

FINAL REPORT

FOR

# EMPLOYMENT CREATION THROUGH DISRUPTIVE TECHNOLOGIES

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### ACKNOWLEDGEMENTS

We would like to acknowledge and appreciate the Research and Development Department of Nigerian Communications Commission for the initiative to redesign the ICT framework in Nigeria and for the assistance and support accorded us during the course of the study.

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Thank you.

### **EXECUTIVE SUMMARY**

#### Introduction - The Objective of the Study

The study explored how technology disruption is enhancing productivity and creating jobs in the different sectors of the Nigerian economy. It specifically examined how the application of different technological instruments are helping to grow and develop diverse sectors of the economy with the ultimate goal of boosting work force efficiency and creation of more jobs.

The Maps Method was used to design the analytical framework while a five-point Likert-scale questionnaire was used as the data collection instrument. The sectors included in the survey were Agriculture, Health, Education, National Security, Law Enforcement, Official Statistics, Environmental Sustainability, Employment Services, Global Partnership, and Infrastructure.

In the course of this project, a background study/comparison of disruptive technology use in South Korea and South Africa was carried out to benchmark the use cases for Nigeria.

#### Results

Results showed varied degree of impacts of disruptive technologies in various sectors of the Nigeria economy. Disruptive technologies have resulted in increased investments in ICT in the education sector, thereby creating jobs for stakeholders in the value chain. Waste management attracted more investments in the environmental sustainability sector due to the introduction of various technologies that support systematic waste collected and recycling.

New forms of jobs are being created in the agriculture sector because successful and proactive stakeholders in the sector are now engaging persons who are well-skilled in usage of agriculture drones, satellite photography and sensors, weather forecasting, automated irrigation, intelligent software analysis for pest and disease prediction, soil management etc. New jobs are being created in the health sector with high demand for doctors, nurses, laboratory technicians, pharmacists, etc., who in addition to their primary areas of expertise, are proficient in the handling of basic technology instruments.

#### Conclusion

Disruptive technologies' impact on the national economy is dynamic, works of routine nature are often affected negatively especially if the workers are averse to upskill of their current knowledge and expertise. However, the technologies also create opportunities for employments and income in some sectors of the economy that were least expected. For Nigeria to get the best out of disruptive technology, Government must increase investment in ICT through enhanced budgetary allocations and alignment of national Plans with ICT masterplan of the country. Also, government must pursue ICT driven governance to enhance productivity and re-image the public sector, especially the civil service.

There must be effective and continuous regulatory measures to ensure the appropriate application and usage of technology. Regulatory agencies should proactively identify extant laws that would aid or inhibit the adoption and ease of use of technologies. Punitive measures and sanctions should be applied when the procurement and application of technology are considered harmful to the environment.

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## LIST OF ABBREVIATIONS

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