

ITU GSR-25: What does it take for regulators to become digital ecosystem builders?

1. Fostering innovation in regulatory approaches

Regulators need to adopt an agile and fit for purpose approach to regulation that does not compromise on consumer protection nor create regulatory uncertainty. Emerging markets are characterized by a dynamic operating environment. An innovation-driven culture requires policy makers and regulators to develop policy and regulations that are not the traditional 'regulate and forget' but are adaptive and flexible to both help drive innovation and keep up with the pace of technology. An innovation-driven culture will require that the mindset of continuous learning is intrinsic in the way regulators work and interact with their stakeholders, and not a mindset that is indicative of a once-off learning effort.

Regulators must continuously learn and vigorously engage with new areas of regulation and technological developments. Transformative technologies, such as Artificial Intelligence (AI), automate specific tasks, and the integration and use of these new technologies will require higher cognitive skills.¹ Automation will free up regulators' time to focus on efforts that will better engage their collaborative and analytic skillsets, working with stakeholders to achieve innovative solutions. In addition to being digitally literate, policymakers and regulatory authorities need to be digitally fluent, with capabilities and skills that are adaptable across technologies, disciplines and different types of work.²

2. Adapting and enhancing regulatory capacity

Regulators need to make data-driven decisions, take risk-based approaches to regulation and encourage collaboration across the digital ecosystem. The advancement of technologies such as AI requires data-driven regulation to manage risks while promoting innovation and competition. Governments and regulators are consuming data while also adopting new data management tools. These tools can enhance risk-based regulation by providing insights that improve decision making. Regulators can leverage AI and other technologies to address information asymmetries and prioritise building a data-driven digital ecosystem while managing evolving risks.

Collaboration and co-regulation must remain a priority for regulatory authorities. There are areas of convergence across the digital ecosystem that require continuous reinforcement of regulatory principles to protect consumers. Emerging digital business models require collaboration and co-regulation, for example for e-verticals such as e-Health and e-Agriculture, and thus, regulatory authorities must be dynamic and enhance responsiveness to risks enabling the achievement of broader social and economic goals. To this end, policymakers need to review existing regulatory institutional arrangements to ensure that they continue to evolve to accommodate developments in the digital ecosystem. This means moving away from a mindset focused only on control, and

¹ [Future-citizen skills | McKinsey](#)

² Coldwell-Neilson, J. (2024). Digital fluency – a dynamic capability continuum. Australasian Journal of Educational Technology.

embracing a role that's about creating value, bringing people and sectors together, and supporting innovation that uplifts communities.

3. Harnessing transformative technologies for regulatory excellence

Transformative technologies have been earmarked to improve the way we work by enhancing the productivity and performance of organisations. Regulators can harness transformative technologies, such as AI and big data, to understand the needs and behaviour of addressees, such as evaluating customer complaints and enhancing delivery. AI and other data tools can be used to collate large data sets, improve response times and build models for future regulatory decision-making. Using predictive analysis can help regulators understand responses to changes in legislation by using technology to assess trends in customer complaints and resolution lead times. This can enable compliance as well as inform regulatory reform efforts.

However, regulators must be cautious of how transformative technologies are adopted and used to make regulatory decisions, considering concerns regarding data privacy, security, ethical and responsible use, trust and accountability. Furthermore, over-reliance and / or over-investing in new technology in the absence of the requisite technical capacity and capabilities could result in regulatory ineffectiveness. Regulators must continue to manage challenges related to the use of transformative technologies and applications to maintain public trust. This is especially important as regulatory authorities contend with talent shortages and skills gaps and budgetary constraints. Regulatory authorities need to strike the right balance between innovation and accountability whilst also developing regulatory frameworks that guarantee fair access and usage of digital resources.

4. Cross-border cooperation for building national, regional and global digital ecosystems

Regulators must identify and address areas where there are shared objectives and prioritise these issues. There is an opportunity to ensure regulatory harmonization by collaborating to develop standards and agreements and share insights for mutual benefit. Regulators can also benefit from regular exchanges of information through outcomes-based engagements. There are various opportunities throughout the year to engage, i.e., conferences and plenaries, and this can be used to build capacity through formal training by certified learning institutions.

Regulators must do more to ensure regulatory harmonization at a regional level. There are existing regional regulatory organisations that are harmonizing regulations and approaches. An example of this is the regional roaming initiative in the West and East African region. Regulatory matters such as SIM registration, data privacy and protection and cybersecurity also require cross-border collaboration and harmonization of regulatory approaches for effective management of risks and enforcement. Countries can no longer function in silos and therefore, there is an immediate need to collaborate across borders, leveraging gains from international trade agreements and provide legal assurance to investors through international investment protections, to encourage investments towards the sector. This will enable the adoption of new technologies while also ensuring that consumers are protected from the harmful impact of said technologies.