

Summary

Status of Frontier Technologies in Pakistan

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The purpose of writing this research report is to evaluate the status of five frontier technologies which include, Robotics, Nanotechnology, Artificial Intelligence, Internet of Things and Blockchain Technologies in Pakistan. The five selected frontier technologies are evaluated on the basis of three criteria. First, the objectives of the frontier technology policies. Second, the education and training in the selected frontier technology assessed to present possible types and kinds of courses being undertaken for each of the frontier technologies. Last, the utilization of each frontier technology is exhaustively searched to compile and analyze data on jobs, startups and established businesses in frontier technologies. This report is a pioneering effort to unbundle the selected frontier technology policies and outcomes. An effort has been made for extensive data collection; however, the researcher does not claim comprehensiveness of the data collected. Any omissions and commissions are the author's responsibility. In the process of evaluation many discrepancies were found regarding quality of data - accuracy, completeness, consistency, currency and reliability. Some of these issues were resolved, however, there were other which could not be fixed. The researcher has also identified issues arising out of the policy, education and training and utilization in business and society that may impact the development of frontier technologies in Pakistan. Moreover, data issues identified are hoped to resonate with policy makers. By addressing these issues, Pakistan could improve its performance in utilizing and deriving impact from frontier technologies. It may also help foster equitable social and economic development in the country by drawing the attention of the decision makers to design and implement better policies and development programmes.

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