

Name KETS Quantum
Website kets-quantum.com
Year Launched 2016
Area Privacy



Description

KETS is a quantum communication (also called quantum security) early-stage venture. It has developed a set of photon silicon chips to secure data communications in a given network, utilising quantum technologies, protecting networks against quantum threats.

KETS key products operate within the Quantum Key Distribution (QKD) and Quantum Random Number Generator (QRNG) spaces, two important categories for communication encryption.

SDG Analysis

KETS focuses on sub-goal 16.3 and 16.A, to provide information security and privacy of information. Privacy is a fundamental human right as enshrined in the charter of the United Nations. Insecurity, weak institutions and limited access to justice remain a great threat to sustainable development. The company also targets SDG 9.1 which focusses on developing resilient infrastructure to support economic development and human well being, with a focus on equitable access for all.



Impact Management Project assessment

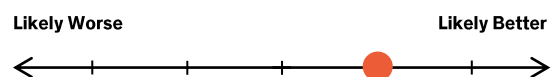
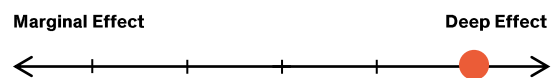
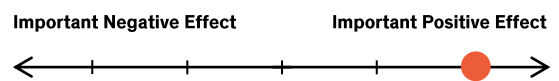
What: Security of communication systems, and privacy of information transmitted online. Data security, at the individual or institutional level, is yet to be protected at scale by quantum software. The EU has identified quantum data security as a major privacy priority via EUROQCI.

Who: Privacy of information for all of society.

How much: The impact of KETS is binary, in so far that its technology only become necessary with the advent of Quantum computing (QC). In the event that QC becomes effective, KETS has pervasive global impact.

Contribution: KETS is the global leader in Photonic Integrated Circuit (PIC) hardware. PIC is expected to provide better chances of mass adoption of quantum communications (due to lower development costs, and easier to mass produce), contributing to the impact of better secured communications in the event of Photonic Integrated Circuits become the enabler of wider adoption of QKDs and QRNGs, and critical infrastructure.

Impact Risk: There is a risk of potential isutilisation of technology towards less positive outcomes (KYC process is being established), and difficulty in measuring impact.



Conclusion

According to the IMP framework, the impact classification of KETS Quantum is a C (Contributing to solutions) given the potential for depth and scale of the solution, and given its potential to drive long-term impact by preserving one of the fundamental tenants of successful society - privacy.