Your Excellencies, Ladies and Gentlemen,

digitalization and technological development shape the world and the future we live in.

In this speech I am going to focus on digitalization and new technologies from three perspectives. First, ”access to technology”, then ”access to digital services” and finally ”collection and governance of data”. Throughout my speech I will use smartphones and mobile money as examples of the above.

Access to technical devices

Persons with disabilities’ access to technological devices has improved as product designers have incorporated a growing selection of inbuilt accessibilty features to their devices. The global trend of businesses gaining their profit from services rather than the devices has lowered sales prices making it more feasible for persons with disabilities to purchase a mobile device.

Regular functions that are based on audio, video and text also facilitate the usability of technology for people with a wide range of disabilities. A good example of such a device is a smartphone. A product that was not originally designed to be an assistive device but serves as one for many people with disabilities.

Smart phones provide access to information, communication, and services such as online banking, mobile money and GPS based maps and navigating. All these help eliminate physical and communicational barriers that persons with disabilities face.

However, persons with disabilities are typically among the poorest of the poor in their communities. For many people even standard devices let alone more expensive ICTs or assistive devices are beyond their financial means and therefore not available to them.

Persons with disabilities who are employed or who come from wealthy families are better off to address their individual technological needs. The financial barrier to accessing technology reflects the intersectional identities of persons with disabilities. Women and girls with disabilities or persons with disabilities who belong to a marginalized minority have fewer opportunities to attend elementary, vocational and higher education. This leads to lower rates of employment and reduced access to technology. In some national contexts this inequality is further exacerbated by social security plans that provide assistive devices primarily to meet study or work related needs. People outside the formal job market are left marginalized. This is especially alarming given the increase in informal and non-traditional job markets.

Accessibilty of digital services

Access to digital devices provides persons with disabilities with a wide range of services that can improve their standard of living and empower them. One such service that has grown rapidly is mobile money. Mobile money, that is not connected to existing banks is present in many parts of the world. The operational environments of mobile money services vary from East Africa where one service provider holds up to 80% of the mobile money market to more volatile societies where there are a high number of parallell mobile and cash currencies in use.

Mobile money has been applauded for providing access to financial services for many people who have formerly been unbanked. For persons with disabilities, mobile money eradicates physical barriers of getting to a bank or an ATM. Of course, this only applies to those persons with disabilities who can access a mobile device.

A large number of persons with disabilities face severe difficulties either accessing mobile devices or using the services on them. Blind and partially sighted people have to rely on the help of another person to handle mobile money which makes them vulnerable to fraud. In contexts where multiple mobile and cash currencies are used parallelly, people need to distinguish the different currencies and exchange rates and be conversant to negotiate prices and currencies with the other party of the transaction. This creates institutional and communcational barriers especially for people with intellectual disabilities and for Deaf persons. Low level of education and lack of basic numeracy and literacy skills create similar barriers for many more persons with disabilities.

There is also good development. The largest service provider in East Africa has recognized these challenges and started developing solutions such as interactive voice response or braille based solutions together with organizations of persons with disabilities. So far these accommodations cover only part of the functions of the mobile currency and are limited by the low level of braille literacy. For mobile money providers to invest in accessibility, there needs to be long term stability in the operational environment.

Data collection and governance

With the development of machine learning and artificial intelligence, data has become a global resource for service design for both businesses and governments. Therefore it is crucial, that disability disaggregated data on persons with disabilities and their needs is systematically collected and included in the data sets used for research and development purposes, whether public or private.

Gender bias in Big Data is a widely recognized phenomenon that can be observed by anyone by a simple Google search. Searching for images on ”boys on bikes” brings results on little boys riding bicycles whereas ”girls on bikes” portrays a selection of adult women in their underwear posing with bicycles. The existing gender bias in data sets used by search engines results in this. Similar bias exists on persons with disabilities but unlike the gender bias, this phenomenon is not well known. In order to address it we need to find out what kind of data exists and what kind of data would be needed in order to present persons with disabilities and their needs in a representative manner for future technological development.

Digitalization is and will be a trend that empowers persons with disabilities. Inclusive digitalization will also provide countries with a larger number of skilled workforce that contributes towards financial development and provides a growing customer base for private businesses. However, reaching these goals requires action. Therefore I would like to recommend:

- governments should identify technological devices enabling participation and inclusion together with persons with disabilities who use them. Social protection plans should subsidize costs of a variety of devices that have an assistive and empowering role in lives of persons with disabilities.
- The United Nations’ member states should guarantee a high level of international and national standards of e-accessibility
- governments should collect disability disaggreagated data systematic utilizing tools such as the Washington Group Questions designed for this purpose.
- private actors and governments should analyse existing data and identify gaps and existing bias
- Private sector should take interoperability, universal design and inbuilt accessibilty features as a starting point to their product design and development
- United Nations, governments and the private sector should cooperate with organizations of persons with disabilities in order to identify technological needs and solutions