

**Meeting: IOT ( Internet of Things)**  
**Committee: Enhancing ethics of IOT usage**  
**Country: Tanzania**

Tanzania officially known as the United Republic of Tanzania. It is located in eastern Africa within the African Great Lakes region. It has borders with Kenya and Uganda to the north; Rwanda, Burundi, and the Democratic Republic of the Congo to the west; Zambia, Malawi, and Mozambique to the south; and the Indian Ocean to the east. Mount Kilimanjaro, Africa's highest mountain, is in north-eastern Tanzania.

The United Nations estimated Tanzania's 2016 population at 55.57 million. The population is composed of several ethnic, linguistic and religious groups. The sovereign state of Tanzania is a presidential constitutional republic and since 1996 its official capital city has been Dodoma. Tanzania is mountainous and densely forested in the north-east, where Mount Kilimanjaro is located. Three of Africa's Great Lakes are partly within Tanzania. To the north and west. Over 100 different languages are spoken in Tanzania, making it the most linguistically diverse country in East Africa. Swahili is used in parliamentary debate, in the lower courts, and as a medium of instruction in primary school. English is used in foreign trade, in diplomacy, in higher courts, and as a medium of instruction in secondary and higher education.

The internet of things, is a system of interrelated computing devices, mechanical and digital machines, objects, animals or people that are provided with unique identifiers ([UIDs](#)) and the ability to transfer data over a network without requiring human-to-human or human-to-computer interaction.

IoT has evolved from the convergence of wireless technologies, micro electromechanical systems(MEMS), micro services and the internet. The convergence has helped tear down the silos between operational technology (OT) and information technology (IT), enabling unstructured machine-generated data to be analyzed for insights to drive improvements. One of the contemporary technological accomplishments which raises a great number of ethical questions is the Internet of Things. In the Internet of Things, the physical things connect to other physical things, using wireless communication and offering contextual services.

According to Business Insider, which quotes one of Morgan Stanley`s predictions (Danova, 2013), more than 75 billions of objects will be connected to the Internet of Things by 2020. Hence, in 2011, the European Commissioner, Gerald Santucci, head of Internet of Things and Future Internet Enterprise Systems Unit from the European Committee underlined the fact that "The Internet of Things does not refer only to things, but also to the relationship between the objects which surround the people daily and the people themselves" and he was wondering: "

The IoT has tremendous potential to enhance society, work, and life. Smart, networked systems can make us safer in our homes and vehicles, increase our efficiency at work and at play, empower us through information, and create new opportunities. But technologies have neither social values nor ethics

Ethics of IOT usage:

The ethical issues are caused by the expansion on a very large scale of the IoT specific technologies and characteristics. IoT is based on a global infrastructure network which connects physical and virtual objects in a unique way, by exploiting the data captured by the sensors, the equipment used for communication and localization.

The range of devices and the various contexts in which they can be used make ethical considerations difficult. For instance, they may be carried by us as individuals, or embedded in facilities such as care homes and hospitals.

Nonetheless, the lives of users can be easily recorded and analyzed by third parties, and whilst this has the potential to significantly improve healthcare, it also runs the risk of violating our expectation of personal and informational privacy.

The issue is complicated, not least because some applications of IoT technology can simultaneously violate and enhance privacy. For instance, a device could enhance privacy by not requiring in-person care, but also violate it by providing a monitoring device. As such, it's likely to require a trade-off between privacy and safety (and quality of care).

The acceptance of IoT devices is also likely to be impacted by the perceived obtrusiveness and visibility of the device. If the user perceives the device as obtrusive, then they can go to great lengths to subvert the system's functions. However, whilst placing sensors unobtrusively into the environment may have advantages, the validity of consent of the user may be undermined if they forget they are being monitored. The authors suggest that regular renewals of consent may be good practice to avoid this.