Procuring the Future: How Disruptive Technologies are Revolutionizing World Bank Projects

# What are Disruptive Technologies?

- Disruptive technologies refer to innovations that fundamentally change the way things are done in an industry or market. They often start as niche products or services, but eventually become mainstream and transform entire markets. Examples of disruptive technologies include the internet, smartphones, and electric vehicles.
- The impact of disruptive technologies on various industries can be transformative. For example, the Internet has disrupted traditional retail by enabling ecommerce, while smartphones have disrupted the photography industry by making high-quality cameras accessible to everyone. Electric vehicles have the potential to disrupt the automotive industry by reducing the reliance on fossil fuels and shifting the focus to renewable energy sources.



## Common challenges in Procurement

- delays, quality issues, cost increase
- Disruptive technologies such as blockchain, artificial intelligence, and machine learning have the potential to transform public procurement to address the challenges
- Adoption of technologies require changes to existing procurement regulations and practices



## Case studies

- Tanzania PPRA piloted the use of Machine Learning in doing Procurement Audit
- Pakistan Federal PPRA used Machine Learning in converting 10 years of data in PDF and image files in a relational database for analysis and reforms
- Pakistan Sindh Agriculture Department used Blockchain for the distribution of agricultural equipment and goods to farmers under a framework agreement
- Under the Zanzibar Electricity project, Bank has piloted an Al-powered platform to check the credibility of documents submitted by bidders for addressing forced labor in the supply of solar panels



#### Potential Risks and Limitations

- Cybersecurity vulnerable to hacking and other cyber attacks
- Need for specialized skilled professionals
- AI Governance data privacy, security, bias, and fairness, Ethical use of AI, Accountability and Liability, Standards and certification, Redress mechanism, and safeguard against misuse.
- Credibility of information



### Conclusion

- Disruptive technologies have the potential to revolutionize public procurement
- It is important to acknowledge that there are also risks and limitations associated with the use of disruptive technologies

