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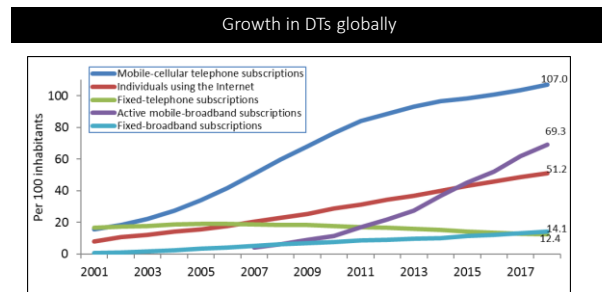


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What are DTs?
Big range of tools and approaches
(from DFID 2015)

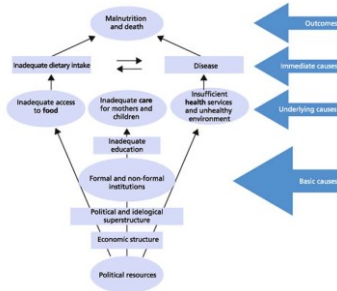
- **Mobile** SMS, apps, Interactive Voice Response (IVRs), mobile money, solar-powered phone chargers, smartphones
- **Internet** Websites, social media, knowledge platforms, databases, management information systems
- **Data** Open data, big data, data collection, data mining, data monitoring, analytics
- **Activities (supported or enabled by digital tools)** Crowd sourcing, geo mapping, user feedback, e-learning, information dissemination, real time monitoring, low cost diagnostics
- **Emerging technologies** Smartcards, biometrics, 3D printing, Google glass, wearable tech, TV white space, unmanned aerial vehicles (drones, satellites)

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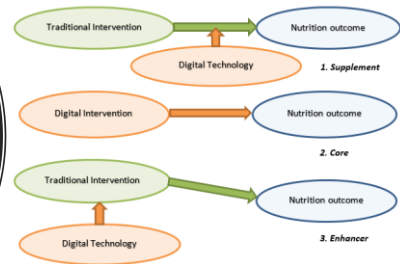
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UNICEF conceptual framework for the causes of malnutrition



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Three roles of DT for enhancing effectiveness of nutrition-related activities

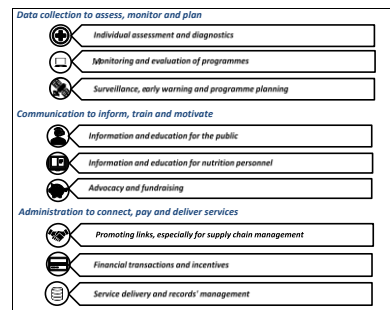


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Methods

- Desk-based review, using published and unpublished academic and grey literature over past ten years
- Incorporated responses to an email survey on use of DTs in GIZ nutrition projects (May 2018)
- Searched institutional websites (eg FAO, UNICEF, USAID, WFP)
- Searched databases (eg Pubmed, Science Direct, Web of Science)
- Used Google to identify relevant government sites, organization and interest groups sites, and specialist blogs
- Selected use-cases of DT in nutrition-specific and nutrition-sensitive projects (chose a typical example if several were similar)

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Nine
application
domains

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Findings

GIZ is very active in two of the nine domains:

- **Monitoring and evaluation** (e.g. digital dashboard in India)
- **Provision of information and education for the public** (e.g. "Health centre by phone" - hotline in Malawi)



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Others' activities: from basic to sophisticated..
 "Talking Book" and Iris scan camera



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Examples of suggestions

- Take advantage of Blockchain technology
- Develop apps to link farmers for sharing information and experiences
- Use uni- and bi-directional SMS messages (there is evidence these are effective for behaviour change)
- Incorporate nutrition outcomes reinforced by DT into social protection and WASH programmes
 eg conditional cash transfers can incorporate counselling reinforced by mHealth approaches
- Use nutrition modelling tools
- Create an internal online forum for discussion, sharing experiences and distributing information about use of DT in nutrition-sensitive interventions

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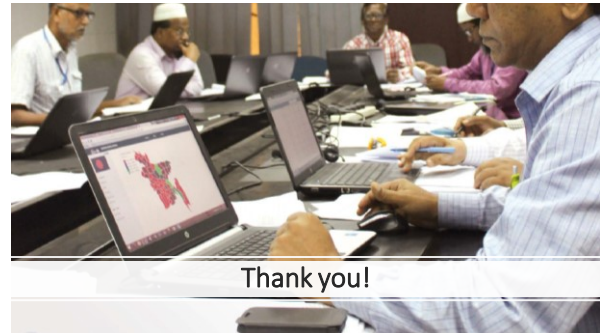
Challenges include

- Capability
- Sustainability
- Equity of access

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