Knowledge representations and conceptualisations of the world differ profoundly across cultures and knowledge systems. Current technology designs are deeply anchored in a Western epistemology which is often conflicting with indigenous conceptualisations. Thus we pursue a locally situated approach to co-creating a new digital reality with indigenous knowledge holders in Namibia. We have developed a number of prototypes to support the preservation of indigenous knowledge. Lessons learned and open research questions are shared in the presentation. Furthermore, we have been engaged in co-designing technologies with unemployed youth in an informal settlement of Windhoek. Namibia has an exceptionally high youth unemployment rate and increasing rural-urban migration leading to a number of socio-economic challenges. Thus over the last 3 years we have dedicated substantial efforts into a digital transformation to improve the livelihood of marginalized youth. Challenges and success stories of the interventions will be shared in the presentation.

As a Professor in the Computer Science Department of the Namibia University of Science & Technology, she has lived, lectured and researched in Namibia since 1994. Her research has been on cultural issues in human-computer-interaction (HCI), cultural appropriation of design and evaluation concepts, representation and retrieval of indigenous knowledge. She promotes a dialogical and community-based co-design approach following principles of action research in the development of technologies. Heike has co-chaired a number of international conferences and co-authored more than 80 peer-reviewed publications.