WiFi device blasphemy

Twenty seven employees of a mobile phone company were detained in Karachi in connection with blasphemous content being broadcast through a WiFi device installed inside a mall. The broadcasts led to a violent protest before the device was seized and shut down by police.

Another bail grant

The supreme court granted bail to Salamat Mansha Masih, a sanitary worker who had been imprisoned following a blasphemy accusation in 2021. In its observations, the court noted that the State should exercise extreme caution and care while dealing with blasphemy cases and should also extend complete protection to the accused until charges were proved.

‘Confession’ goes viral

A violent mob in Karachi caught a woman allegedly burning the Holy Quran on the streets, leading to her arrest and protests at the police station. After being manhandled, her ‘confession’ video went viral on social media, in which the woman stated, “I am a Jew … Muslims are against Jews … that’s why [I burnt the Quran]”. The police later shared that the suspect was Muslim.
Set on fire
A handicapped man was set on fire in Ghotki following accusations of blasphemy. When the victim jumped in a pond to save himself, his assailant, a seminary student, followed him in and strangled him to death. Once again, the killing was recorded, with the video going viral on social media platforms.\(^\text{29}\)

WhatsApp group case
Imran Rehman, a Christian man, was jailed on accusations of posting allegedly blasphemous content in a WhatsApp group. Human rights activists decried custodial torture inflicted on Rehman to force a confession.\(^\text{29}\)
Specific to online spaces, they noted:

- Digital media and social platforms in Pakistan had become a source to make false accusations of blasphemy and target religious minorities.
- The blasphemy laws and the Prevention of Electronic Crimes Act of 2016 were misused to curb freedom of expression, thought, conscience and religion.
- Innocent blasphemy accused were made to face imprisonment for years.

Uploads to social media
A woman was arrested for allegedly uploading blasphemous content on social media. Upon inquiry, the woman shared that her husband had shared the video clip to frame her while he was inebriated.\(^\text{30}\)

Sentenced to death
A man accused of blasphemy in 2021 was convicted this year, with an anti-terrorism court sentencing him to death, a prison term of 21 years and a fine of Rs1.6 million. He was accused of sharing blasphemous content in a WhatsApp group, as well as having blasphemous content in his phone. His lawyer had argued that the accused was falsely implicated by the complainant, and there were major contradictions in the evidence of witnesses.\(^\text{31}\)

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The issue of child pornography is a menace that continues to plague Pakistan, and although progress has been made in 2022, there is still much more to be done. The Federal Investigation Agency (FIA) made some commendable strides in arresting criminals, identifying, and blocking several unethical websites and seizing various types of indecent material such as videos, photos etc. However, this is only the beginning.

For one, the Pakistan Telecommunication Authority (PTA) and FIA are in dire need of human resources as well as technical resources. Though it is noteworthy that the FIA has a dedicated cybercrime wing, it is worrying that many cases go unsolved due to a lack of cyber forensics and non-availability of forensic labs and experts. Thus, more needs to be done in this vein moving into 2023.

Secondly, the issue of child pornography is relatively new to the Pakistani legal system, and the related laws enforced in the country are derived from other countries, and thus, do not entirely suit our legal system. It is, therefore, the responsibility of the government to take action and make necessary amendments to the existing laws to strengthen the fight against such a crime.

It is also necessary to regulate the internet to make it more secure, improve coordination and facilitation of relevant stakeholders and enhance the capacity of law enforcers to investigate and prosecute child pornography cases.
At the societal level, the public should be educated on the issue of child pornography and the law. Massive advocacy campaigns, especially in high-risk cities and communities, are essential. Parents must take greater responsibility and provide proper guidance and supervise their children in use of the internet. Children should be educated about their rights and the safe use of online spaces. It is only through a concerted effort on all fronts that Pakistan can hope to combat this heinous crime.
Tougher Punishments

The biggest development in the fight to curb the production and consumption of child pornography in Pakistan was a landmark judgment in January by Justice Mohsin Akhtar Kiyani of the Islamabad High Court (IHC) who ordered the federal government to amend the Prevention of Electronic Crimes Act (PECA), 2016, so tougher punishment for the offence can be made part of legislation, more in line with the law under the Pakistan Penal Code (PPC).

The court sought to raise the punishment for child pornography from the 14-year maximum set via an amendment in PECA in 2018, to 20 years, with a fine of at least Rs1 million. In the judgment, the court also set down survivor-centric guidelines for the justice system to handle such cases.

“...this Court is of the view that our legal system has not yet secured the rights of the child victim, who has sexually been abused in the offences like child pornography…”

IHC judgment in Muhammad Shahzad Khaliq versus The State

KEY HIGHLIGHTS FROM THE RULING INCLUDE:

- The court orders harmonisation of laws under PPC and PECA, noting that disharmony in the two offers “certain extraordinary benefit to the accused person”.

- The court observes Pakistan is a signatory to the United Nations Convention on the Rights of the Child (UNCRC) and so the state must follow international standards regarding child pornography in line with the Optional Protocol to the Convention on the Rights of the Child on Sale of Children, Child Prostitution and Child Pornography.

- In line with applying the Optional Protocol in letter and spirit, the court sets guidelines to ensure the best interest of the child victims throughout the proceedings, such as exemption from court appearances, in-camera trials, and no display of victim’s footage in court.

- The court orders “sentences be run consecutively with other offences, if charged, in terms of deterrent theory of punishment, in order to protect the society at large from this heinous crime”.

- The court also recognises possession of such material to be just as grave an offence.

Separately in Khyber Pakhtunkhwa, a bill was passed for more stringent punishment for child pornographers, calling for a minimum 14 years rigorous imprisonment that is extendable to 20 years, with a fine of Rs2-7 million.

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While the criminal justice system may have contributed to attempting to stem the tide of rising incidents of child pornography, it was clear 2022 saw no meaningful let-up in the number of cases and prevalence of the crime.

The director general of the Federal Investigation Agency, Mohammed Tahir Rai, spoke in July about the lack of reporting of explicit images of children on the internet. He said only 343 cases over the past five years had come to the fore — this, when in 2021 alone, over 2 million explicit images of children were uploaded to Facebook from Pakistan.

The gravity of the issue was further highlighted by child protection NGO Sahil, which revealed in its report for the first half of 2022 that 2,211 children were victims of abuse. Of these, 1,170 were cases of sexual abuse. In this period, 59 cases of child pornography were reported.

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The data for January-June 2022 recorded:

- 803 cases of abduction, 212 cases of missing children, and 26 cases of child marriages discovered.

- 1,207 (55%) of victims were girls and 1,004 (45%) were boys.

- 567 boys were victims of sodomy/gang sodomy/attempt of sodomy/murder/pornography and abduction while 551 girls were victims of rape/gang rape/attempt of rape/murder/pornography and abduction.

- 17 cases of incest were reported.

- Children aged 6-15 are the most vulnerable; 715 children aged 11-15 and 401 children aged 6-10 were abused in this period.

- 47% of cases involved an acquaintance as the abuser, 18% cases involved strangers and 9% involved acquaintances along with strangers.

- In 1,050 cases, acquaintances were involved, in 409 cases strangers, in 39 cases relatives, in 32 cases female abettors, in 50 cases religious/school teachers and in 63 cases neighbors were involved.

- A majority of the cases (71%) were reported from Punjab. Among the rest, (15%) were from Sindh, nine per cent were reported from the federal capital, three per cent from Khyber Pakhtunkhwa, and two per cent cases from Balochistan, Azad Jammu and Kashmir (AJK) and Gilgit-Baltistan (GB).

- 48% cases were from rural areas and 52% cases from urban areas.

Accordingly, Pakistan was placed among the 10 worst performing countries in the 2022 Out of the Shadows Index which ranks a country by its response mechanism to child sexual exploitation and abuse (CSEA). The country received an overall score of 40.1 out of 100, with a score of 36.1 for “Prevention” of child pornography and 44.1 for the national “Response” to the crime. The only area registering a better score was Justice Process within the Response category, where Pakistan scored 63.5, with Capacity of the Judicial System receiving the full 100 points.

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Manizeh Bano, Executive Director at Sahil, which has been working since 1996 for child protection — primarily against child sexual abuse — regretted “resistance” by the government in implementing proposed initiatives. Speaking during an interview with Matrix Media, Bano said there is a dire need for child-friendly courts, where the victim is not exposed to the abuser, and quicker hearings. She further lamented compromises taking place in cases.

“The problem is [even if] it is not a compromisable case, the witnesses will fall out [of the equation], saying we are mistaken, and there was no such thing, so they ruin the case.

“Remember, abuse is a power game. The victim is always weak; the abuser is in some way or the other more powerful. So, to break that chain is very difficult. Even before the case is brought, he has reached some compromise or the other,” she explained, adding that it is also internet users and the society at large that is partly to blame for the persistent rise in crimes against children.

“It is a question worth exploring why, despite the existence of several laws made to protect children against abuse and newer initiatives such as the Zainab Alert app, this scourge is not only rampant but endemic in many parts of Pakistan.”

Dawn editorial

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A man was arrested in Quetta\(^4\) by the FIA’s Cybercrime Unit for his alleged involvement in child pornography. He was said to be in possession of large amounts of videos and photographs of a pornographic nature which he had stored online on Google Photos. His digital equipment was confiscated and sent to a digital forensic lab for analysis.

The FIA arrested a Rawalpindi\(^5\) man for allegedly uploading objectionable imagery of children on social media. An electronic device was seized on which the explicit pictures and videos were found. Media reports, quoting authorities, said he was a member of various WhatsApp groups for child pornography.

An FIA team from Faisalabad arrested two suspects\(^6\) from Sargodha for their alleged involvement in producing child pornography and threatening their victims that they would upload the videos online. According to an FIA official, some of the videos were uploaded to social media. Mobile phones seized contained multiple footages of minor children.

Separately in Lahore, a gang was busted\(^7\) by the FIA for running a racket that involved filming and selling child pornography videos that would get uploaded to the dark web. At least 10 victims were said to have been allegedly sexually exploited. The four-member gang, that included a woman, would earn in dollars from the trade.

Multi-city FIA crackdowns took place in July\(^8\) with a focus on child pornography and sexual harassment on social media. A majority of the busts took place in Islamabad. In one case, the arrested suspect was said by the FIA spokesperson to be “associated with gangs producing and selling child pornography material on the internet and dark web”. Along with a large amount of pornographic material, several online accounts were recovered where such material had been stored. Similar raids took place in Multan, Abbottabad and Quetta.

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A man, allegedly associated with a child pornography mafia, was arrested in Lahore by the FIA. Officials said he would befriend his victims via video games. He would film them and then blackmail them, they added.

A primary school teacher, who allegedly shared child pornographic content on social media, was held in Mansehra by the FIA after they received a tipoff from Interpol. A collection of pornographic recordings and photographs, smartphones, mobile SIM cards, laptops, and hard drives were seized from the suspect’s possession.

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Cybercrime in Pakistan has evolved and diversified compared to the past. Previously, the majority of crimes included website defacements and DDoS attacks, targeted harassment for financial extortion or coordinated campaigning to troll against political rivals. Now, there is a growing focus on compromising sensitive data held by state organizations and institutions for adversarial political signaling and strategic sabotage.

This shift, along with the prevalence of mis/disinformation and propaganda, has made public and private sector organizations more susceptible to data theft and disinformation.

Unfortunately, targeting and ridiculing women remains an unchanged strand in cybercrime as well. This year saw a disturbing rise in sexist comments, abuse, and character assassination of women. As pessimistic as it sounds, no reduction in such targeted harassment is in sight because the malaise lies in the society’s roots, i.e. beyond the cyberspace realm. Establishing channels to report complaints against harassment, such as a website or mobile application that connects affected women with relevant authorities, could provide a deterrent against such behavior.

At the government level, a major structural overhaul is needed to improve the situation. An autonomous organization staffed by civilian technical experts should be mandated to exclusively deal with cybercrime incident reporting and response. The present mechanism of relegating these powers to the Federal Investigation Agency (FIA) is counterproductive, with changing political governments frequently using these powers to silence critics on flimsy charges. The FIA
itself has frequently complained of being under-resourced, so it is best that they be left to deal with prosecution matters and field assistance only, as and when required.

While much of the cybercrime witnessed in Pakistan mirrors that of any other country, religious blasphemy is a unique issue for the state, with thousands of malicious elements within and outside the country engaging in abhorrent activities. Regrettably, the state uses this as a pretext to restrict/block entire websites, as it does not (yet) appear to have the capability to limit specific web pages or elicit favorable action, such as content removal from host platforms. I have not seen any other country tackle this most sensitive issue with such impunity.

At the societal level, more awareness of cybercrime is needed. Awareness materials should be simplified and disseminated through traditional communication mediums like print and electronic media to reach more people. Less than half of Pakistan’s population has access to or uses the internet, so disseminating this information via traditional mediums would be the most effective way to educate the masses about cybercrime.

In summary, to combat cybercrime in Pakistan, a determined effort is needed. A strong focus on the root causes of the issue, like societal norms and values, would be beneficial in creating a safe and secure cyber environment for future users.
In 2022, businesses and individuals across the globe continued to be threatened by an increasing number of cyberattacks, the UK-based AAG IT services noted in its latest report. It said that the Russia-Ukraine war had “a massive impact on the cyber threat landscape” and that phishing remained the most prevalent crime online.

In Pakistan, a similar trend was witnessed, with a rise in cybercrime reported in 2022. By the first quarter alone, 60,000 complaints were received by the Federal Investigation Agency (FIA) Cybercrime Wing. As reported in Dawn, of these, 7,000 complaints were closed by the agency after the Islamabad High Court (IHC) declared unconstitutional parts of the Prevention of Electronic Crimes Act (PECA) related to defamation. In the same report, an official shared that a majority of these complaints had been filed by women who were harassed on social media.

Other notable cases that were closed included a defamation case against singer Meesha Shafi, as well as others filed against journalists.

Despite defamation being out of the picture, by the end of the year, the total number of cybercrime complaints clocked in at 107,493, showing a steady rise over the last five years, with over 16,000 cases filed in 2018, more than 48,000 cases lodged in 2019, over 94,000 cases registered in 2020 and over 100,000 cases reported in 2021. Despite the large number of complaints, the interior ministry said only 124 people were convicted for cybercrime across 2020-2022.

According to the director general of the FIA, Dr Sanaullah Abbasi, the rise in cybercrime comes with an increase in the use of technology with the proliferation of smartphones and other gadgets, with a large number of complaints citing Facebook as the platform where crime was conducted.

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Women are targeted more than men when it comes to online harassment, data by the Digital Rights Foundation (DRF) shows. In 2021, 68% of the calls made to DRF’s cyber harassment helpline were by women, while 30% were by men and 1% by gender minorities. That year, a total of 4,441 cases were recorded by DRF, of which 893 pertained to blackmail and 727 were of the non-consensual use of images. The year 2022 was no different with cases of online blackmail and harassment continuing to make headlines.

In December, the FIA\(^1\) arrested a man in Faisalabad who allegedly shared obscene photos of a woman on WhatsApp to blackmail her. He was charged under PECA.

In September, a judicial magistrate in Karachi sentenced\(^2\) a man to 22 months in jail for obtaining and sharing objectionable photos of a ninth grade student on social media with the aim to blackmail her and force her to be friends with him. The man was also ordered to pay Rs100,000 compensation to the victim.

Much grimmer reports also surfaced. In October, news broke of a mother of four committing suicide\(^3\) in Okara reportedly after her relatives upload-ed doctored photos of her on social media platforms, along with sharing them with neighbors and relatives on WhatsApp. Moreover, they allegedly physically assaulted her seven-year-old daughter, fracturing her arms. The elders of the family tried to settle the matter quietly, without police intervention, asking the attackers to pay for the child’s treatment, but no payment was made.

The woman, whose face had been edited onto a naked body, made a complaint to the FIA and awaited action for days, before reportedly deciding to consume poison and end her life, said her family. They alleged that nothing was done by the agency to protect the woman and that she continued to be blackmailed by the culprits.

In a similar case, a US teenager\(^4\) committed suicide after two men from Faisalabad blackmailed her. The US Embassy told the FIA the two suspects were allegedly involved in “sextor- tion” through Facebook. They shared objectionable videos and pictures of the 17-year-old New York girl among her friends on Facebook and one of the suspects continued to harass her to send nude photos.

Online harassment of women co-workers was also reported in 2022. In October two employees of the Multan Electric Power Company (Mepco) were found guilty by the Federal Ombudsman Secretariat for Protection against Harassment of Women (Foshap)\(^5\) of sexual harassment. One employee was dismissed from service and asked to pay Rs500,000 in compensation to the victim, while the other was demoted and fined Rs1 million, also to be paid as compensation.

The woman’s mobile phone was hacked to retrieve her personal chat and photos, which were uploaded to social media and used to blackmail her. She said she saw a screenshot of her WhatsApp conversation published in an Urdu newspaper and realized her phone had been hacked.

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Aamir Liaquat Husain, a televangelist who later joined politics, remained in the media eye across 2022. Shortly into his third marriage, several explicit videos of his made their way to social media, reportedly after ties with his wife Dania Shah deteriorated. Observers described the case as “revenge porn.” Soon after, the TV anchor, 50, was found dead under mysterious circumstances.

Husain reportedly implicated Shah on social media over the release of the videos, and following his death, Shabbir Shaqat, said to be the head of a civil rights organization, approached a Karachi court to order an investigation into Shah over the leaks, contending it was a cybercrime matter. That petition was dismissed.

Shortly after, the anchor’s daughter Duaa Aamir filed a police complaint against Shah. In the complaint, she maintained her father went into depression after the videos were allegedly released. The criminal complaint was filed under sections 20 (malicious code), 21 (cyberstalking) and 24 (legal recognition of offences committed in relation to information system) of PECA. Shah was arrested by the FIA and as the year turned, she was seeking bail, which was rejected.
In 2022, both the judiciary and military found themselves at the receiving end of online campaigns aimed at so-called ‘defamation’, in particular following the end\textsuperscript{20} of PTI Chairman Imran Khan’s tenure as prime minister. In the days following his ouster, a “strong trend”\textsuperscript{21} was witnessed on Twitter against the army and judiciary with over 20,000 tweets posted.

The social media campaigns continued across the year, with notable campaigns including one after the Lasbela incident when six army officers were martyred, and another after Imran Khan’s aide Shahbaz Gill’s alleged attempt to incite army ranks to go against their top command, and specifically when Khan called out a female judge who handed Gill over to the police. The FIA cracked down\textsuperscript{22} on social media activists it believed were involved in these “vilification” campaigns, making eight arrests in the process.

"They are accusing us of leading the smear campaigns, but none of the PTI workers are behind the trends. These raids and arrests are illegal. They have revoked the Peca ordinance and even under Section 20 of Peca they should first send a notice and investigate before taking action."

Azhar Mashwani, the former focal person on digital media to the Punjab chief minister

The agency told\textsuperscript{23} Dawn an “organised” campaign was set in motion by social media activists at home and abroad, although it did not name any party responsible. According to a report by the publication, over 69,000 tweets were generated for one anti-army hashtag, while another prompted 410,000 tweets.

Asad Baig of Media Matters for Democracy (MMfD) said that the PTI could not be blamed for all such campaigns, although it was noted that a leading contributor to the anti-army trends had been found to post in support of the party. Baig said 72% of the 410,000 anti-army tweets were generated in Pakistan, followed by 5% in the UK and 4% in the UAE.
The social media campaigns were also bolstered by politically motivated ‘leaks’ across the year, the most serious of which occurred in September. In a massive security lapse, several conversations that appeared to have taken place in the Prime Minister Office surfaced (See section: Data Protection).

A 12-member high-powered committee, comprising federal ministers and heads of intelligence agencies, was notified by the prime minister in October to oversee a probe into the security breach at PM House.

It was not just current government functionaries that had to undergo such intense public scrutiny following leaks. Recordings of an alleged conversation between Imran and his former principal secretary, Azam Khan, came to the fore just three days after the PM Office clips. The two spoke about the US cipher that the PTI chief had long claimed was proof of a conspiracy to oust him. The ‘tit-for-tat’ release of audio leaks continued to be a feature across the year.

In February 2022, the president promulgated an ordinance to amend the Pakistan Electronic Crimes Act, 2016 (PECA), in effect criminalizing online “defamation” of authorities. The provisions criminalizing defamation of “natural persons” were broadened to include “any company, association, or body of persons, … institution, organization, authority or any other body established by the Government under any law or otherwise”. With the amendment, defamation became a non-bailable offence, and the prison term for a convict increased from three to five years. Moreover, any person or institution could initiate a complaint calling for criminal proceedings.

The move drew sharp rebuke from rights organizations who viewed the amendment to be “incompatible with the fundamental human right to the freedom of speech and expression” and the amendment was later declared unconstitutional by the courts. (Read more: Censorship and Media)

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SOCIAL MEDIA FUELS ETHNIC TENSIONS

On July 12, a young Sindhi man named Bilal Kaka was murdered and five of his friends were injured in a brawl outside a hotel in Hyderabad, allegedly by Afghans, sparking ethnic tensions between Sindhis and Pashtuns. But what added fuel to the fire was social media. A video of police standing by while the deadly brawl was underway went viral, which was seized upon by activists of nationalist parties who condemned what they termed police indifference.

The ensuing rhetoric quickly took on a racial tone, and over the next few days, groups of men patrolled areas of Hyderabad and Jamshoro, forcing tea shops and restaurants run by the Pashtun community to close down. Some shops were ransacked as well. In one such incident, three people were injured in gunfire.

The communal anger spread to Karachi, where protesters in the Pashtun-dominated neighborhood of Sohrab Goth torched vehicles and pelted cars with stones. The Sindh government, scrambled to defuse tensions, with its Information Minister Sharjeel Memon vowing not to spare those who spread hate through social media. He claimed that social media accounts of dead people were used to circulate hate messages and videos to further fuel tensions. The FIA was asked to move against accounts fanning hate, while the Sindh Chief Minister House posted warnings on Twitter.

Political parties including the Jamaat-e-Islami, MQM-Pakistan, Awami National Party, and nationalist leaders Jalal Mehmood Shah and Ayaz Latif Palijo urged restraint from both Sindhis and Pashtuns. Scores were arrested as police armored personnel carriers patrolled the streets. After violence peaked on July 15, an “uneasy calm prevailed,” but tensions remained. On October 15, the heirs of the murder victim, backed by nationalist groups, held a rally in Hyderabad against the “Afghans involved in murders,” where racist slogans of “go, Afghans, go” were raised. They also demanded Afghan refugees be repatriated to their home country.

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CRYPTOCURRENCY SCAMS

In January, the FIA revealed that Pakistani investors lost an estimated $100m when 11 apps linked to Binance, the world’s largest Bitcoin exchange, went offline\(^{36}\). The agency reached out to Binance’s local representative demanding he explain his company’s position on the alleged fraud. Binance was quick to assure FIA of its full support and quickly mobilized a two-member linked to the US Treasury Department team to work with the agency\(^{37}\).

The modus operandi of the apps — MCX, HFC, HTFOX, FXCOPY, OKIMINI, BB001, AVG86C, BX66, UG, TASKTOK and 91fp — was to ask people to open a Binance account and then transfer the money from the Binance Wallet to the account of that particular app. "At the same time, all the members of the group were added in groups on Telegram where so-called expert betting signals, on the rise and fall of Bitcoin, were given by the anonymous owner of the application and admins of the Telegram groups," the FIA said.

Preliminary findings suggested that apps averaged 5,000 customers, with the HFC app reporting the maximum number of 30,000. "The reported range of investment per person was from $100 to $80,000 with an estimated average of $2,000 per person thus making [the] estimated scam stand at nearly $100m," the agency said.

In response, a committee formed by the Sindh High Court recommended a complete ban on cryptocurrency in Pakistan\(^{38}\). The court had been hearing a constitutional petition filed in 2019, which sought to overturn SBP guidance from 2018 advising banks and payment system operators against processing and investing in virtual currencies\(^{39}\).

"The only use of cryptocurrency in Pakistan seems to be speculative in nature where people are being enticed to invest in such coin for the purpose of short-term capital gains. This may result in the flight of precious foreign exchange as well as the transfer of illicit funds from the country".

Sindh High Court committee recommendations

The court sent the report to the finance and law ministries to develop a plan, but later expressed annoyance at their failure to do so\(^{40}\). Simultaneously, FIA said the agency would approach PTA to block websites dealing in cryptocurrencies to prevent fraud and possible money laundering\(^{41}\).
The central bank's governor at the time, Reza Baqir, at one time said cryptocurrency “has more risks than benefits”\(^{42}\). He, however, left the door open on the matter, saying the SBP had been working to develop an understanding of possible future currencies. However, in a follow-up talk, he said there was “no good use” for cryptocurrencies\(^{43}\). However, that did not stop Pakistanis from investing in cryptocurrencies and landing in trouble for doing so.

In December, the FIA's Khyber Pakhtunkhwa offices registered the province’s first-ever money laundering case over cryptocurrency transactions\(^{44}\). The suspect, the FIA alleged, had 10 bank accounts with transactions of Rs870 million during the last three years. The agency also alleged he had invested in cryptocurrency. According to them, since cryptocurrency isn’t allowed in the country by the SBP, all transactions made through cryptocurrency were undocumented, unexplained, unregistered, illegal and tantamount to illegal parallel banking.

**FAKE INVESTMENT FIRM**

The FIA said it arrested four\(^{45}\) more\(^{46}\) people for allegedly defrauding hundreds by luring them to invest in a fake online investment firm “Parpal Digital”. The fake company’s director\(^{47}\) and two others\(^{48}\) had been arrested in 2021. Media reports said the suspects baited a large number of people into investing with the fake company by offering them high returns and later disappearing with the money. The FIA believes more than 30 people were involved in the scam and the agency has so far arrested 20 of them.

**FAKE JOB ADS TARGET THE VULNERABLE**

Vulnerable job seekers were targeted by fraudsters putting up fake advertisements for jobs overseas\(^{49}\) using a variety of approaches, The News reported.

In one case, a man from Swat found an advertisement online announcing vacancies in Qatar. After filling out a Google form, the victim received an email from a man representing a “Qatari” company in Pakistan. After congratulating him for being selected, the man asked for a Rs4,000 deposit to process the job application. After he paid him, the scammer stopped responding. The same man then shared that he received a WhatsApp message informing him that he had been shortlisted for an overseas job and that his employment letter was ready. When he informed the scammer that he hadn’t applied for any job, the scammer stopped responding.

In another case, a university graduate from Shangla narrated that he had come across a job advertisement on social media offering a handsome salary for a news website. He paid Rs3,000 and filled out a Google form. A week later, he got an envelope with a newspaper and a pamphlet. “When I searched the internet, there was no such newspaper or website. They then contacted me through WhatsApp and asked for more money for issuing me a press card. This time, I did not pay them anything,” he said.

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\(^{42}\) Iqbal, S. (2022, February 15). Cryptocurrencies have more risks than benefits, says SBP governor. DAWN.COM. https://www.dawn.com/news/1675151


\(^{46}\) The Newspaper’s Correspondent. (2022, September 18). Two more held in online investment firm scam. DAWN.COM. https://www.dawn.com/news/1710592


DIGITAL MARKETING FRAUD

The chief executive and director of Click Pay Earn and Global Ads and Marketing, respectively, were arrested from Karachi in January for allegedly committing Rs200 million online fraud with scores of people. While details are scant, the FIA claimed the duo lured people through “digital marketing” and different investment schemes and allegedly committed fraud\(^50\).

ILLEGAL ARMS DEALING

Social media was also employed for arms dealing\(^51\) this year. In November, the The Counter-Terrorism Department (CTD) reported arresting four men for their alleged involvement in the sale of arms to youngsters, criminals and terrorists in Karachi.

“Arms dealers and shopkeepers of Peshawar, Darra Adamkhel, Dera Ismail Khan and other districts were involved in smuggling of arms whose modus operandi was to publicise the arms dealing through Facebook and Whatsapp groups,” said CTD official Raja Umer Khattab.

Khattab said the weapon of choice was communicated and its price determined on the groups. Buyers would pay half through online apps and the remaining upon delivery. Fake arms licenses, made to look like originals, were also sold, he added.

\(^50\) The Newspaper’s Staff Reporter. (2022, January 10). Two held in Karachi over Rs200m online fraud. DAWN.COM. https://www.dawn.com/news/1668620

\(^51\) The Newspaper’s Staff Reporter. (2022, November 12). Four held in Karachi for selling weapons through social media. DAWN.COM. https://www.dawn.com/news/1720385
Hundreds of people, mostly women, lost an estimated Rs420 million by participating in an online “ballot committee” allegedly orchestrated by a Karachi-based online influencer.

A ballot committee — known locally as a BC — is a traditional form of saving money, aided by a group. According to Bloomberg, “Each member of a group of trusted friends or relatives contributes the same sum daily or monthly to a pool for a predetermined length of time, usually one year. Through a ballot, each participant is allotted a number indicating his or her turn. Every month, one participant gets the pool total. Everyone on the committee keeps contributing until each member gets a pot of cash.”

The influencer who allegedly ran the “Ponzi scheme” had by some estimates set up more than 100 WhatsApp groups to collect funds from members. The organizer suddenly published social media posts announcing that she had “no means” of paying off her committees to the hundreds of contributors, leaving them livid and sparking a social media debate. She did promise to pay them all back.

The woman then approached a court seeking protection from harassment and the court issued summons to seven women who contributed to the savings scheme to hear their side of the story. The case remained in court.

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The year 2022 saw data protection continue to be a challenge for policymakers in developing countries, even as the advent of the next generation of the World Wide Web — Web 3.0 — gained pace.

According to the United Nations Conference on Trade and Development (UNCTAD), 29% of the world’s countries still lack privacy and data protection legislation (9% with draft legislation — Pakistan is among these — 15% with no legislation and 5% without any data)\(^1\).

In Pakistan, data breaches were a major issue, especially in the form of audio leaks that greatly impacted local politics. Aside from this, many institutions with sensitive data were reportedly under-threat, or considered vulnerable by experts and activists.
While data privacy remained a concern for the average citizen in 2022, it became a nightmare for the Prime Minister’s Office, with several informal conversations that took place there, leaked to the public in September. The leaked audio allegedly featured Prime Minister Shehbaz Sharif, PML-N leader Maryam Nawaz and some members of the federal cabinet. These audio clips were shared widely on social media, including by PTI leaders. A security lapse of this magnitude raised several questions as to the flaws in the security of the highest office in the country.

Former information minister Fawad Chaudhry characterized the leaks as a cyber attack. Responding to a tweet that termed it the work of a hacker who invited bids upwards of $345,000 for access to more than 8GB of recorded data, he wrote, “Shocking! PM of Pak office conversations are available on hackers website for 345,000 USD, really shows the security levels of PMO.”

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The prime minister acknowledged it as a major security lapse and constituted a high-powered inquiry committee to probe the debacle. The probe committee combed through the entire premises, debugged it, and also monitored mobile phone data and laptops of employees and officers of the PM House and Office. Security measures were put into place including keeping a "vigilant eye on lower staff", whose movement was curtailed. Also, all mobile devices were to be turned in at the PM House entrance. Moreover, the PM House was to get a new cyber security department, to be overseen by a director general.

The National Security Committee (NSC) set up a body to investigate the leaks and agreed on a "legal framework" for cyber security. Despite all this, the perpetrators of the incident were never publicly identified. The interior minister later claimed that no hostile intelligence agency was involved, and that some staff members of the PMO had been identified as the culprits and had been motivated by money.

A few days after this set of PMO leaks, former prime minister Imran Khan ended up being at the heart of another leaks controversy with a clip allegedly featuring him in conversation with then principal secretary Azam Khan on the sensitive matter of a “threat cipher” received by his government just prior to his removal from office through a no-confidence vote.

This pointed to a shocking realization, put succinctly by a Dawn editorial: “The place appears to have had a bug problem for months, if not years, and private conversations held inside its usually secure walls are now casually leaking into the public domain.”

In the course of the following weeks, leak after leak surfaced of the former premier speaking of his party’s “numbers” in parliament and how it should approach the controversial cipher.

"The Imran Khan leak added an interesting dimension to the controversy raging over this serious national security breach: it is now clear that the PM Office had been under illegal surveillance for longer than just one brief period. Clearly, the Intelligence Bureau miserably and repeatedly failed in its sworn duty to secure the facility and protect the prime minister."

Dawn editorial

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A few months later, the government of Pakistan issued\(^6\) a cybersecurity advisory to various government departments and provinces warning them about the dangers of data leaks on the dark web. The advisory, titled “Leakage of Sensitive Data on Dark Web (Advisory No 53),” notes that the anonymity offered by the dark web makes it a “gateway to the world of crime” and constitutes 96% of total data available on the internet.

The advisory lists a range of criminal activities that are carried out on the dark web, including hacking, blackmail, financial scams, terror financing, and propaganda dissemination. It also provides guidelines for protecting personal and official data from cyber criminals, including remaining vigilant while surfing the web, applying two-factor authentication on email and banking accounts, and avoiding the installation of untrusted software from third-party sources.

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**‘HACKERS FOR HIRE’**

While the country was still reeling from the shock of the audio leaks attributed to the office of the prime minister, news broke of a “hack-for-hire” gang\(^7\) operating out of India that had spied on Pakistani politicians, diplomats and senior generals, among other targets around the world. The expose was published in November by The Bureau of Investigative Journalism (TBIJ) and the Sunday Times.

TBIJ undercover investigators managed to obtain the contents of a leaked database which showed that hackers broke into the computers of the high profile individuals and “eavesdropped on their private conversations, apparently at the behest of the Indian secret services”. According to the report, the Whitelint\(^6\) gang that targeted Pakistan was run from an apartment in Gurugram. Its 31-year-old mastermind, Aditya Jain, was a TV cybersecurity pundit who also worked for the local branch of British accountancy firm Deloitte. The investigation found that many of Jain’s targets arose from frayed relations between India and Pakistan.

On January 10, 2022, he was asked to gain access to then information minister Fawad Chaudhry’s email account. Furthermore, Jain’s team used malware to break into his computer and target senior generals, besides embassies in Beijing, Shanghai and Kathmandu. Former president Pervez Musharraf was also among those hacked.

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FINTECH DATA LEAKS AND NEW POLICIES

In mid-2022, accounts of people being harassed by fintech companies, in particular two that provided nano loans of up to Rs25,000, started doing the rounds on social media (See section: Fintech). The Securities and Exchange Commission of Pakistan (SECP) in July took note of this trend and decided to take strict action against such companies.

Later in December, the SECP issued a statement saying it had noted “rising concerns involving mis-selling, breach of data privacy, and coercive recovery practices of licensed digital lending companies” and is thus issuing standards for them to follow. This included standards related to data protection and privacy whereby, lenders, “will not be allowed access to the borrower’s phone book or contacts list or photo gallery, even if the borrower has given consent in this regard”.

Among other stipulations was the requirement that no data be stored on any cloud service outside Pakistan. Furthermore, it is incumbent on all such services to register their apps with the Pakistan Telecommunication Authority (PTA).

LAND OWNERSHIP HACKS

In July, hackers broke into the government-run Dehi Marakaz-e-Maal (DMM) systems, which were setup to facilitate the public in accessing revenue records. This put the land ownership of several people across Punjab in danger. When complaints surfaced, the authorities disabled VPN access to the system.

The first instance of such a breach was traced to Bhalwal tehsil of Sargodha district where the ownership of millions of rupees worth of farmland was transferred by hackers who got into the computerized land record management information system. Complaints of transfers were also received from Vanike Tarrar (Hafizabad), Kharian and Dinga (Gujrat), and Lodhran without the required fees that are to be paid for such transactions. The assistant commissioner of Bhalwal made a complaint to the Punjab Land Record Authority (PLRA). However, it was reported from Kharian that despite the court issuing stay orders, a transactional fard (document showing land ownership) was issued.

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SECP WEBSITE BREACH

In another cybersecurity breach in August, the website of the Securities & Exchange Commission of Pakistan (SECP) was hacked\(^{13}\), with information belonging to the commission’s directors stolen.

An initial report surmised this would not have occurred had a routine “vulnerability and penetration testing” been carried out for the website. It was due in February and had still not been done when the website breach was highlighted by the media.

The data scrapped by the website included names of companies and their directors along with crucial details such as CNIC numbers, permanent addresses and names of the directors’ fathers. Some of the information was put up on the website www.companieshouse.pk. The SECP, along with the Pakistan Telecommunication Authority, was able to shut down the site. Authorities were also requested to cancel the domain registration of the website.

IMRAN KHAN’S INSTAGRAM HACKED

PTI Chairman Imran Khan’s Instagram account was momentarily hacked\(^{14}\) in August, during which time hackers posted a picture and story related to Elon Musk and bitcoin.

The breach was confirmed by Imran Ghazali, the general manager of the disbanded Digital Media Wing (DMW). He said at the time that he was working with Meta, the company that owns Instagram, to recover the account. Ghazali, while speaking to Geo.tv, said that no other social media accounts had been compromised and that the Instagram handle was restored within 15 minutes.


The Twitter account of Pakistan’s consulate in Afghanistan’s Kandahar was briefly hacked in December. The account was swiftly recovered and an update posted on Twitter, but only after certain “unsolicited tweets” were posted.

“Official account of Consulate General of Pakistan Kandahar was hacked a while ago which was immediately recovered. Unsolicited tweets have been deleted. The Consulate offers sincere apologies for any inconvenience this may have caused. The matter is being reported to Twitter,” read a tweet posted by the consulate. No further details as to the nature of the breach were released to the media.

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The federal cabinet in February 2022 gave its nod to Pakistan's first ever Cloud First Policy, paving the way for a streamlined and upgraded information and communications technology (ICT) sector.

Federal Minister for Information Technology and Telecommunication Syed Amin-ul-Haque highlighted the importance of the move saying that it would help create a common platform for public sector departments as maintaining data was a costly endeavor, and was at times difficult for the departments to manage.

To that end, the policy's main goals were to lower ICT capital costs, improve public administration and transparency, and effectively exchange and consolidate data between departments. Additional goals include lowering costs through "pay as you use" cloud services and enhancing data security under contracts with cloud service providers.

According to Nadra— the National Database and Registration Authority — it has issued some 120 million cards to citizens. Each card has a 13-digit unique ID, a photograph of the person, their signature, and a microchip that contains their iris scans and fingerprints. Due to the fact it is a prerequisite for any official work, the Nadra database is accessed by about 300 public and private service providers, from the tax department to the election commission to mobile service providers, according to a Reuters report, which creates many points of vulnerability.

Personal data breaches are particularly risky for vulnerable groups such as journalists, activists and religious and ethnic minorities. Haroon Baloch, a senior manager at Bytes for All said that citizens remain oblivious to how their biometric data is used. He cautioned of serious implications not just personally but also for one's family. On its part, Nadra dismissed such concerns saying that its database has multiple levels of security “which makes hacking impossible”.

One of the main components of the policy was the creation of a cloud office by the IT ministry, which will be responsible for carrying out its implementation. The office is intended to serve as a regulator, and among its duties are developing the standards for cloud service provider accreditation and registration, issuing guidelines for cloud service provider contracts with public sector entities (PSEs), and ensuring adherence to the policy and specified data security requirements. A cloud acquisition

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NRCA LAUNCH

IT and Telecommunications Minister Syed Amin-ul-Haque inaugurated the Public Key Infrastructure (PKI) for the National Root Certification Authority (NRCA) in December, marking a significant step toward digital security. The minister stated that the NRCA will provide trust and security in electronic transactions and communications, and will be globally recognised through WebTrust audit and secure PKI setup.

The PKI and information security industry is a multi-billion-dollar global market that Pakistan has yet to tap into. Currently, all certificates used for secure services in Pakistan are imported, but the NRCA may alleviate this issue and reduce the burden on foreign reserves.

The minister emphasized that the growth and adoption of digital technologies are crucial for the development of Pakistan and the establishment of a regulatory framework for digital transactions, documents, and systems is essential.

Office will also help PSEs with developing, acquiring, and migrating to the cloud. Additionally, it will be in charge of starting call off requests for PSEs from a list of authorized cloud service providers.

According to the nature and level of security necessary for each type of data, the policy specifies general recommendations and a cloud selection matrix to be followed. There are five categories listed: "open data," "public data," "restricted data," "sensitive/confidential data," and "secret," each requiring a unique cloud and security level. The cloud office will also establish the security criteria, which range from "baseline" to "highest".

With the groundwork complete for the policy to take effect, no department would get funding in the development budget for setting up their own data centers in future.

In tandem with the IT ministry launching the policy, Jazz, one of the country’s telecom service provider, launched its “state-of-the-art cloud platform” called Garaj. One key advantage to using the service would be to have data created in Pakistan hosted within the country. According to a press release, an investment of $6 million was in the pipeline over the next few years. The platform will “enable businesses, public entities, academic institutions as well as local startups to further optimize their operational efficiency, capacity and accelerate their growth ambitions”. The services is to be offered from Jazz’s data center in Lahore.

LOOKING TO WEB 3.0

The government of Punjab aimed to stay ahead of the curve by becoming the first province in the country to launch a Web 3.0 portal. The platform would allow registration from IT experts, researchers, and scientists, as well as feedback from companies in the field. The move toward the latest generation of the World Wide Web, which incorporates emerging technologies like AI, blockchain, and virtual reality, promises to revolutionize the digital landscape.

The Punjab government was stated to be greatly in favor of the adoption of Web 3.0, predicting that it would have a profound impact on industries such as tourism, education, retail, and real estate.

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It’s comforting to see that some things remain constant.

Censorship is perhaps the one place successive governments, the state and the establishment are still on the same page. The Pakistan Electronic Crimes Act (PECA) — a section of which was struck down in 2022 — is just one of the many iterations and avatars of censorship measures that have existed in one form or another for decades. And while the striking down of PECA’s Section 20 (related to defamation) can be celebrated, it must be understood why these laws are made in the first place. They are used to target those deemed “inconvenient” or “troublesome”, so even if one law is removed now, another will be found to replace it.

There are many laws that are so loosely worded and interpreted that when the authorities want to target someone, they will find a law to use against them. As for whether journalists are aware of the legal lines they can or cannot cross online, they only become aware of them — or, rather, are made aware of them — when they step over them. There’s really no point in being too careful about the law because it’s all situational. Just like sedition. It is a charge that can be applied to almost anything, so if everything is sedition, then nothing is sedition.
So does the online space offer more freedom than traditional media?

In all, 2022 was a time of great chaos and flux in terms of politics. This meant that censorship was simply less of a priority because the powers that be were too busy watching each other and trying to go up against each other to bother with what someone was talking about.

However, it certainly seems like the state pays more attention to tweets than what journalists say in traditional media. And while journalists, myself included, may be more pithy and raw on social media than on television, I would argue that what is being said isn’t fundamentally different.

In such an environment, journalists have learned – as a defense mechanism and survival technique – that they can talk about many things depending on how they talk about it. To that end, they have mastered the art of the euphemism. But even then, for the sake of one’s sanity one simply refrains from overly criticizing a political party on social media to avoid dealing with the torrent of abuse and vilification that follows.

Let us hope 2023 will be better, but I’m not holding my breath.
In 2022, the state ramped up its efforts to control the online space, continuing a long running trend of abusing rights to speech and information. Across the year, cases continued to be filed against journalists, activists and political opponents over their ‘unfavorable’ views expressed on social media, while attempts were also made to legislate in favor of tougher defamation laws as a means to stamp out dissent. Websites, and in some cases, entire platforms were blocked to curb speech and demands to register VPNs resurfaced.

Amending PECA

In February, the Pakistani government under then-Prime Minister Imran Khan passed an ordinance amending Section 20 of The Prevention of Electronic Crimes Act, 2016 (PECA) to make online defamation a criminal offence with far tougher penalties. The then-law minister Farogh Naseem claimed it was meant to deal with “fake news.”

After the PECA Amendment Ordinance 2022 came into force, defamation became a non-bailable offence, and the maximum jail term for convictions was increased from three to five years. It also expanded the definition of those who could initiate criminal proceedings for defamation, allowing any person — or institution — to make complaints. The accused had to be tried within six months, and the offence was made “cognisable”, meaning the police could make arrests without warrants.

The addition of sub-section (1-A) of Section 20, which extended the right to lodge a complaint to any member of the public even if they were not defamed, drew widespread condemnation. As noted by the public sector National Commission of Human Rights, the ordinance was found to be, “Incompatible with the fundamental human right to the freedom of speech and expression – a right enshrined within Article 19 of the Constitution of Pakistan, and protected under various international agreements to which Pakistan is a party. Further, such enactment through an Ordinance without consultation with the relevant stakeholders vitiates the democratic process.”

Amnesty International and Human Rights Watch (HRW) termed the move, “a concerted campaign to restrict freedom of expression and stifle dissent.”

“The Prevention of Electronic Crimes Act neither protects the public from legitimate cybercrime concerns nor respects fundamental human rights. The new amendments will further embed violations of basic rights with a thin veneer of legality.” Patricia Gossman, Asia Associate Director at Human Rights Watch

DEFAMATION, A MEANS TO AN END

Introduced in 2016 by the Nawaz Sharif government, PECA was billed as a bulwark for women against online slander. However, it later emerged that politicians “wanted this clause to prosecute slander against themselves and their families as well”. Imran Khan had criticized the bill as an oppression of the “most democratic medium of expression — the internet”.

“Enacted under these false pretences, the intent behind Peca stands well exposed today, having proven to be an effective weapon in the hands of the state, to harass, intimidate and silence critics.”

Farieha Aziz, co-founder Bolo Bhi

Six years later, Khan’s denunciation of “fake news” reports about the state of his marriage while he defended his under-fire PECA ordinance was seen by some in the media as one of the reasons behind the step. Analysts were quick to question whether this “draconian” ordinance was really an attempt to curb fake news. There were fears that since companies and state institutions were allowed to become aggrieved parties, the government could easily bear down on speech it deemed “false” and believed could hurt the reputation of an institution.

Furthermore, the denial of bail and arrests without warrants were seen as “coercive measures to threaten citizens, and one more step towards digital autocratisation”. The absence of an exact definition of fake news was also highlighted by observers, which could leave citizens “vulnerable to the interpretations and mercies of law enforcement personnel”.

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**LEGAL CHALLENGE**

In March, four media bodies — the Pakistan Broadcasters Association, All Pakistan Newspapers Society, Association of Electronic Media Editors and News Directors, and the Council of Pakistan Newspapers Editors — petitioned the Islamabad High Court to declare the PECA amendment ordinance unconstitutional.

They argued that, “The fear of being dragged into criminal proceedings by the investigating agency on the complaint of any member of the public for alleged defamation of public officials are bound to chill free speech and fair comment”. While hearing the case, the judge, Athar Minallah, said Imran Khan could have been misled by advisers with regard to the ordinance, which triggered a social media campaign against him.

The judge also asked the government to investigate the conduct of officials of the Federal Investigation Agency’s Cybercrime Wing, which was behind the PECA prosecutions. The ruling was universally hailed.

Subsequently, the FIA closed 7,000 cases opened under the ordinance, a majority of which were related to defamation and threats from Twitter and Facebook accounts. A month later, the FIA challenged the court’s verdict, but the petition was swiftly withdrawn by the government, which had since changed hands.

> "This landmark overturning of the PECA Ordinance is a significant step toward restoring freedom of expression and press in Pakistan. However, there is dire need to increase efforts to ensure that all Pakistani journalists and media workers enjoy unfettered independence. Long-term democracy and the rule of law require a free, independent, and responsible media."

International Federation of Journalists

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Just 10 days after the PECA ordinance was overturned, the government, now under Nawaz Sharif’s PML-N party, disbanded the Imran Khan-era Pakistan Media Development Authority (PMDA), an umbrella body established in 2021 to regulate print, broadcast and digital media.

The PMDA, which was also established by presidential decree, endured significant criticism from the press and international rights bodies like HRW, who warned it would allow “unchecked powers to punish news outlets, [and] journalists”.

Like the PECA ordinance, the PMDA was ostensibly established to curb “fake news”. To that end, it conceived of media tribunals, three-year jail terms and fines as high as Rs25 million for violations.

While scrapping the PMDA, the government minister described the regulator as a “black law” and said no such law would be enacted or worked upon that would restrict the people’s constitutional right to freedom of expression.

In November however, the government approved an amendment to the FIA act, empowering it to act without the cabinet’s approval against anyone who intends to spread “rumours and false information against state institutions” on social media.

“To circumvent procedures that require permissions from court and warrants, or to have to rely on the police, it appears the FIA’s hand is being further empowered so the crackdown can continue more swiftly,” Bolo Bhi co-founder Farieha Aziz said of the development.

Interior Minister Rana Sanaullah said the government would consult journalists and other stakeholders on the bill and withdraw it if it restricted freedom of expression. However, he added that there were some things on social media that “need to be controlled and the personal lives of people are being negatively affected”.

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MEDIA

From May 2021 to April 2022, there were a total of 86 violations against journalists in Pakistan, 12 of which were against digital media practitioners, Freedom Network shared in its study. These included two of the four journalists who were killed in the period. Aside from that, there were a number of cases opened against journalists — mostly PTI leaning — over their views shared on social media.

Targeted: Mohsin Baig

On February 16, 2022, media personality Mohsin Baig was arrested by the FIA’s Cybercrime Wingt for allegedly disparaging then-federal minister Murad Saeed on a television show.

Baig had joined a television panel on NewsOne the week before, in which he and others questioned the reasoning behind Saeed winning top honours in a ceremony celebrating the best-performing federal ministries. According to the Pakistan Electronic Media Regulatory Authority (PEMRA) show-cause notice issued to the channel, in the show, anchor Gharida Farooqui asked her panellists the "[real] reason" behind Saeed’s ministry ranking first. Baig responded that he didn’t know but it was "written in Reham Khan’s book".

In the minister’s criminal complaint against Baig, Saeed said the journalist related a "baseless story with derogatory remarks" which was subsequently shared on social media and had "shattered" the federal minister’s image in public. In dramatic scenes that played out in broad daylight, Baig’s house was raided by armed FIA personnel in plainclothes, as mobile phone videos from the scene showed Baig waving a gun at his captors. He was eventually taken into custody on charges that included alleged terrorism for resisting arrest.

The raid was ruled to be illegal by a sessions court. Furthermore, in an anti-terrorism court hearing, Baig alleged custodial torture at the hands of FIA officials. The Islamabad High Court ordered an inquiry into the charges, and after two months of hearings, dismissed the case against him.

Targeted: Sami Abraham, Imran Riaz Khan, Jameel Farooqui, Arshad Sharif

After Imran Khan’s government was removed in a no-confidence vote, journalists aligned with the PTI saw themselves increasingly in the crosshairs of the law.

On May 8, the FIA opened an inquiry against Bol channel anchorperson and YouTuber Sami Abraham for allegedly transmitting "anti-state" videos and statements on various social media platforms. On May 20, a separate defamation case was filed against Abraham.

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The complainant said he saw Abraham’s vlog on his ‘Canadian Pak News’ YouTube channel in which he allegedly “used obnoxious words against judiciary and armed forces”.

On May 22, the first of 18 sedition cases was filed against fellow Bol anchorperson and YouTuber Imran Riaz Khan for allegedly using “derogatory and provocative language” against the army and institutions on social media. A day later, Khan got protective bail from the Lahore High Court, but by July 5, he was arrested by Attock Police outside Islamabad. From Attock, Riaz landed in a Chakwal jail, and from there, he was handed over to the Lahore Crime Investigation Agency (CIA). The Lahore High Court granted him bail four days after his arrest. A week later, Khan tried leaving the country for the UAE but was offloaded by the authorities.

Around the same time, a pair of sedition cases were filed against ARY television journalist Arshad Sharif. They referred to Sharif’s comments in a conversation with journalist Matiullah Jan on his YouTube channel in which Sharif allegedly “disrespected” state institutions and uttered statements that attempted to “spread hate in the army and create a hateful atmosphere”. He eventually fled the country and was gunned down by police in suspicious circumstances in Kenya. Investigations were underway across the end of 2022.

On August 22, Bol News staffer and YouTuber Jamil Farooqui was arrested in Karachi for allegedly accusing the Islamabad Police of physically and sexually assaulting Imran Khan’s chief of staff Shahbaz Gill in custody in a vlog. Following his arrest, a Karachi court handed him over to the Lahore police. He alleged he was stripped and beaten in custody. He was eventually released on bail on August 31.
FACT FOCUS WEBSITE GOES DOWN IN PAKISTAN

On November 21, Fact Focus, an investigative website was rendered “totally or partially inaccessible” in Pakistan when it reported that former army chief Qamar Javed Bajwa’s family had become extremely rich in recent years⁴⁶.

“This site can’t be reached,” was the message Pakistanis faced when trying to access the site, after it posted its “Bajwa Leaks” story. Reporters Without Borders (RSF) called on Pakistan’s “civilian authorities to ensure respect for its citizens’ right to journalism that serves the public interest”. The website was still inaccessible at the end of 2022.

FACEBOOK, GOOGLE, TIKTOK CONTENT REMOVAL

Between January-June 2022, Facebook restricted access in Pakistan to 6,428 items⁴⁷ reported by the PTA for allegedly violating local laws. The content blocks are nearly double the amount of those that were restricted in the same period the previous year. They include:

- 3,674 items for blasphemy and anti religious sentiment
- 2,010 items related to obscenity
- 589 items related to sectarian enmity and hate speech
- 119 items for fraud and regulated goods violations
- 22 items for terrorism content
- 14 items related to anti-judiciary content

Facebook complied with Pakistan government requests for user data about 46% of the time.

In the same period, Google removed six blog posts from Blogger on PTA’s request, reportedly for online fraud and obtaining sensitive personal information of users. It also received 23 requests from the regulator for video removal from YouTube related to political speech regarding a former high ranking government official. The company did not take action on any of the 23 videos⁴⁸.

Tiktok had the highest levels of content removal of the large social platforms, with millions of videos taken off of its platform for violating community guidelines of the Pakistani market. This excess of content removal - over 15 million removed in the second quarter of 2022 alone - placed the country second on the list of largest volume of videos removed⁴⁹.

On February 15, the FIA arrested PML-N activist Sabir Mahmood Hashmi for allegedly running a “malicious campaign” on social media against then-prime minister Imran Khan and his wife Bushra Bibi. The PML-N party spoke in his defence. After a month, he was released on bail. In his order, Additional District & Sessions Judge Rai Yasin Shaheen observed, “I have gone through the record available on the file minutely where no objectionable, derogatory or abusive tweets were found against the prime minister and the Pakistan army.”

On April 10, the PTI alleged that the Lahore home of Imran Khan’s focal person on digital media, Arslan Khalid, was raided by unidentified men who took away his phones and laptops. Khalid himself, anticipating the raid, went into hiding. Azhar Mashwani, a key digital media figure for the party, said Khalid was “continuously receiving threats in the past four weeks from the people who didn’t like the online feedback coming from masses”.

On October 13, 2022, PTI Senator Azam Swati was arrested by the FIA for allegedly tweeting against then-army chief Qamar Javed Bajwa. Swati’s tweet, from his verified Twitter account, addressed Bajwa — a rare occurrence in Pakistan — and came a day after Prime Minister Shehbaz Sharif and his son Hamza Shehbaz were acquitted in a high-profile money laundering case.

Outside court, Swati told reporters he was arrested for “taking one name — of Bajwa — and that is the violation”. He also alleged he was stripped and tortured.

On October 21, he received bail. A week later, Swati went on the offensive and in a press conference, named military officials — allegedly behind his torture. On November 6, he broke down on media and revealed that his wife had received an obscene video of the couple from an unknown number.
On November 26, a pair of tweets from Swati’s Twitter account used derogatory language against Bajwa and another military official. On November 27, he was arrested and remanded to FIA custody for two days, which was extended by four days. On December 1, he was then sent to jail on two-weeks judicial remand but the following day, was taken away by Quetta police for similar criminal complaints there.

On December 5, the Balochistan High Court quashed the five cases in the province, but within hours, Swati was taken into custody by the Sindh Police and flown to the province, where a court prevented any new cases being filed against him. The prosecutor general told the court that the pleas against Swati had been rendered ineffective after the criminal complaints were downgraded.

Swati was then flown back to Islamabad, where he eventually distanced himself from the tweets. He was subsequently granted bail by the Islamabad High Court and freed on January 3, 2023.

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On May 25, 2022, the day Imran Khan launched his anti-government “long march” to Islamabad, internet governance watchdog Netblocks confirmed disruptions to internet providers across Pakistan for a two hour period. The disruptions took place across Pakistan after 5pm local time and was restored two hours later.

“Real-time network data show the restriction coming into effect across multiple providers in a pattern consistent with an intentional disruption to service, corroborating user reports of outages in multiple cities,” it said. NetBlocks also noted that the incident

“comes as the government moves to ban rallies and a march to the capital organized by ousted Prime Minister Imran Khan”.

Separately, Facebook also confirmed disruptions in Karachi, Lahore and Islamabad. The PTA, however, denied it had taken any such step and that a local provider, Transworld, was facing slight degradation. But in later months, more disruptions occurred, as Khan’s party began to increasingly rely on live streaming his incendiary speeches, which the regulator PEMRA banned television channels from broadcasting live.
On August 21, YouTube services were impacted across Pakistan, coinciding with his speech at a Rawalpindi rally. The disruption was picked up by NetBlocks.

Digital rights activist Usama Khilji lambasted the move as “outrageous arbitrary censorship”. A similar pattern took place on September 6. Khilji asserted that PTA was blocking the service “at the gateway level” using Deep Packet Inspection (DPI) technology.

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In a continuation of an attempt made in 2020, the PTA once again made a call to register Virtual Private Networks (VPN).

In September, the PTA gave an October 31 deadline to Pakistanis — long comfortable with using VPNs to get past internet restrictions in the country — to register their VPNs, warning that failure to do so would be a violation of regulations, risking disruption. “Usage of any mode of communication such as VPN by means of which communication becomes hidden or encrypted is a violation of PTA regulations,” the regulator said in a statement.

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**Public Notice**

**GET YOUR VPN REGISTERED**

Usage of any mode of communication such as VPN by means of which communication becomes hidden or encrypted is a violation of PTA regulations.

PTA has simplified the process of registration. Now Public & private sector organizations, foreign missions and freelancers, who desire to use VPN for their legitimate purposes, must register their VPN by using online application available at [https://ipregistration.pta.gov.pk/](https://ipregistration.pta.gov.pk/) by 31st October 2022, to avoid disruption.

Application for VPN registration will only be accepted through above mentioned online link. Applications communicated through any other means shall not be accepted.

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Digital disinformation has become a pervasive and dangerous challenge in our society. Reports and research have made it clear that orchestrated and politicized campaigns of disinformation are proliferating, often with significant funding behind them. This is particularly concerning as we approach an election year, when transparency and accountability are essential for democracy. There are multiple important questions that need to be answered on this front.

01 Since the disinformation campaigns appear to be coordinated and the targets are political adversaries and antagonistic media figures, who is funding such sophisticated campaigns?

02 If the beneficiaries seem to be political parties, does this merit the Election Commission of Pakistan’s attention?

03 While it is no secret that political parties have social media outreach wings, their funding structure is opaque and needs to be probed.

Several key factors contribute to the rise of disinformation. Platforms like social media have failed to adequately counter disinformation, and all parties are using these platforms to spread false and misleading information with impunity. The YouTube channels that were spreading disinformation about the Aurat March and putting individuals in danger are all still running. Twitter accounts that alleged blasphemy was done and shared edited videos that had no relation to blasphemy are still running. Those using online platforms to attack journalists like Gharida Farooqi are still active.
TikTok and WhatsApp are particularly concerning, as they have become hotbeds of harmful disinformation that incites violence.

It’s also clear that the state has failed to do enough to protect citizens from the harm caused by disinformation. Additionally, many people lack the critical thinking skills and media literacy necessary to identify and avoid disinformation.

While there are policies in place to combat disinformation, more needs to be done to address this threat. To share a few ways forward:

01 Instead of drafting laws, set aside some funds to run campaigns that try to educate the people on disinformation.

02 Specifically, go into schools and colleges; it is very easy to plan and act together in these institutions. Many countries have done it successfully. In universities, a percentage of the curriculum can be dedicated to information literacy so that people begin to develop critical thinking.

03 The more we can promote and support critical media outlets — like Dawn, Geo and so on — the better it will be. What we’re seeing in newsrooms right now is an economic meltdown with a lot of resource-cutting. In such a scenario, how can you expect the media to present a challenge to disinformation? The government should focus policy-making on their survival/revival.

It is essential that we recognize that the consumption of disinformation is just as important as its production and distribution. Focusing solely on production and distribution will not solve the problem. Instead, we need to find ways to educate and empower people to think critically about the information they consume. Ultimately, the government must take responsibility for protecting citizens from the harms of disinformation, and we call on policymakers to take action now.
Disinformation, amplified by social media, continued to spread in 2022, especially in the political arena. In the leadup to and throughout the year, information disorder, or misinformation, disinformation and malinformation (MDM) — colloquially known as “fake news” — was increasingly pushed by state actors.

In Pakistan, disinformation was propagated against political figures, as the country went through significant tumult. Additionally, sophisticated disinformation operations originating in India were carried out against Pakistan — targeting ethnic faultlines as well as seeking to build a narrative against the country.

Despite the magnitude of disinformation online, research conducted by the US Institute of Peace found that Pakistanis demonstrated disbelief in true information, were suspicious of traditional media and relied on social media to determine what is true and false. It additionally found that while Pakistanis, “are aware of the prevalence of misinformation…simple corrections of misinformation do not effectively counter negative downstream social and political beliefs.”

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When the year began, then-army chief General Qamar Javed Bajwa interacted with university students in Lahore, where he stressed the “need to counter disinformation campaign[s] and stay united in order to thwart designs of hostile forces”. While he didn’t name anyone, his remarks followed the EU Disinfo Lab’s expose from December, which revealed a sophisticated anti-Pakistan operation which promoted Indian interests. Strategic projects like the China-Pakistan Economic Corridor (CPEC) were also seemingly targeted, as evident by statements of Chinese officials.

In April, as the military leadership was besieged by critical social media trends in the days leading up to and after Imran Khan’s ouster as prime minister, General Bajwa hit out at what he claimed to be “misinformation and propaganda” that “threaten state integrity requiring [a] timely and unified response to effectively counter speculations and rumours”. He also said that the army “draws its strength from people and any effort to create [a] wedge between army and population won’t be tolerated”.

One trend calling for General Bajwa to step down as army chief amassed millions of tweets and trended for a week. Another trend calling him a “traitor” also received almost a million tweets.

Among those arrested over running these campaigns was one PTI activist who trended campaigns such as #ExecuteTraitor and #LosersCantBeDefenders. His account was suspended after his arrest. Separately, in a video circulated on media, a social media activist, Sadaqat Hussain, alleged that he had been running fake Twitter accounts impersonating army officers to “create division and differences among the officers of the Pakistan Army”. Hussain was allegedly part of multiple WhatsApp groups managed by PTI’s official social media team.

Defence Minister Khawaja Asif later alleged the anti-army social media campaign was a “joint project” of PTI and India. Pakistani ulema vowed they would counter disinformation against the army from the pulpit. Soon after, the FIA began tracing Twitter accounts involved in the campaign and determined that an alleged supporter of the party tweeted a year-old video of the army chief in Ukraine, claiming he was in London during independence celebrations and enjoying a rendition. There were several arrests, and Imran was reported to have softened his tone against the institution.

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Khan, for his part, first claimed that it was India that had launched a propaganda campaign against the army and him through its disinformation lab consisting of “at least 600 fake media houses” abroad, saying it was because the “enemy” knew these two entities could keep Pakistan united. He later accused the coalition government of being behind the “disinformation campaign against the country” and of creating a rift between his party and the army. The government fired back, saying the social media campaign was being run at the behest of Khan and his wife Bushra.

In October, after journalist Arshad Sharif was murdered under mysterious circumstances (See section: Censorship & Media), members of the media as well as others sympathetic to Imran Khan strongly hinted at the military’s involvement in the killing. Social media accounts that posted pro-PTI content were more overt in their accusations.

The matter came to a head when the head of the Inter-Services Intelligence (ISI), Pakistan’s top spy agency, held an unprecedented press conference to hit back at the insinuations, the social media campaigns and the party. “There were campaigns against me in March on social media. I got a call from the agency that a campaign was underway against me,” he said.

In November, as General Bajwa’s time at the helm of the army approached its end, an image of a sign that appeared to show him asking people to stop telling him to retire spread on social media. Fact-checkers determined it was a doctored photo. The image, which was viewed hundreds of thousands of times, was manipulated from an old photo of a placard of Bajwa’s predecessor Raheel Sharif.

The image appeared to show a photo of Bajwa on a sign alongside Urdu-language text that reads: “For God’s sake! Let go of the talk of leaving.”

According to AFP Fact Check, the photo was shared across Facebook and Twitter and racked up more than 300,000 views on TikTok.
**PTI AND ALLIES**

**TRIGGERING PECA ORDINANCE**

In February, Farrukh Habib, one of Khan’s mouthpieces complained that “fake stories” were being spread by “certain quarters” against the then-prime minister’s wife Bushra Bibi\(^{22}\). His remarks followed a piece published in the Friday Times that — without naming either Khan or his wife — alleged that the “The Great Khan’s” marriage was on the rocks and that his wife was involved in some questionable financial dealings\(^{23}\).

The controversial PECA ordinance was passed within weeks of this report (See section: Censorship and Media).

**MISLEADING COMPARISON OF KHAN AND SHARIF**

In February, a post making a misleading comparison of photos between Khan and Nawaz Sharif made the rounds on Facebook as the former paid a visit to China\(^{24}\). The photos falsely suggest Sharif is the more popular leader for the Chinese leadership.

The top photo shows former Pakistan prime minister Nawaz Sharif walking alongside China’s President Xi Jinping. The post claimed the photos show Xi welcomed Sharif in person when he visited China during his term, but declined to do the same for Khan’s visit. In reality, during the trip, there was a well-publicized meeting between Khan and Xi.

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DOCTORED VIDEO OF ANGRY CALLER

On April 4, just days before a no-confidence vote eventually removed Khan from power, a video of a live phone-in with a caller’s voice insulting Khan was viewed 2.5 million times on Facebook. AFP Fact Check reported that the video was doctored to add a voice mocking him. The caller in the original phone-in had actually expressed his support for Khan.25

SHEIKH RASHID ‘HIDING’

Amid reports of a fruitless police raid on Khan’s ally Sheikh Rasheed’s house in August26, a photo showing Rasheed purportedly “hiding” in a hospital spread on Facebook and Twitter. According to AFP Fact Check, the photo was posted in a false context, as it was taken in June 2020 when he was being treated for Covid-19.27 The one who sets parliament on fire and gives open threats to institutions, Sheikh Rasheed has made the excuse of being sick and is hiding in a hospital,” reads an Urdu tweet posted on August 11. The tweet, shared by an account named “Tahir Mughal pmln” with more than 110,000 followers, shows a photo of Ahmed in a hospital bed. Rashid himself debunked the photo a few days later.

IMRAN WALKS IN HOSPITAL AFTER ASSASSINATION BID

On November 4, a day after Khan survived an assassination bid which wounded his legs, a video purportedly showing him walking in a hospital corridor emerged on social media, suggesting the attempt on his life was staged. AFP Fact Check debunked this post as well28. The tweet falsely claimed that “the man took four bullets and look how he’s walking! Even though both his legs are plastered, the truth cannot be hidden. It will all come out and lies are short-lived”.

Like the Sheikh Rasheed photograph, this video predated the incident by more than a year. The original was posted by the PTI on August 6, 2021, and had footage of Khan visiting his Shaukat Khanum Hospital in Peshawar. That same day, another video, posted on Twitter and viewed 9,000 times, showed Imran Khan walking to his car. That one was debunked by Geo Fact Check, which found that the video was an old one.29
**PUTIN ‘PRAISING’ IMRAN**

Throughout the year, there were a number of social media posts exaggerating Khan's popularity. Such false posts surged after Khan was ousted from power in a parliamentary vote.

After Imran Khan met Russian President Vladimir Putin in Moscow, on the eve of Russia’s invasion of Ukraine, a video — which was viewed over 240,000 times, popped up on Facebook showing Putin purportedly praising Khan\(^{30}\). The video was shared in a false context, according to AFP Fact Check. The subtitles of the video with Russian audio were altered to show him saying: "This week I hosted the Prime Minister of Pakistan, a brave man. He resisted Western pressure to accept my invitation to visit Russia. We discussed many areas of mutual interest including Afghanistan and trade cooperation and soon, I will visit Pakistan to sign a major oil pipeline deal."

In the original clip, Putin was shown criticizing Ukraine.

**‘ANTI-US PROTEST’ IN RUSSIA FOR IMRAN**

Another doctored photo was posted to Twitter, and retweeted over 5,000 times, just as the no-confidence vote was shaping up against then-prime minister Khan. This one showed Russians protesting in support of him. According to AFP Fact Check, the image showed protesters holding placards which read, "Stop interfering in the affairs of other countries" and "No for American interface (sic)"\(^{31}\). The original photo, captured by the Associated Press, showed supporters of Russian opposition figure Alexei Navalny protesting in Moscow against his detention.

**‘PROTEST’ IN TURKEY**

Another image of a purported pro-Khan, anti-US protest in Turkey was retweeted nearly 3,000 times on Twitter\(^{32}\). The image was doctored from a photograph taken in 2017 when thousands marched against the detention of a Turkish opposition politician. A picture of Khan's face was doctored onto a sign that actually read "Freedom for jailed MPs." "After Russia, there were demonstrations in Turkey against the American regime change," reads an Urdu-language tweet.

**SKARDU AIRPORT’S INTERNATIONAL STATUS ‘REVOKED’**

Soon after Imran Khan was ousted in the no-trust vote, a Facebook post claiming the international status of Skardu airport was revoked\(^{33}\). The Pakistan Civil Aviation Authority debunked the claim.


According to AFP Fact Check, the Urdu-language post translated to English as: "(Bad news for tourism!) International status of Skardu airport has been revoked after the opposition came into power. Sign board has also been removed. No international flight will land at Skardu airport now… Please be reminded that former Prime Minister Imran Khan had accorded international status to Skardu airport to make Skardu a tourism hub and India had objected to it."

Pakistan’s Civil Aviation Authority rejected the claim in a tweet on April 24, 2022, saying it was "fabricated and baseless".

‘MASSIVE RALLY IN THE US FOR KHAN’

A video posted to Facebook purportedly showing a large crowd of people rallying in the United States in Khan’s support was viewed 1.5 million times. The video was misleadingly captioned. "A rally in support of Imran Khan in America," reads the Urdu Facebook post shared on April 11. "America has also come to know that Imran Khan was right."

According to AFP Fact Check, the video was filmed in Senegal two months earlier, when football fans welcomed the national team after they won the Africa Cup of Nations34.

DOCTORED KASHMIR PHOTO

Yet another social media post circulating on Twitter showed a photo of protesters in the disputed Kashmir territory, with the poster claiming they rallied in Khan’s support after his ouster. The photo was actually taken in October 2019, when protesters gathered to thank Khan after he criticized New Delhi for sending troops to the disputed region following a controversial move to strip its autonomy35.
JUDICIARY IN THE CROSSHAIRS

A Facebook post, published after a Supreme Court ruling allowed the no-confidence vote to go ahead against Khan, claimed that the New York Herald newspaper published a cartoon depicting Pakistan's judiciary as subservient to Washington. However, the newspaper ceased publication in 1924 and the image was digitally altered from a cartoon about a UK court approving an order to extradite WikiLeaks founder Washington.

PUTIN ‘INTEREST’ IN PUNJAB BY-ELECTIONS

After Khan swept the elections for Punjab Assembly seats, a doctored photo showing Vladimir Putin looking at a screen, with the Russian RT channel showing news of Khan’s victory, was shared hundreds of times on Facebook.

"Russian President Vladimir Putin is watching the news about the July 17 breakthrough in Pakistan. Expressing his satisfaction over the victory of Imran Khan he has declared Imran Khan a wonderful personality," reads the Urdu caption of the photo.

PML-N AND PPP

There were a large number of false and misleading posts against Khan’s political opponents across the year. The posts cast aspersions on the character of key leaders and tried to demonstrate the public’s disfavorable opinion of them. Other videos showed police oppression carried out at their behest.

MUSIC DURING CRISIS

A video posted on Twitter on April 16 claims to show newly elected Prime Minister Shehbaz Sharif being serenaded by a singer in his office. PTI politicians accused him of “ignoring the public’s troubles”.

‘A THIEF’

After Shehbaz Sharif was sworn in as premier, a doctored video was posted on Twitter showing people chanting “thief” at him during a visit to a market. It was viewed over 150,000 times.

The video was viewed more than a million times. The clip, however, showed a performance at Sharif’s private residence in November 2021, months before he became premier. It was shared by PTI leaders, including Fayaz-Ul-Hassan Chohan, Sajid Khan, Fawad Chaudhry and Qasim Suri.

However, the video was edited to include the chants. The original video was posted just hours before on Sharif’s official Facebook page.

37 This image has been doctored from a photo of Vladimir Putin speaking to Italian executives. (2022, July 25). AFP Fact Check. https://factcheck.afp.com/doc.afp.com.32FA4HE
Another video, posted to TikTok on May 29, with the chants “thief” and “traitor” doctored in featured Information Minister Marriyum Aurangzeb weeping⁴⁰. The original clip was filmed in 2018 and shows her reacting to party leaders being released from jail. The video was viewed more than 3.3 million times.

‘ARRESTS’

When Sharif and his cabinet ministers were in Madina, they were heckled by opposition supporters. Soon after, a video was posted to Facebook — raking up several hundred thousand views — claiming PTI workers were rounded up by Saudi Arabia police⁴¹. The video’s context was misleading as it predated Sharif’s visit by over a year. As per AFP Fact Check, it actually showed Pakistan nationals who were arrested on suspicion of running scams in Riyadh in 2021.

Another video, which circulated on Facebook and Twitter on May 29, claimed Pakistani police officers tortured an Imran Khan supporter⁴². The video’s context was false as it had been in circulation since the previous year in posts about police officers apprehending a drug suspect.

MISLEADING COMPARISON

On June 1, a pair of photos were tweeted comparing Shehbaz Sharif and Imran Khan during their separate trips to Turkey as prime ministers⁴³. The tweet claimed Turkish President Recep Tayyip Erdogan personally greeted Khan at the airport during his visit, while the current Prime Minister Sharif was greeted by the Turkish defence minister. Sharif’s picture was shared in the correct context, but Khan’s was not; his was actually taken in Pakistan in 2020 during Erdogan’s visit.

GOVERNMENT ‘CALLOUSNESS’ TOWARD PILGRIMS

On July 2, the coalition government was targeted in a misleading video for what the caption said was its failure to ensure proper housing for Pakistani Haj pilgrims in Saudi Arabia⁴⁴. A video, viewed over 2,000 times on Facebook, showed pilgrims criticising the incumbent government for housing them in "terrible" conditions. "The most expensive hajj in history, but they don’t even have water for drinking and washing," read the post. "Ultimately, who controls the Ministry of Religious Affairs?". The original video had been circulating since August 2019 in posts that criticized the then-government for the inadequate facilities.

MARYAM NAWAZ CRITICISM

In October, soon after journalist Arshad Sharif was killed in Kenya, a video of television writer Khalil-ur-Rehman Qamar, purportedly criticizing former prime minister Nawaz Sharif’s daughter Maryam Nawaz over an “insensitive tweet”45, was viewed more than 90,000 times on TikTok46.

The superimposed Urdu-language text translates as: “Khalil-ur-Rehman’s response to Maryam Safdar’s (Maryam Nawaz) tweet on Arshad Sharif.” The video in reality shows a speech Qamar delivered in 2020 where he spoke against an academic and women’s rights activists.

FAKE MEDICAL REPORT

Senior PTI leader Shireen Mazari shared a false medical report of Senator Azam Swati, who was incarcerated at the time. Mazari tweeted on October 14 that a “fake medical report” had been created for Swati after his arrest by the FIA. Mazari then posted a medical report dated August 17, 2022, claiming it was the actual report of the senator.

However, the claim was found to be false by Geo Fact Check47, which reached out to the Pakistan Institute of Medical Sciences (PIMS) in Islamabad. The hospital, which conducted Senator Swati’s medical examination and prepared his report, shared the original copy of the report and confirmed that the report posted by Mazari was fake, with the date altered. The medical report was actually dated October 13, 2022, not August 17 as alleged by Mazari.

Additionally, the claim that the report was a duplicate of the one prepared for PTI leader Shahbaz Gill on August 17 was also found to be incorrect. Gill’s report was prepared by a different team of doctors at PIMS, and its contents bear no resemblance to Senator Swati’s report.

SEHAT CARD ‘DISCONTINUED’

In October, a video that went viral on Twitter claimed that the Sehat Card health insurance program introduced by the PTI had been shut down by the new coalition government in power since April. The video, which had received over 198,000 views and 22,000 likes, was also shared by television anchor Imran Riaz Khan to his nearly four million followers.

Geo Fact Check found the claim to be false48. It reached out to health officials and hospitals in Sindh, Punjab, Balochistan, Khyber Pakhtunkhwa, Azad Jammu and Kashmir, Gilgit-Baltistan, and Islamabad. The programme was not suspended in any part of Pakistan. With 1,031 hospitals across Pakistan accepting the Sehat Card, the false claims made in the viral video were debunked.

Sophisticated disinformation operations targeting Pakistan and benefiting India were unearthed by the EU Disinfo Lab in 2019 and 2020\(^49\). Another coordinated operation — centered on Twitter — spread propaganda against Pakistan, was publicized by a Stanford University paper\(^50\).

EU DISINFO LAB DISCLOSURES

The EU Disinfo Lab ‘Indian Chronicles’ investigation highlighted a network of hundreds of fake media outlets and organizations that it said pushed a pro-India agenda in the European Union and United Nations bodies to discredit countries in conflict with India, in particular, Pakistan but also China to a lesser extent. The operation, allegedly led by the Srivastava Group and amplified by the Indian press agency ANI, began in 2005 and was still ongoing. New Delhi and ANI have rejected the contents of the report\(^51\).

The investigation uncovered a “shocking multiplication of layers of fake” in the network, including the resurrection of dead media, think tanks, and NGOs. The actors behind the operation even resurrected dead people and impersonated well-known media and press agencies such as the EU Observer, The Economist, and Voice of America.

The team behind the investigation discovered that Indian Chronicles had hijacked the names of others and used fake addresses and phone numbers to register websites and attend events. The network used politicians who genuinely wanted to defend women’s or minority rights to ultimately serve geopolitical interests and gave a platform to far-right politicians when their objectives converged. The team also found that the actors behind Indian Chronicles had used layers of fake media that would quote and republish one another.

Despite their extensive investigation, the EU DisinfoLab team noted that they had to leave many findings aside for the sake of legibility.

> “Even our full report does not mention everything we uncovered, and it is with regret, but for the sake of legibility, that we had to leave many other findings aside. Ironically, this level of fakery may be the very reason why the operation could last for so long: how could anyone imagine that this is even possible?”

Gary Machado, Alexandre Alaphilippe, Roman Adamczyk and Antoine Grégoire in the Indian Chronicles

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The Stanford University paper revealed a network of 1,198 accounts that tweeted primarily about India and Pakistan. The accounts claimed to be “proud Kashmiris and relatives of Indian soldiers” and praised the Indian army’s military “successes and provision of services” in occupied Kashmir while criticizing the militaries of Pakistan and China. The network, with India being the presumptive country of origin, was suspended by Twitter for violating their Platform Manipulation and Spam Policy.

While Twitter did not publicly attribute this network to any actor, and neither did the paper, the researchers highlighted news articles in Indian media about the suspension of accounts of the Chinar Corps, an Indian army unit operating in Kashmir for “coordinated inauthentic behaviour”. The paper also found that the content of the Twitter network was consistent with the Chinar Corps’ objectives.

In June, the UN General Assembly adopted by consensus a Pakistan-sponsored resolution on “Countering Disinformation for the Promotion and Protection of Human Rights and Fundamental Freedoms” which, according to the UN, had initiated a concerted campaign at the United Nations to counter disinformation by states and all relevant stakeholders.

The resolution highlights the negative impact on the enjoyment of human rights and fundamental freedoms of the rapid spread of disinformation, through online platforms, including social media. The terms of reference are:

- Highlight the global concerns about the exponential spread and proliferation of disinformation and how it is impacting human rights and the attainment of Sustainable Development Goals;
- Provide a platform for deliberations to member states to discuss means to counter disinformation and raise awareness;
- Share best practices to counter disinformation;
- Promote multi-stakeholder cooperation for developing multi dimensional responses for countering disinformation;
- Promote and protect freedom of expression

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53 Group of Friends (GoF) on Countering Disinformation for the Promotion and Protection of Human Rights and Fundamental Freedoms. (2022, June 23). UN Web TV. https://media.un.org/en/assets/1e1e/K1e1o6zgm
A study by Media Matters for Democracy revealed that popular YouTube channels in Pakistan had been spreading disinformation about Aurat March, a women’s rights movement in the country which leads an annual march on International Women’s Day to highlight the challenges faced by women in the country.

The research looked at the coverage of the march in 2022 by three verified YouTube channels and found that misleading titles were the most commonly used form of disinformation, appearing in 47% of the videos analyzed. One channel, Khabar Gaam, had the highest amount of misleading content with 36% of its videos relying on false information. Bol, a mainstream television channel as well, was found to repeatedly imply that Aurat March was foreign-funded.

The study also uncovered common themes across these videos that implied the marchers were part of a foreign-funded Western agenda, against men and family structure, and inciting violence. These arguments were seen to play on populist narratives and societal views in the country.

Building on the momentum of 2021, the first quarter of 2022 was quite exciting for fintechs as a lot of investment and venture capital poured into this segment. Fintechs had a good opportunity to build their teams and products, leveraging on Application Programming Interfaces (APIs), which allow apps of different companies to connect and communicate with each other such as those provided by 1LINK and a few banks.

However, the impact of the global financial situation began showing from the second quarter onwards, which, combined with Pakistan’s domestic political situation, has made the environment quite challenging.

All in all, the year 2022 was a mixed bag. Given the outlook of the economy, 2023 will be another challenging year, and only those fintechs that have sufficient capital along with a firm business plan with a path to sustainability, if not profitability, will survive.

**TRENDS THAT STAND OUT**

Fintechs work in different segments (payments, savings, lending, investment advisory, insurance tech etc.) and there is a growing realization in the industry that independent customer acquisition is very costly; so partnerships with like-minded financial institutions is a better approach which we could be seeing a lot more of.
Moreover, many fintechs are focusing on lending because of the huge supply-demand gap in this space. New models of lending, such as earned wage access and financing against stock purchase are gaining some traction.

**WHAT DOES THE FUTURE HOLD?**

In the near term, for fintechs focused on lending, the current economic situation is a bit challenging because the cost of lending has risen sharply and due to inflation, economic activity is also subdued. There will, however, be segments of the economy (such as micro, small and medium enterprises) that would continue to have financing needs and so those areas may be targeted.

In the payments segment, the first half of 2023 will likely see the State Bank of Pakistan bring new use cases for Raast, which is the central bank’s flagship instant payments system that enables end-to-end digital payments among individuals, businesses, and government entities. Fintechs may partner with regulated entities (banks, electronic money institutions and payment service providers) to access Raast services such as ‘Request to Pay’ and ‘QR Payments’ once these are launched.

Additionally, fintechs may review their customer acquisition strategies and focus on partnering with existing digital players such as EasyPaisa and JazzCash who have a large active customer base. This could help reduce customer acquisition costs and increase outreach of their products quickly.

The next couple of years will provide more opportunities for fintechs as the State Bank recently issued digital bank licenses to five entities, and these players by design will be completely digital and operate on ‘Open API’ models. Fintechs can position themselves as potential partners and discuss use cases on which to collaborate because these digital banks will need a lot of last-mile partnerships.
The year 2022 was an exciting one for the fintech ecosystem in Pakistan, with several noteworthy developments, most prominent among which was a significantly greater adoption of digital payment tools in the country as well as regulatory changes that set in motion the arrival of digital banks.

In fiscal year 2022, internet banking transactions saw a steep rise of 51.7% to 141.7 million transactions — almost doubling in value to Rs10.2 trillion from Rs5.7 trillion in FY2021. State Bank of Pakistan (SBP) data further showed that internet banking users increased almost 60% to 3.1 million in FY22.

Although mobile banking users grew just 13% to 12.3 million in FY22, transactions more than doubled to 387.5 million from 193.4 million in FY21. In terms of value, mobile banking witnessed a whopping growth of 141% to Rs11.9 trillion.

As shared in the SBP Annual Payments Report, by the end of fiscal year 2022, there were four Electronic Money Institutions (EMIs) that had launched commercial operations, having received licenses from the State Bank. These were:

- NayaPay
- Finja
- PayMax
- SadaPay

All four of these EMIs received their commercial launch licenses in fiscal year 2022 – i.e. between July 2021 and June 2022.

According to the SBP, these four EMIs, which are providing e-money wallets for consumers and merchants, had issued a total of 514,961 payment cards to their customers and had 262,558 active accounts as of June 30, 2022.
At present, there are seven more EMIs that are at different stages of the licensing approval process\(^2\) and are expected to launch operations in the future. These are:

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<td>1 - E-money wallet for consumers and merchants 2 - Payment gateway for consumers and merchants</td>
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<td>In-principle approval granted August 12, 2022</td>
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### Top 2022 Financial Apps (Google Play Store in Pakistan)

*Source: Similarweb*

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<th>Rank</th>
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<tr>
<td>1</td>
<td>easypaisa - Payments Made Easy</td>
<td>easypaisa</td>
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<tr>
<td>2</td>
<td>JazzCash - Your Mobile Account</td>
<td>Jazz Pakistan - Official</td>
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<td>3</td>
<td>Barwaqt - Loan Money Cash</td>
<td>SeedCred Financial</td>
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<td>4</td>
<td>Al Trade</td>
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<td>5</td>
<td>LendHome</td>
<td>SUSAN R TABOR</td>
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<td>6</td>
<td>EasyLoan Personal Loan Online</td>
<td>Sarmaya Microfinance (Private) Ltd</td>
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<td>7</td>
<td>ExpertOption - Mobile Trading</td>
<td>ExpertOption</td>
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<td>8</td>
<td>UdharPaisa-Safe&amp;Reliable loan</td>
<td>Microcred Financial Services Limited</td>
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<tr>
<td>9</td>
<td>UPaisa – Digital Wallet</td>
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<td>CreditCat</td>
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The year 2022 began with a groundbreaking announcement for Pakistan’s fintech ecosystem as the State Bank launched a licensing and regulatory framework for digital banks, seen as a milestone in the country’s move towards a digital banking and financial system. Along with the new framework, the central bank invited applications from players interested in operating digital banks, setting a deadline of March 31, 2022. Initially, the State Bank said it would award five licenses.

One of the key objectives of digital banks, as outlined by the State Bank in its regulatory framework, is to “promote financial inclusion” and “provide credit access to unserved and under-served” segments of the country. The need for this was outlined by Mutaher Khan, Co-founder of Data Darbar, who shared that, “A majority of people and small businesses can’t obtain loans from banks, which in turn impacts economic activity. With digital banks, the SBP wants to address this problem – meaning lending should be an important part of their offering.”

KEY FEATURES IN SBP’S FRAMEWORK

01
Digital banks are required to maintain a principal place of business in Pakistan to house the offices of their management, staff, other support operations and serve as the main hub/point of contact for various stakeholders including SBP and other regulators.

02
The SBP said it may grant two types of digital bank licenses: Digital Retail Bank (DRB) and Digital Full Bank (DFB). DRBs will primarily focus on retail customers while DFBs can deal with retail customers as well as business and corporate entities.
Minimum capital requirement for DRBs is set at Rs1.5 billion during the pilot phase that will gradually increase to Rs4 billion over a transition period of three years. The minimum capital requirement for a digital full bank at the time of grant of license is Rs6.5 billion which will be gradually increased to Rs10 billion. These requirements are significantly lower than those applicable to local conventional banks.

WHO MADE THE CUT?

The SBP received 20 applications for licenses and finally announced its picks in January 2023 after a nine month wait. Those granted an NOC\(^1\) were:

- Easypaisa DB — backed by Telenor and Alipay
- KT Bank — a joint venture between Fatima Fertiliser, City School, and Nigerian fintech Kuda Technologies
- Hugo Bank — sponsored by courier company M&P, pharma group Getz Bros and Singaporean wealth-tech HugoSave
- UAE’s Mashreq Bank
- Kuwait Investment Authority’s Raqami

Subsequent to completion of transition phase\(^2\), DRBs may graduate to receive a license of a DFB, subject to fulfillment of minimum capital requirement and completion of a two years progression phase. Only after obtaining commercial license for a DRB and successfully completing the transition phase can an entity apply to become a digital full bank (DFB).

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Zong became the final telecom provider in the country to enter the digital payments arena in 2022, launching ‘PayMax’ which had already received its license to commercially operate as an electronic money institution (EMI) earlier in the year. Consequently, all four telcos – Jazz, Telenor, Ufone and Zong – now offer digital wallets. PayMax is said to initially focus on delivering P2P money transfer, utility bills payments, mobile loads, online payment gateway, and retail payments. It also plans to offer nano loans, mobile handset financing, cross border payments, insurance and merchant financing in the near future.

The company is expected to face tough competition in this arena as its major competitors are market leaders. JazzCash is the largest digital wallet service in the country, boasting 42 million subscribers and 16 million monthly active users followed by Telenor’s Easypaisa that has 28 million subscribers and 11 million monthly users. Owned by a subsidiary of China Mobile Pakistan (CMPAK), Zong is banking on its customer base, especially in rural areas, as a target population for PayMax.
Fintech funding

Startup funding was unable to accelerate at the rapid pace it did in 2021 as funds dried up, particularly in the second half of 2022. Fintech startups, like others, did not mimic the staggering funding growth seen last year. The startups posted a marginal growth of 7.5% with $100.3 million in 2022 compared to $93.3 million last year, but for the second year in a row, fintech led in terms of deal count, which came in at 19⁹, down from last year’s 24¹⁰.

Fintech Funding ($ Millions)
Source: Data Darbar

<table>
<thead>
<tr>
<th>Company</th>
<th>Funding (Millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dbank</td>
<td>$17.6 million</td>
</tr>
<tr>
<td>Abhi Finance</td>
<td>$17 million</td>
</tr>
<tr>
<td>NayaPay</td>
<td>$13 million</td>
</tr>
<tr>
<td>OneLoad</td>
<td>$11 million</td>
</tr>
<tr>
<td>SadaPay</td>
<td>$10.7 million</td>
</tr>
<tr>
<td>Finja</td>
<td>$10 million</td>
</tr>
<tr>
<td>MyTM</td>
<td>$6.9 million</td>
</tr>
<tr>
<td>Taro</td>
<td>$3.5 million</td>
</tr>
<tr>
<td>SnappRetail</td>
<td>$2.5 million</td>
</tr>
<tr>
<td>Neem</td>
<td>$2.5 million</td>
</tr>
</tbody>
</table>

The bad

TAG’S END

The State Bank revoked the in-principle and pilot approval for Pakistan’s fintech poster child TAG in October 2022\(^1\), almost two months after it directed the electronic money institution to refund all outstanding funds to its wallet holders.

Just like the sudden closure of e-commerce startup Airlift sent shockwaves through the startup ecosystem, TAG’s downfall came as a big blow. One of the highest funded fintechs at the time, TAG had raised $17.5 million and many market watchers believed it was on its way to becoming the only fintech company with a full digital banking license. But it turned out that in its attempt to reach the finish line, the company had forged\(^2\) a critical document that led to its eventual downfall. When the news hit the market, it raised serious questions about the due diligence carried out by investors as well as governance structures in Pakistani startups. But even more critically, it could damage the confidence of foreign investors who recently began pouring money into Pakistan's startups\(^3\).

RISE OF DIGITAL LOAN SHARKS

### MOST POPULAR INSTANT LENDING APPS IN PAKISTAN

<table>
<thead>
<tr>
<th>Developer</th>
<th>Downloads</th>
<th>Rating</th>
<th>Reviews</th>
<th>Licensed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seed Cred Financial</td>
<td>5M+</td>
<td>4.4</td>
<td>334,000</td>
<td>✔</td>
</tr>
<tr>
<td>Sarmaya Microfinance</td>
<td>1M+</td>
<td>4.4</td>
<td>61,300</td>
<td>✔</td>
</tr>
<tr>
<td>S&amp;P Fintech</td>
<td>1M+</td>
<td>4.3</td>
<td>6380</td>
<td>✗</td>
</tr>
<tr>
<td>Zetaloan Team</td>
<td>1M+</td>
<td>4.4</td>
<td>14,900</td>
<td>✗</td>
</tr>
<tr>
<td>Sarmaya Microfinance</td>
<td>1M+</td>
<td>4.6</td>
<td>28,400</td>
<td>✔</td>
</tr>
</tbody>
</table>

Source: Google Play, Data Darbar Research, Appfigures

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Growth in digital financing led to the rise of unlicensed and dangerous lending apps in 2022. These apps were giving out nano loans - ranging from as low as Rs50 up to Rs25,000 - at exorbitant rates and laying out a vicious trap for those in need. Only two companies, SeedCred and Sarmaya Microfinance, that are operating known apps – Barwaqt and Easy Loan – have direct SECP licenses. In fiscal year 2022, these licensed lending apps disbursed a whopping Rs10 billion in nano loans in the 2021-22 fiscal year, also at high rates.

To make matters worse, the regulator – the Securities and Exchange Commission of Pakistan (SECP) – was unable to tackle the problem adequately, allowing digital loan sharks to prey on people in a financial crunch. Since a large part of the population, particularly those who fall in the low-income brackets, are not served by the banking system, these fraudulent lending apps gained popularity on app stores.

An investigative report by Data Darbar in December 2022 looked at the top mobile apps on Google’s Finance charts and found there were 20 lending apps in the top 44 alone. These 20 apps had a combined 19.1 million downloads from June 2021 to November 2022 (18 months), reflecting their meteoric rise in the past two years. Out of these 20, just nine claim to have a license or backing by an entity i.e. a majority of them are unauthorised and therefore illegal. The report further found that several foreign players have entered the space and are leveraging the licenses of existing companies to go about their business which raises questions about their legitimacy.

The Data Darbar report also found that users could face “technical glitches” while trying to make repayments, resulting in late fees and charges. A majority of these apps require key user data, and get complete access to users’ contacts list on their phones, which has in some cases been used to reach out to their friends and family as a harassment tactic to shame them when they were unable to pay back on time.

By the end of 2022, the SECP sprang into action and restricted these platforms from taking coercive measures for recoveries and barred them from shifting borrowers’ data outside Pakistan. The regulator also said that borrowers’ data cannot be stored on any cloud infrastructure outside the jurisdiction of Pakistan and issued digital lending standards applicable to Non-Banking Finance Companies (NBFCs) undertaking lending activities through digital channels/mobile applications. Of the eight NBFCs in Pakistan, only two are operating in the digital lending space.

The SECP also made it mandatory for the lenders to display a summary of the Key Fact Statement (KFS) through a video/audio, screenshot and email/SMS in both English and Urdu languages, which includes annual rates, loan tenors, and all fees and charges. Anything not part of this statement cannot be added to the charges. The lender is also required to disclose its full corporate name and licensing status and has been barred access to users’ phone book and photo gallery, even if consent is taken. Lenders

are not allowed to reach out to users’ contacts other than those mentioned as guarantors who consented to being approached. A separate grievance redressal mechanism, beyond the existing framework for NBFCs, has also been established by the SECP. The Competition Commission of Pakistan has also invited aggrieved users to lodge complaints against deceptive marketing by digital lenders.
**CRYPTOCURRENCIES FLOURISH UNREGULATED**

**Jan 2022:** SBP proposes a ban on cryptocurrencies, arguing that it causes flight of capital.\(^{18}\)

**May 2022:** The government forms three sub-committees to decide whether crypto should be banned.\(^{19}\) So far no policy framework is present to regulate crypto and it continues to function in a gray area.

**ADOPTION**

In 2021, Pakistan ranked 3rd on the Global Crypto Adoption Index.\(^{20}\) In the same year, cryptocurrency value received (a measure of trading activity, not assets held) by Pakistanis came in at $20 billion, while Pakistanis made gains worth $635 million.\(^{21}\)

In 2022, despite negative guidance by regulators, Pakistan ranked 6th on the Global Crypto Adoption Index while crypto value received is close to $30 billion. As cited in the report, across the year, Pakistanis largely traded in stablecoins and Ethereum, with these two cryptos making up 2/3rd of total trading activity.

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Source: Chainalysis Annual Report 2022
Since the second half of 2022, Pakistan’s startup scene has been gloomy with funding back to pre-Covid levels in the last quarter of the year. Given the lukewarm start to the new year reflected in funding during January 2023, we can expect a similar environment to continue in the near future, especially for the venture capital (VC) space where most of the investors from the 2021 frenzy have basically evaporated.

For VC-funded e-commerce, it might be a double edged sword as investment has all but dried up — meaning less money to spend on customer discounts and therefore a contraction in the target market. But due to inflation and resulting import restrictions, it has become increasingly difficult to cater to even the relatively well-off customer segment. Again, this trend will continue in the near future. On the flip side, new e-commerce company registrations have mostly held up, which is a positive for the sector.

One interesting trend in the e-commerce space, which reinforces the fact that it is a highly discount driven market, is that a large chunk of sales for companies, particularly for a major VC-backed player in the market, Daraz, come in the last quarter of the year when it offers high discount deals: the Black Friday sale, 11/11 sale, 12/12 sale etc.

Additionally, a large part of demand is generated from the bigger cities of Karachi, Lahore and Islamabad (KLI) and we’ve seen more impulse purchases, with order values lower than Rs500, from customers here, primarily because of lower delivery charges and waiting times. However, from non-KLI cities, we’ve seen that customers often do planned purchases and their single order value, on average, is much higher.
Where the players stand

There are three types of e-commerce players in Pakistan: VC-backed (such as Daraz and PriceOye for example), corporate click-and-mortar stores (such as Khaadi and Gul Ahmed) and small players running their businesses through Instagram and Facebook.

Among VC-backed players, only Daraz has been able to make a mark on the market. Excluding Daraz, this category of players have a small market share. Instead, corporate click-and-mortar stores are dominating the e-commerce space and their domination is expected to continue.

Future prospects

Like any business currently operating in Pakistan, the near-term future of startups is also marred with uncertainty regarding day-to-day operations such as power outages, difficulty in making international payments etc. There is unlikely to be any uptick in funding until the second quarter at least as deal activity around the world has been heavily dented, even in developed markets. Globally, VC funding is expected to make some recovery after the end of the US Federal Reserve’s tightening cycle, but it will come to Pakistan with some lag.

In the long term, the outlook is more positive driven by a number of variables. First, the size of the population is massive, predominantly young and digital natives, thus making the country a large addressable market to serve.

Second, digitization will remain a key theme across industries from retail to supply chain where legacy players will rely on nimble startups for tech solutions. The B2B segment should continue to be the key driver of startup activity, a trend we have already seen a glimpse of, as most of the funding in the past two years has channeled into B2B.

We’ve also seen a constant rise in the market size of the third category, which includes smaller players using social media to break through. These are often healthy, cash positive and high-margin businesses who haven’t been able to scale up because of funding issues. As such, there is a lot of room for merger and acquisition (M&A) activity, particularly in the fashion segment, where bigger players like Daraz could buy out these brands and launch their own private fashion and grooming offerings.
The year 2021 was prolific for Pakistani startups, buoyed by the e-commerce sector, as Pakistan witnessed a sharp growth spurt in funding across the board. Pakistani startups raked in an unprecedented $366 million in funding, which was 450% higher than the $66 million from the previous year. This phenomenal growth was led by the e-commerce sector, which accounted for $175 million or 48% of all funds raised and marked a monumental leap from the $11.4 million raised by the sector in 2020.

But 2022 was unable to match that trend and the second half of the year in particular painted a dismal picture with regards to both funding and deal counts. Although the year began on a high note with startups raising $174 million in the first quarter, it was downhill from there. Funding began drying up immediately after, and each succeeding quarter saw considerable declines while the year was also marred by some high-profile closures – most prominent among which was Pakistan’s e-commerce prodigy, Airlift.

On the whole, Pakistan’s startups managed $348 million in funding in 2022. Even though this translated into a 5% decline compared to the previous year, the sharp downturn was apparent in a quarter by quarter analysis. The last quarter of 2022 saw just $15.15 million in funding, a plunge of 72.65% over the previous quarter and 79.24% over the same quarter last year, which makes it the worst quarter on record since Q1-2020. E-commerce startups grabbed a lion’s share with $190 million of the total startup funding in 2022, which marked a marginal increase of 8.6% over the previous year. The number of deals secured in the e-commerce sector however declined 25% to 16 from 20.

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This fall in investor interest was not exclusive to Pakistan as venture class (VC) assets all over the world struggled. According to some estimates, global venture funding fell by 35% in 2022\(^1\). These trends were primarily driven by the US Federal Reserve hiking its policy rate as it tried to battle rising inflation. As a consequence, the higher interest rate saw investors switching to better returns on risk-free investments, such as directing more of their money to government securities and banks.

Resultantly, the premium on investments in emerging markets like Pakistan rose, which translated into capital outflows from all asset classes. In Pakistan’s case, the risk premium was even higher because of the country’s macroeconomic crises and the high levels of political instability witnessed in 2022.

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### Major E-Commerce Platforms of 2022

Source: Alpha Venture

<table>
<thead>
<tr>
<th>Company</th>
<th>Total Visits/Month</th>
<th>Category</th>
<th>Platform</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daraz</td>
<td>11.7M</td>
<td>Marketplace</td>
<td>Custom</td>
</tr>
<tr>
<td>Priceoye</td>
<td>4.1M</td>
<td>Marketplace</td>
<td>Custom</td>
</tr>
<tr>
<td>GulAhmed</td>
<td>2.9M</td>
<td>Fashion</td>
<td>Magento</td>
</tr>
<tr>
<td>Saphire</td>
<td>2.8M</td>
<td>Fashion</td>
<td>Shopify</td>
</tr>
<tr>
<td>Khadi</td>
<td>1.5M</td>
<td>Fashion</td>
<td>Magento</td>
</tr>
<tr>
<td>Limelight</td>
<td>1.4M</td>
<td>Fashion</td>
<td>Shopify</td>
</tr>
<tr>
<td>J</td>
<td>1.3M</td>
<td>Fashion</td>
<td>Magento</td>
</tr>
<tr>
<td>Telemart</td>
<td>933.3K</td>
<td>Marketplace</td>
<td>Custom</td>
</tr>
<tr>
<td>nahead.pk</td>
<td>921.9K</td>
<td>Click &amp; Mortar</td>
<td>Magento</td>
</tr>
<tr>
<td>B Gallery</td>
<td>674.3K</td>
<td>Marketplace</td>
<td>Shopify</td>
</tr>
<tr>
<td>LAAM</td>
<td>441.7K</td>
<td>Fashion</td>
<td>Shopify</td>
</tr>
<tr>
<td>Shopeez</td>
<td>416.6K</td>
<td>Marketplace</td>
<td>Magento</td>
</tr>
<tr>
<td>Mophive.com</td>
<td>285.7K</td>
<td>Marketplace</td>
<td>Magento</td>
</tr>
<tr>
<td>Liberty Books</td>
<td>255.7K</td>
<td>Books</td>
<td>Custom</td>
</tr>
<tr>
<td>HomeShopping</td>
<td>203.1K</td>
<td>Marketplace</td>
<td>BigCommerce</td>
</tr>
</tbody>
</table>
CLUSTER OF LOCAL CHALLENGES

Pakistan’s economic crisis particularly worsened after June as inflation peaked to a five-decade high in August⁴, which impacted the purchasing power of consumers. Since July, many businesses, including e-commerce stores, said they were seeing a decline in orders. On the other hand, many companies began facing issues meeting orders because they were unable to source key components required to finalize their products after the government imposed import restrictions in a bid to protect its dwindling foreign exchange reserves.

According to Hammad Khan, co-founder of AlphaVenture, the digital agency behind the price comparison website Pakistanstores.com, sales have declined around 10-15% this year compared to 2021, despite more people coming online⁵. He shared that, “Even though our website traffic went up 5% year-on-year in November 2022, it hasn’t necessarily translated into more orders for stores as major players in the industry are having a relatively slower period.”

“More than demand, supply has been the issue as almost all sectors — regardless of online or traditional channels — struggle to source products. If companies cannot source products in the first place, how are they even going to fulfil orders?”

Hammad Khan, co-founder of AlphaVenture

CLOSURES ACROSS THE YEAR

Some prominent closures and layoffs across e-commerce in 2022 were:

— Airlift
— Olx Mall
— Swvl
— Uber
— Careem
— Food
— Vavacars
— Yayvo.com
— Dukan
— Retailo.pk
— Truck it in

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⁴ Reuters. (2022, September 1). Pakistan CPI inflation hits multi-decade high 27.3% on year in August. Arab News Pakistan. https://www.arabnews.pk/node/2154356/pakistan
It takes years for large-scale e-commerce operations to become profitable because margins are thin. They require continuous funding to continue before they can scale up to a size where they start generating profit, which explains the uncertainty surrounding TCS’ venture Yayvo and the closure of OLX Mall. “It takes $20-30 million to set up a proper e-commerce business in Pakistan … If you’re not willing to do that, then you’re wasting time and resources,” Hamad Raavda, former chief marketing officer at Daraz shared⁶.

Additionally, e-commerce businesses, especially those that are serving in the quick commerce segment, also require considerable funding to be able to set up a network of warehouses and dark stores across the country in order to provide the service they promise. “Setting up this network of warehouses and then ensuring fulfillment costs associated with such deliveries makes quick commerce a very costly affair,” according to an expert who spoke to Profit Magazine. In such an environment, when a global recession causes investors to back out, it becomes almost impossible for companies to continue because business has not turned profitable yet.

It takes years for large-scale e-commerce to become profitable because margins are thin. They require continuous funding to continue before they can scale up to a size where they start generating profit, which explains the uncertainty surrounding TCS’ venture Yayvo and the closure of OLX Mall. “It takes $20-30 million to set up a proper e-commerce business in Pakistan … If you’re not willing to do that, then you’re wasting time and resources,” Hamad Raavda, former chief marketing officer at Daraz shared⁶.

Pakistan’s economic woes clubbed with the global funding problem the ride-hailing segments of the e-commerce industry particularly hard. With inflation soaring, petrol prices going well past Rs200 per liter and the rupee witnessing a freefall, both demand suppression and product costs spiraling resulted in Swvl, Uber and Careem food delivery shutting down as well. To avoid a similar fate, Retailo and Dukan.pk laid off employees in 2022⁹, with the aim to reduce cash burn and achieve profitability.

Despite the overall downhill trend, digital payments to e-commerce vendors went up drastically in fiscal year 2022, according to data collected by the State Bank of Pakistan, indicating that there was a shift away from the cash-on-delivery (COD) payment method that was until recently the primary choice for customers in Pakistan.

In its annual payments report\(^{10}\), the central bank revealed that e-commerce merchants registered with banks had gone up 63% to 4,887 by June 2022, while digital payments to these merchants shot up to Rs106 billion from Rs60 billion in the previous year. Overall, digital transactions with e-commerce merchants in fiscal year 2022 also doubled to Rs45 million from Rs22 million in the previous year.

Additionally, despite a tough year that saw funding dry up, there were still a few positives for Pakistani e-commerce in 2022 including some notable funding\(^\text{11}\) for platforms (see table below).

### TOP 10 E-COMMERCE FUNDING IN 2022

<table>
<thead>
<tr>
<th>Platform</th>
<th>Funding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bazaar</td>
<td>$70 million</td>
</tr>
<tr>
<td>Dastgyr</td>
<td>$37 million</td>
</tr>
<tr>
<td>Retailo</td>
<td>$36 million</td>
</tr>
<tr>
<td>Jugnu</td>
<td>$22.5 million</td>
</tr>
<tr>
<td>PriceOye.pk</td>
<td>$7.9 million</td>
</tr>
<tr>
<td>24Seven</td>
<td>$6 million</td>
</tr>
<tr>
<td>DealCart</td>
<td>$4.5 million</td>
</tr>
<tr>
<td>Markaz Technologies</td>
<td>$2.4 million</td>
</tr>
<tr>
<td>Zaraye</td>
<td>$2.1 million</td>
</tr>
<tr>
<td>Jomo</td>
<td>$0.85 million</td>
</tr>
</tbody>
</table>

**Source:** Data Darbar

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Pakistani sellers also rose to prominence on global e-commerce platforms Amazon and Alibaba this year. After being added to Amazon in May 2021, it took Pakistan a little over a year to break into the top three nations\(^2\) selling products on the digital platform, behind only the US and China. Similarly, Alibaba revealed that in 2022, around 85% of Pakistani sellers using the platform were from Sialkot\(^3\), highlighting that Pakistan could shore up its exports drastically if sellers in other cities also adopted the e-commerce platform.

As for startups, one of the most renowned venture capital firms in the world, 500 Global, partnered with JS Global, a leading financial services provider in the country, to scout high potential founders and startups to invest in as well as bring investor education programs to Pakistan\(^4\). Similarly, a Hum Network subsidiary announced it was partnering with GS Group to launch a $50 million fund, named the Pakistan Katalytic Fund\(^5\). Through this fund, both companies “will invest the funds of different limited partners in technology and related companies which have the potential to scale their business”.

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Bytes for All (B4A), Pakistan is a research think tank with a focus on Information and Communication Technologies (ICTs). It experiments with and organize debates on the relevance of ICTs for sustainable development, democracy and social justice. Its strategic plan delivers in following key result areas (KRA):

- Securing digital rights for civil liberties;
- Strengthening holistic safety of citizens in cyberspace;
- Technology for environmental sustainability; and
- Network building at national, regional and global level.

To deliver above-mentioned KRAs, B4A conducts research for evidence-based policy advocacy, field projects and capacity building of citizens.

More information about B4A is accessible at www.bytesforall.pk.
<table>
<thead>
<tr>
<th>Acronym</th>
<th>Full Form</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>PTA</td>
<td>Pakistan Telecommunication Authority</td>
<td>08</td>
</tr>
<tr>
<td>SCO</td>
<td>Special Communication Organization</td>
<td>08</td>
</tr>
<tr>
<td>PMCL</td>
<td>Pakistan Mobile Communications Limited</td>
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<tr>
<td>PTML</td>
<td>Pakistan Telecommunication Mobile Limited</td>
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<tr>
<td>CMPAK</td>
<td>China Mobile Pakistan</td>
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<td>QoS</td>
<td>Quality of service</td>
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<tr>
<td>ISP</td>
<td>Internet Service Provider</td>
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<tr>
<td>KPI</td>
<td>Key Performance Indicator</td>
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<tr>
<td>DNS</td>
<td>Domain Name System</td>
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<tr>
<td>GSMA</td>
<td>Groupe Speciale Mobile Association</td>
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<tr>
<td>SMS</td>
<td>Short Messaging Service</td>
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</tr>
<tr>
<td>IVR</td>
<td>Interactive Voice Response</td>
<td>13</td>
</tr>
<tr>
<td>ICT</td>
<td>Information &amp; Communication Technology</td>
<td>13</td>
</tr>
<tr>
<td>MISTT</td>
<td>Mobile Internet Skills Training Toolkit</td>
<td>13</td>
</tr>
<tr>
<td>FTTH</td>
<td>Fiber To The Home</td>
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</tr>
<tr>
<td>USD</td>
<td>United States Dollar</td>
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<tr>
<td>5G</td>
<td>Fifth Generation</td>
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<td>15</td>
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<td>OICCI</td>
<td>Overseas Investors Chamber of Commerce &amp; Industry</td>
<td>15</td>
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<tr>
<td>AIT</td>
<td>Associate in Information Technology</td>
<td>15</td>
</tr>
<tr>
<td>CKD</td>
<td>Completely Knocked Down</td>
<td>16</td>
</tr>
<tr>
<td>NEPRA</td>
<td>National Electric Power Regulatory Authority</td>
<td>16</td>
</tr>
<tr>
<td>SBP</td>
<td>State Bank of Pakistan</td>
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</tr>
<tr>
<td>FIA</td>
<td>Federal Investigation Agency</td>
<td>16</td>
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<tr>
<td>DCB</td>
<td>Direct Carrier Billing</td>
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<tr>
<td>IT</td>
<td>Information Technology</td>
<td>17</td>
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<tr>
<td>PTCL</td>
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**LIST OF ACRONYMS**

- **NBFC**: Non-Banking Financial Company
- **KFS**: Key Fact Statement
- **KLI**: Karachi Lahore & Islamabad
- **B2B**: Business to Business
- **M&A**: Merger and acquisition
- **Q1**: Quarter 1
- **COD**: Cash On Delivery

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