



the global voice of
the legal profession®

IBA Intellectual Property, Communications
and Technology Law Committee

Digital Regulations in the Metaverse Era

PAKISTAN

Regional Coordinators:

Angela Flannery *Quay Law Partners, Sydney*

Yoshifumi Onodera *Mori Hamada & Matsumoto, Tokyo*



Cybersecurity

Sahar Iqbal *Akhund Forbes, Sindh*

1. Are there any cybersecurity policies, strategies or regulations applicable to the metaverse in your jurisdiction?

In Pakistan, there are no specific cybersecurity policies or regulations tailored explicitly to the metaverse. However, the existing cybersecurity frameworks cover various aspects relevant to the digital landscape. The National Cybersecurity Policy 2021 aims to protect critical infrastructure and strengthen cybersecurity across all sectors through the adoption of robust security standards. The policy's objective is to establish a secure and resilient cyber environment through measures, such as the creation of a national Computer Emergency Response Team (CERT), the promotion of cybersecurity awareness and capacity building.

2. Are there any secure-by-design principles applicable to the metaverse in your jurisdiction?

The Prevention of Electronic Crimes Act 2016 (PECA) emphasises the need for implementing appropriate security measures to protect electronic information and systems. It includes provisions for safeguarding sensitive data through encryption and other technical measures.

3. Have there been any cyber incidents in the metaverse in your jurisdiction? How do the applicable policies, strategies or regulations react to cyber incidents?

While specific incidents that have occurred in the metaverse have not been documented, Pakistan has experienced various cyber incidents. The applicable policies, such as those set out in the PECA, provide mechanisms to deal with cybercrime, including hacking and unauthorised access to information systems. The National Cyber Security Policy also outlines response strategies to mitigate and respond to cyber incidents.

The Pakistan Telecommunication Authority (PTA) has acted to combat various types of cybercrime, including blocking websites involved in illegal activities. The Cyber Crime Division of the Federal Investigation Agency (FIA) has handled numerous cases involving cyber fraud, identity theft and unauthorised access to information systems.

4. Are there any cybersecurity standards in your jurisdiction specifically applicable to the metaverse? What are the main obligations they set out?

In Pakistan, there are no cybersecurity standards specifically tailored to the metaverse. However, the existing cybersecurity laws and policies provide a framework that can be applied to emerging technologies, including the metaverse. The PECA and the National Cyber Security Policy 2021 are the primary legal instruments governing cybersecurity in Pakistan. The PECA covers a broad range of cybercrimes, including unauthorised access to information systems, electronic fraud and identity theft, which means that any activities falling within these categories that occur in the metaverse will also be subject to these regulations. The National Cyber Security Policy 2021 outlines strategic objectives for protecting cyberspace in Pakistan, emphasising the need for secure system architecture, incident response capabilities and public-private cooperation.

The main obligations set out by these laws and policies include ensuring the security and integrity of digital systems, protecting personal and sensitive data, and promptly reporting and responding to cyber incidents.

Q 5. Are there any upcoming policies, strategies or regulations that will impact cybersecurity in the metaverse?

Pakistan is actively working on updating its cybersecurity frameworks to adapt to new digital landscapes, such as the metaverse.



Digital identity and authentication

Sahar Iqbal *Akhund Forbes, Sindh*

Q 1. Are there any digital identity and authentication policies, strategies or regulations applicable to the metaverse in your jurisdiction?

Yes, digital identity and authentication in Pakistan are governed by various regulations, including the Electronic Transactions Ordinance 2002 (ETO) 2002 and the Prevention of Electronic Crimes Act 2016 (PECA).

The PECA imposes penalties for identity theft and the unauthorised use of identifying information. Section 16 of PECA states that anyone found guilty of obtaining, selling, holding, transmitting or utilising someone else's identifying information without proper authorisation can face a maximum prison sentence of up to three years and a fine of up to PKR 5m (approximately US\$18,000). Furthermore, the use of identity verification methods, such as know-your-customer (KYC) standards, is encouraged to ensure robust security and consumer trust in digital transactions.

Q 2. What are the different types of digital identity in the metaverse: what are the different tiers and types of ID and what are the different levels of protection in your jurisdiction?

There are no policies or regulations specific to the different types of digital identity in the metaverse in Pakistan. The existing forms of identification, such as computerised national identity cards, residence cards, passports, voter numbers, social security cards and tax identification numbers, are not tailored for use within the metaverse.

Q 3. How is self-determination exercised and protected in the metaverse in your jurisdiction?

Self-determination in the digital realm is protected under Pakistani law through the PECA, which protects digital identity and provides sanctions for misuse. Section 16 of PECA covers the unauthorised use of identity information, imposing penalties of up to three years' imprisonment and/or fines.

Q 4. How is the role of intermediary ID providers regulated in your jurisdiction? What are their main obligations?

In Pakistan, the regulation of intermediary ID providers is primarily governed by the ETO and the PECA. The ETO grants legal recognition for electronic documents and electronic signatures, laying the foundation for digital identity management. It ensures that electronic forms and electronic signatures are valid and that electronic records are retained properly. The PECA further enhances this regulatory framework by addressing the misuse of digital identities and providing penalties for identity theft and the unauthorised use of identity-related information. These laws collectively ensure that intermediary ID providers operate within a legal structure that mandates the secure and proper handling of digital identities.

The main obligations imposed on intermediary ID providers in Pakistan include ensuring robust data security and data protection safeguards, complying with legal standards and maintaining transparency and accountability. Providers must implement comprehensive security measures, such as encryption and regular audits, to safeguard personal and sensitive data. They are required to adhere to the ETO and PECA, obtaining proper consent from users and ensuring the legal validity of electronic signatures and records. In case of a security breach or cyber incident, providers must promptly

report the event to the relevant authorities and cooperate with law enforcement agencies. Additionally, they must be transparent with users about how their data is used and stored, and they are held accountable for any misuse or mishandling of digital identities.



5. Are there any upcoming policies, strategies or regulations that will impact the digital identify and authentication process in the metaverse in your jurisdiction?

Pakistan is actively working on updating its regulatory framework to address emerging technologies, including the metaverse. The draft National Artificial Intelligence Policy and ongoing discussions about an updated Personal Data Protection (PDP) Bill aim to enhance digital identity and authentication processes in the country. These forthcoming regulations focus on ensuring the ethical use of artificial intelligence, strengthening data protection measures and providing clear guidelines for digital identity management, which will impact how identities are verified and authenticated in the metaverse.



AI in the metaverse

Sahar Iqbal *Akhund Forbes, Sindh*

Q 1. Are there any policies, strategies or regulations applicable to AI or the use of AI in the metaverse in your jurisdiction?

AI regulation in Pakistan is still in its nascent stages. The draft National AI Policy aims to regulate AI applications, ensuring the ethical use of such technology and the protection of personal data. However, specific guidelines for AI use in regard to the metaverse are yet to be developed.

Q 2. How is transparency and accountability in terms of AI ensured in your jurisdiction?

In Pakistan, transparency and accountability in terms of AI are primarily dealt with by the draft National AI Policy and the Prevention of Electronic Crimes Act 2016 (PECA). The draft National AI Policy emphasises the ethical and transparent use of AI, requiring developers and users to document processes, ensure transparency in AI decision-making and prevent bias and misuse. The policy aims to create clear standards for responsible AI deployment, promoting accountability in terms of AI applications across various sectors.

Sanctions for infringements of these regulations can include civil, criminal and administrative penalties. Civil sanctions allow victims to seek compensation through lawsuits for negligence or breach of contract. Criminal penalties under PECA, such as those concerning the unauthorised use of identity information or cyber harassment, can involve imprisonment and fines. Administrative sanctions can be imposed by regulatory bodies, such as the Pakistan Telecommunication Authority (PTA), which can levy fines and enforce compliance with data protection and AI transparency regulations. While specific case law on AI-related infringements is limited, the existing legal framework provides robust mechanisms for addressing AI misuse and maintaining ethical AI practices.

Q 3. How is algorithmic bias mitigated in your jurisdiction? Are there any policies, strategies or regulations aiming to promote fairness and non-discrimination?

In Pakistan, the mitigation of algorithmic bias is addressed through emerging policies and the broader regulatory framework aimed at promoting fairness and non-discrimination. The draft National AI Policy emphasises the importance of ethical AI, requiring developers to ensure their algorithms are free from bias and promote fairness. This includes guidelines for documenting AI processes, conducting regular audits and implementing measures to prevent discrimination in AI applications. The policy aims to establish clear standards for ethical AI deployment, ensuring that algorithms operate transparently and equitably across different sectors.

Sanctions for infringements related to algorithmic bias can include civil, criminal and administrative penalties. The victims of algorithmic discrimination can seek compensation through civil lawsuits. Criminal sanctions under the PECA may apply if the bias results in the unauthorised use of personal data or cyber harassment, with penalties including imprisonment and fines. Administrative sanctions can be imposed by regulatory bodies such as the PTA, which can enforce compliance through fines and other measures. While specific case law on algorithmic bias is limited, the existing legal and regulatory framework provides mechanisms to address and mitigate bias, promoting fairness and accountability in terms of AI systems.

Q 4. What is the intellectual property law treatment of AI-generated content used in the metaverse in your jurisdiction? Who are the rightsholders of that content?

In Pakistan, the treatment of AI-generated content under intellectual property law is currently evolving and lacks specific provisions directly addressing AI-created works. Generally, intellectual property rights, such as copyright, are granted to the creator of a work. However, since AI lacks legal personhood, the ownership of AI-generated content typically defaults to the individual or entity that owns or operates the AI system. This aligns with international norms, where the human input in creating and using the AI system is recognised, making the developer, programmer or user of the AI the likely rightsholder of the content produced by the AI.

Given the absence of explicit regulations for AI-generated content, existing intellectual property laws are applied by analogy. For instance, if an AI system is used to create content within the metaverse, the individual or organisation that deployed the AI for this purpose would hold the intellectual property rights to the resulting content. This approach ensures that human creators or operators retain control and can benefit from the commercial exploitation of AI-generated works.

Q 5. Which stakeholders are liable for any damages caused to third parties due to the use of AI in the metaverse? What sanctions (civil, criminal, administrative) may apply in the case of infringement?

The liability for damages caused to third parties due to the use of AI in the metaverse typically falls on the developer or operator of the AI system. Under the PECA, individuals or entities responsible for the deployment and management of AI technologies are accountable for ensuring their safe and lawful use. If the AI system causes harm due to negligence, design flaws or misuse, the stakeholders involved can face civil, criminal and administrative sanctions. Civil penalties may include compensation for damages, while criminal sanctions can involve fines and imprisonment. Administrative actions might include regulatory fines and restrictions on business operations.

While there is no specific case law or any related decisions from Pakistani regulators explicitly addressing AI-related infringements in the metaverse, general principles under the PECA and the Companies Act 2017 apply. These laws provide a framework for addressing breaches of fiduciary duties, unauthorised data usage and other cybercrimes.

Q 6. Are there any upcoming policies, strategies or regulations that will impact AI in your jurisdiction?

The draft National AI Policy aims to establish clear guidelines for the development and deployment of AI technologies, emphasising transparency, accountability and fairness. This policy is designed to ensure that AI systems are developed responsibly and are aligned with international standards. Additionally, the ongoing discussions on the enactment of the Personal Data Protection Bill seek to enhance data privacy and protection, which will also affect how AI systems handle and process personal data.



Digital transactions and ownership

Sahar Iqbal *Akhund Forbes, Sindh*

Q 1. Are there any relevant policies, strategies or regulations applicable to tokens, non-fungible tokens (NFTs) or digital assets in the metaverse in your jurisdiction?

In Pakistan, the regulation of tokens, NFTs and digital assets within the metaverse is still in its nascent stages, with no specific policies or regulations currently in place. The State Bank of Pakistan (SBP) and the Securities and Exchange Commission of Pakistan (SECP) have issued general warnings and advisories regarding the risks associated with cryptocurrencies and digital assets, highlighting the lack of legal protection and potential for misuse. However, comprehensive regulatory frameworks specifically addressing the use and trading of tokens, NFTs and digital assets in the metaverse are yet to be developed.

Q 2. Are there any relevant policies, strategies or regulations applicable to digital transactions in the metaverse in your jurisdiction?

While there are no specific policies or regulations exclusively addressing digital transactions within the metaverse, the existing general frameworks, such as the Electronic Transactions Ordinance 2002 (ETO) and the Prevention of Electronic Crimes Act 2016 (PECA), apply. These laws provide legal recognition for electronic transactions and outline measures to prevent cybercrimes, ensuring a degree of regulation for digital activities, including those taking place in the context of the metaverse.

To date, there is no significant case law nor any regulatory decisions specifically concerning digital transactions in the metaverse. However, the evolving digital landscape suggests that regulatory bodies, such as the SBP and the SECP, may introduce more targeted regulations in the future to address the unique challenges posed by the metaverse.

Q 3. How is property defined in the metaverse? Are there any relevant policies, strategies or regulations applicable to the ownership of digital assets on the metaverse in your jurisdiction?

In Pakistan, property in the metaverse is generally treated as intangible property. Digital assets, such as tokens and NFTs, are considered a form of intangible property that can be owned, transferred and traded. However, specific definitions and regulations tailored to the ownership of digital assets in the metaverse are not yet fully established. The general principles of property law and contract law apply, providing a framework for the legal recognition of digital assets and related transactions. The ETO provides legal recognition for electronic contracts and records, which could extend to digital assets in the metaverse.

Currently, there are no specific policies or strategies in Pakistan that exclusively address the ownership of digital assets in the metaverse. Regulatory guidance from bodies like the SBP primarily focuses on the prohibition on the use of cryptocurrencies in financial transactions, which indirectly affects the trading of digital assets



Q 4. How are property transfers regulated in your jurisdiction?

Property transfers are regulated under general property and contract laws. The Transfer of Property Act 1882 governs the transfer of property, including the sale, mortgage, lease and exchange of immovable property. For movable property, the Sale of Goods Act 1930 provides the relevant legal framework. Additionally, the ETO ensures that electronic contracts and records are legally recognised, facilitating digital transactions, including those involving digital assets.

While specific case law or regulatory decisions directly addressing property transfers in the metaverse are not yet available in Pakistan, general principles and legal precedents under the existing property and contract laws apply.

Q 5. How are currencies, including cryptocurrencies, used in the metaverse regulated in your jurisdiction? Who are the main stakeholders and what are their obligations?

In Pakistan, the use of cryptocurrencies, including those in the metaverse, is tightly regulated by the SBP. The SBP has banned the use of cryptocurrencies for financial transactions, emphasising that digital currencies are not recognised as legal tender. As a result, banks and financial institutions are prohibited from facilitating cryptocurrency transactions. The regulatory focus is primarily on preventing money laundering, fraud and other financial crimes associated with cryptocurrencies. Stakeholders involved in the cryptocurrency ecosystem, including exchanges and digital wallet providers, must adhere to these regulations and ensure compliance with anti-money laundering (AML) and counter-financing of terrorism (CFT) standards.

Non-compliance with these regulations can lead to significant sanctions. Civil penalties may include substantial fines and the seizure of assets involved in unlawful cryptocurrency transactions. Criminal penalties can involve imprisonment for individuals found guilty of violating SBP directives. Administrative actions may include the revocation of business licences and other regulatory approvals necessary for operating within the financial sector.

Q 6. How are transactions and the ownership of assets in the metaverse taxed in your jurisdiction? What sanctions (civil, criminal, administrative) may apply for non-compliance with these obligations?

In Pakistan, transactions and the ownership of digital assets in the metaverse are subject to the same tax principles that apply to other forms of property and income. The Federal Board of Revenue (FBR) oversees the taxation of digital transactions, ensuring that income generated from the sale, transfer or ownership of digital assets is reported and taxed appropriately. This includes capital gains tax on the sale of digital assets and income tax on earnings derived from activities in the metaverse. While specific guidelines for metaverse-related transactions have not yet been fully developed, the general tax laws concerning digital commerce are applicable.

Non-compliance with tax obligations can result in significant sanctions. Civil penalties for failing to report or pay taxes on digital transactions may include fines and interest on any unpaid taxes. Criminal penalties can involve prosecution for tax evasion, which may lead to imprisonment and additional fines. Administrative actions by the FBR may include audits, asset freezes and the suspension of business operations.

Q 7. Are there any upcoming policies, strategies or regulations that will impact digital transactions in your jurisdiction?

Yes, Pakistan is actively developing policies and regulations to enhance the legal framework for digital transactions. The FBR and other regulatory bodies are working on new guidelines to address the complexities of digital commerce, including aspects like the taxation of digital assets, e-commerce transactions and the use of cryptocurrencies.



8. Are there any upcoming policies, strategies or regulations that will impact the ownership of assets in the metaverse in your jurisdiction?

Pakistan is in the process of developing new policies and regulations that will affect the ownership of assets in the metaverse. The evolving digital landscape has prompted regulatory bodies, such as the FBR and the SECP, to consider frameworks that address the legal status, taxation and protection of digital assets.

Digital marketing and consumer protection

Sahar Iqbal *Akhund Forbes, Sindh*

1. Are there any relevant policies, strategies or regulations applicable to digital marketing in the metaverse in your jurisdiction?

In Pakistan, digital marketing, including in the metaverse, is governed by the existing laws and regulations that address advertising standards, consumer protection and data privacy. The Pakistan Electronic Media Regulatory Authority (PEMRA) oversees advertising content to ensure it complies with national standards, prohibiting misleading or deceptive practices. The Prevention of Electronic Crimes Act 2016 (PECA) also plays a significant role in regulating digital marketing, particularly concerning data protection and the prevention of cybercrime. These regulations ensure that digital marketing practices are transparent, truthful and respect consumer rights.

Additionally, the Personal Data Protection (PDP) Bill will have a further impact on digital marketing in the metaverse, by introducing stringent data protection requirements. This bill aims to enhance consumer privacy and regulate the collection, processing and storage of personal data used in digital marketing campaigns. Marketers will need to ensure that they are compliant with these new data protection standards to avoid penalties.

2. Are there any relevant policies, strategies or regulations regarding misleading advertising or other unfair commercial practices in the metaverse in your jurisdiction?

In Pakistan, policies and regulations addressing misleading advertising and unfair commercial practices in the metaverse are primarily governed by the Competition Act 2010 and the consumer protection acts enacted by each province. The Competition Act bans deceptive marketing practices and ensures fair competition, while the Consumer Protection Act safeguards consumers from false advertising and fraudulent business practices. The PEMRA also oversees advertising content, ensuring it adheres to ethical standards and does not mislead consumers. These regulations extend to digital platforms, including the metaverse, aiming to maintain transparency and fairness in regard to commercial activities.

Non-compliance with these obligations can result in significant sanctions. Civil penalties for misleading advertising or unfair commercial practices may include fines and compensation to the affected consumers. Criminal sanctions can involve imprisonment and additional fines for severe violations. Administrative actions by regulatory bodies such as the Competition Commission of Pakistan (CCP) and PEMRA can include revoking business licences, imposing restrictions on advertising activities and conducting investigations into unfair practices.

3. Are there any relevant policies, strategies or regulations aiming to promote consumer protection in the metaverse in your jurisdiction?

In Pakistan, consumer protection in the metaverse is primarily governed by the existing legal frameworks that ensure fair trading and protect consumer rights. The Consumer Protection Act provides a broad set of guidelines to safeguard consumers from unfair practices, fraudulent activities and defective products. This law is applicable to all commercial transactions, including those conducted in digital environments, such as the metaverse. Additionally, the Competition Act 2010 addresses anti-competitive practices and aims to ensure a level playing field for businesses, indirectly supporting consumer interests by promoting fair competition.



Furthermore, the PDP Bill, once enacted into law, will enhance consumer protection in the digital sphere, including the metaverse. This bill aims to regulate the collection, processing and storage of personal data, ensuring consumer privacy and security. It will impose strict compliance requirements on businesses operating in digital markets, including those in the metaverse, to protect consumer data and prevent the misuse of personal data.

Q 4. What is the minimum information that should be provided to consumers? Who are the stakeholders responsible for providing this information?

In Pakistan, the minimum information that should be provided to consumers includes details about the product or service, pricing, terms and conditions, return and refund policies and any potential risks or side effects, in line with the consumer protection acts applicable in each province. This information must be clear, accurate and easily accessible, to ensure informed consumer decisions. The responsible stakeholder for providing this information is typically the business or service provider offering the product or service, which includes retailers, manufacturers and online platforms.

Non-compliance with these consumer information obligations can result in various sanctions. Civil penalties may involve compensation claims by affected consumers, while criminal sanctions under laws like the PECA can include fines and imprisonment for fraudulent or misleading practices. Administrative sanctions can be imposed by regulatory bodies such as the CCP or the Pakistan Telecommunication Authority (PTA), which may levy fines, suspend licences or take other corrective action.

Q 5. Are there any relevant policies, strategies or regulations applicable to platform-to-consumer relationships in your jurisdiction? What are the main obligations placed on platform providers?

In Pakistan, platform-to-consumer relationships are primarily governed by the PECA and the consumer protection acts applicable in each province. These regulations ensure that platform providers adhere to the standards on transparency, fairness and data protection. Key obligations for platform providers include providing clear and accurate information about products and services, safeguarding consumer data and ensuring that transactions are secure. Additionally, the CCP oversees fair competition practices, preventing deceptive or unfair trade practices.

Non-compliance with these obligations can lead to various sanctions. Civil penalties include compensation claims by consumers for damage caused by non-compliance. Criminal sanctions under PECA can include fines and imprisonment for fraudulent activities or data breaches. Administrative sanctions imposed by regulatory bodies, such as the CCP or the PTA, can include fines, the suspension of licences or other corrective measures. Although specific case law on platform-to-consumer relationships is limited, these frameworks provide robust mechanisms for ensuring accountability and consumer protection in the digital marketplace.

Q 6. Are there alternative dispute resolution mechanisms available for consumers in your jurisdiction? How are they implemented in the metaverse?

In Pakistan, consumer-focused alternative dispute resolution (ADR) mechanisms are available and include mediation, arbitration and consumer courts. These mechanisms provide consumers with accessible and efficient means to resolve disputes without resorting to formal litigation. ADR is promoted under various laws, such as the Consumer Protection Act, which encourages the resolution of disputes through these alternative methods.

Implementing ADR mechanisms in the metaverse in Pakistan would involve adapting the existing frameworks to the virtual environment. This could include virtual mediation and arbitration sessions conducted through secure online platforms and the integration of dispute resolution protocols directly within metaverse platforms. While specific regulations for ADR in the metaverse are not yet in place, the principles of fairness, transparency and accessibility remain crucial.

Q 7. Are there any upcoming policies, strategies or regulations that will impact digital marketing in the metaverse in your jurisdiction?

In Pakistan, while there are no specific upcoming policies or regulations exclusively targeting digital marketing in the metaverse, the broader digital landscape is influenced by ongoing regulatory developments. The PTA and the Ministry of Information Technology and Telecommunication (MOITT) are working on policies to address digital advertising and data protection. The draft PDP Bill aims to enhance data privacy and security, which will indirectly affect digital marketing practices by enforcing stricter data handling and consent requirements.

Q 8. Are there any upcoming policies, strategies or regulations that will impact consumer protection in the metaverse in your jurisdiction?

In Pakistan, there are ongoing efforts to enhance consumer protection in the digital realm, which will have an indirect impact in the metaverse. The draft PDP Bill aims to strengthen data privacy and security measures, ensuring that consumers' personal information is protected. This legislation will enforce stricter data handling and consent requirements, which are crucial for consumer protection in the metaverse, where vast amounts of personal data are processed and exchanged.

Additionally, the CCP is involved in promoting fair competition and preventing deceptive practices in terms of digital markets. Although specific regulations targeting consumer protection in the metaverse are not yet in place, the principles of transparency, fairness and accountability, as outlined in existing and upcoming regulations, will apply.