UiO : Department of Technology Systems
University of Oslo

Gravid
BEDRE HELSE FOR MOR OG BARN

Trygt Svangerskap

Global Health Inspiration days,
13-14Nov2017, Oslo

Digital Health

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HiOA, in co-operation with Signatory scheme: Digital Health

GravidPluss.no - TrygtSvangerskap.no

Digital Health - more than .docx

- Lessons learned from GravidPluss
  - App development & Questionnaires
- Trygt Svangerskap
  - A more fail-safe approach to Questionnaires
  - Multi-language translation made easier
- Internet provision at Health stations
  - Economy, Security and Privacy
- The global perspective
  - Agenda 2030 and SDG 3: (Digital) Global Health

Technology Development

- Questionnaire
  - Development
  - Translation
  - inclusion of video, games
- Wireless access
  - Tablet
  - Wireless-/Mobile Networks
  - Digital Health information

Impact for Digital Health and Trygt Svangerskap

- Think globally
  - ➡ develop once, open for re-use
    - Free-lancers for new languages
  - ➡ "*where else can our findings be applied?*"
- Health Ecosystem
- Agenda 2030 and Sustainable Development Goals

- **TrygtSvangerskap.no**
- Questionnaire
  - ➡ Fail-safe development
  - ➡ 4 languages: NO, EN, Somali, Urdu
  - ➡ develop once
- Digital ecosystem
  - ➡ Information
  - ➡ Ethics
  - ➡ Health Network

Carrier 11:51 AM

Blodsukker

Mat & Drikke

Fysisk aktivitet

Diabetes

Hjem | Profil | Notater | Info

LANGUAGE:

Vennligst velg ditt språk
اپنی زبان منتخب کریں
Fadlan dooro luqaddaada

Gravid
BEDRE HELSE FOR MOR OG BARN

Min matkultur

Jeg ønsker å få informasjon basert på et:

Norsk kosthold

Pakistansk kosthold

Somalisk kosthold

Min vekt | Mine mål | Mitt aktivitesn...

MIN PROFIL

- Mitt sykehus og fødeplass
- Min matkultur
- Min vekt og høyde
- Mine mål
- Mitt aktivitesnivå
- Språk

- Registrer blodsukker
- Ditt blodsukker over tid
- Min erfaring med mat og blodsukker
- Om svangerskapsdiabetes
- Skriv ut blodsukkerverdiene

Lessons learned from GravidPluss.no

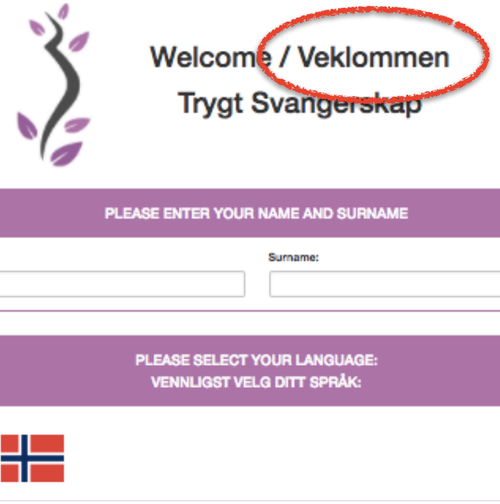
- Questionnaire
  - Time consuming development of questionnaire, non-automised
  - 3 languages
    - Urdu: mixture of arabic digits and urdu text
  - not designed for re-use
- App for Android and iPhone
  - updates to be up-to-date
  - difficult maintenance
- Digital ecosystem
  - email and phone, not Web

TrygtSvangerskap Technology development

- Questionnaire development
  - Start with structured document (.xls)
  - Semi-automatic conversion to Web language (.php)
- Translation tool
  - Corrections: EN -> EN
  - Translation: EN -> Somali, Urdu
- Health station access
  - Tablets with 4G
  - Health stations with Wifi

TrygtSvangerskap-Questionnaire_EN.xlsx

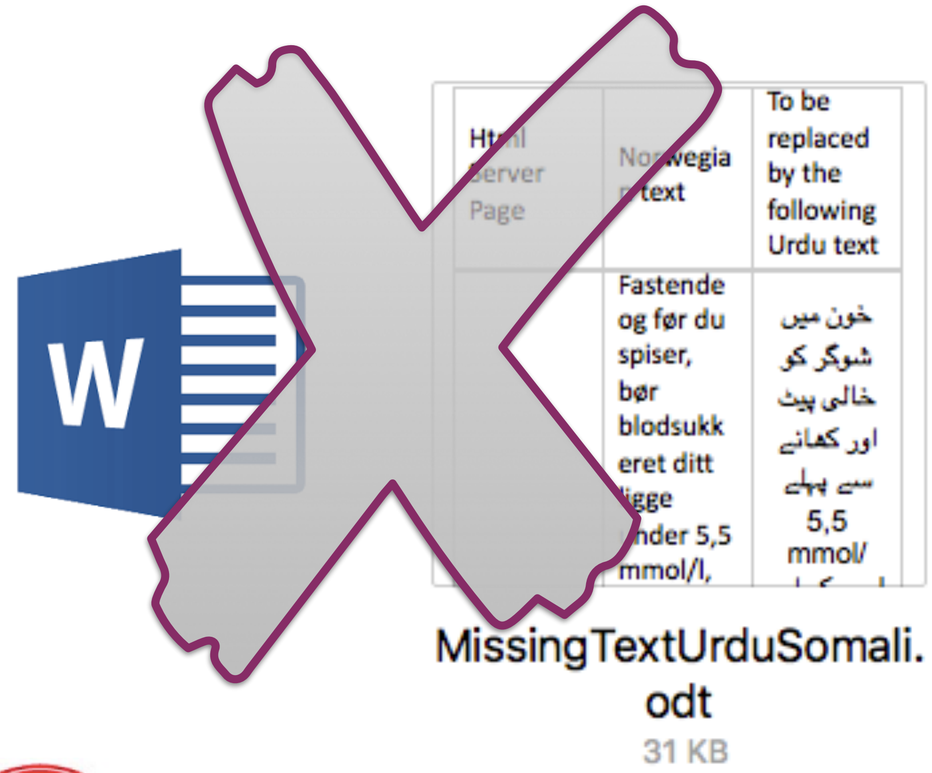
q.TrygtSvangerskap.no

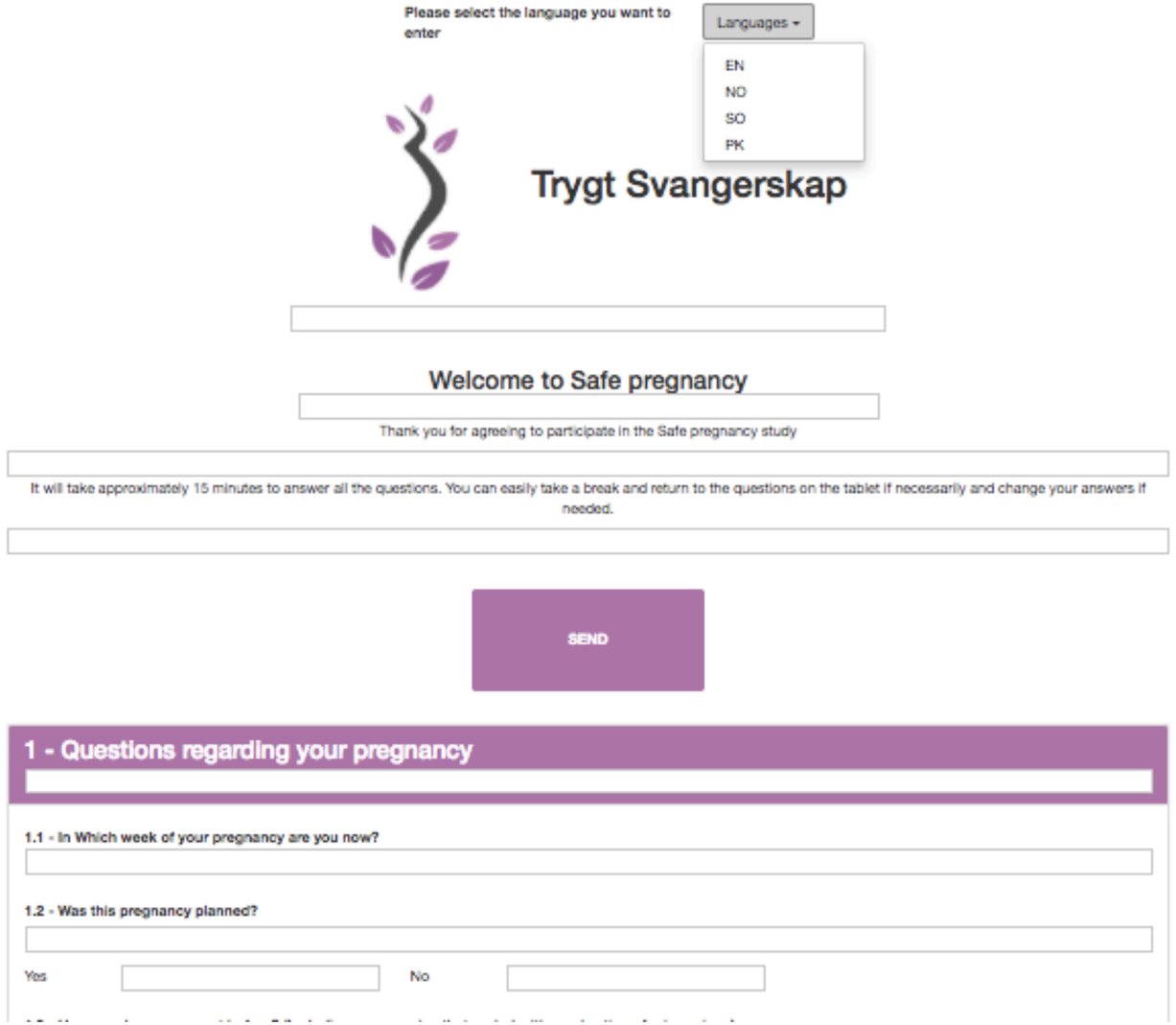


Trygt Svangerskap

Translation tool

translate.TrygtSvangerskap.no

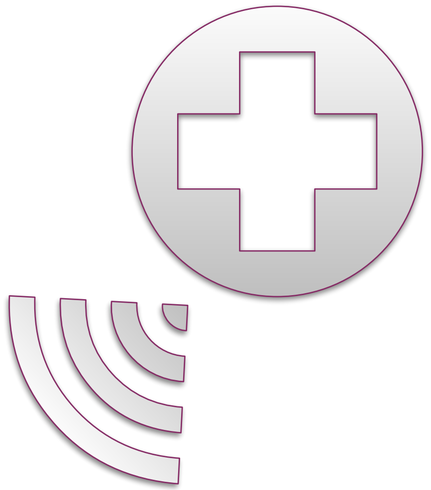




Tablet and Wifi Access

- Wifi situation at Health Stations
  - only about 25% have free Wifi

- Communication and free access
  - 4G tablets
  - establish Wifi
  - bring your own device (BYOD)



Sustainability and the Agenda 2030

- 17 main goals
- 169 associated targets
- “Free access to Information” (InfoInternet)

The Basic Internet Foundation

Digital Health

- digital health info
- digital access
- hotspots with health info

Education

- access to information, hotspots
- schools and community centres
- Off-line videos/courses

Work

- digital Society
- digital Knowledge
- Digital Services

USA: 33% of the GDP from digital
Financial services: 57%, Buz Services 54%
[source: Accenture & Oxford Economics, 2016]

Trygt Svangerskap

A tool for the world?

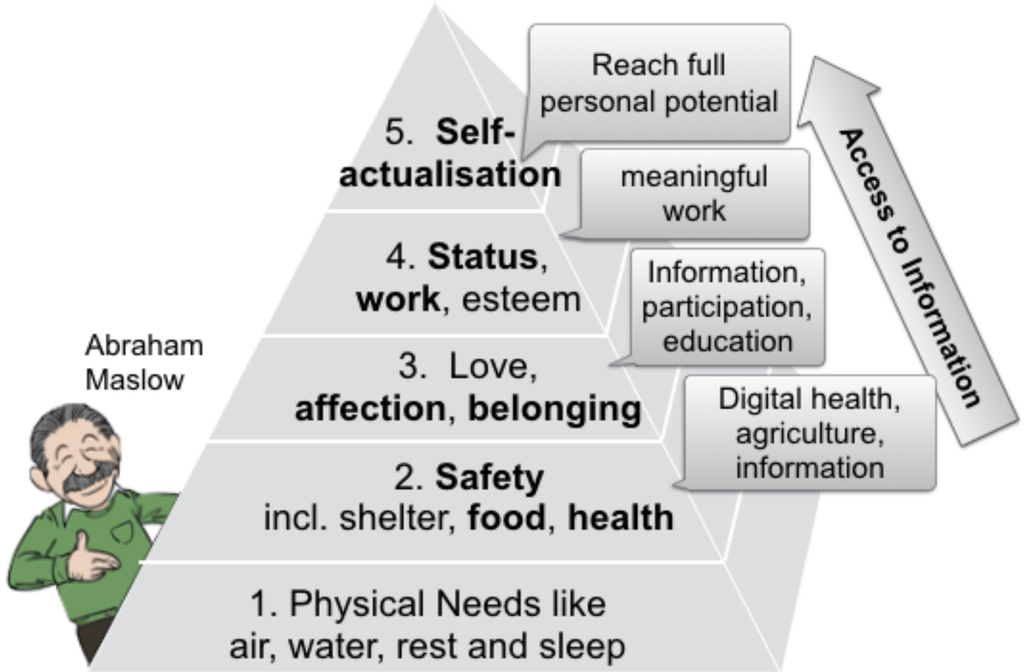
- digital health info
- digital access
- hotspots with health info

3. Health and Education

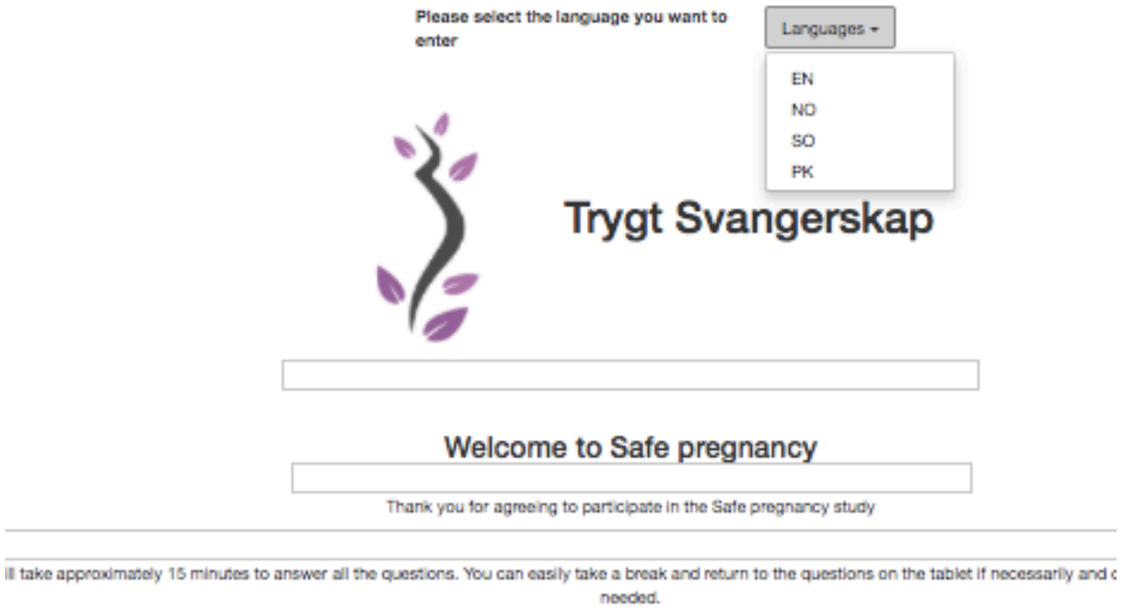
- “nobody pays for a health video”
  - ➡ 10 min of video or 10 months of information?
  - ➡ need for 2-2,5% of bandwidth for free information
- Health as basis for further development
- Education
- Participation in the Digital Society

3. Health and education.

Norway has long had a heavy international involvement. Education and health are associated with economic growth.



[adopted from: https://shift-magazine.net/2015/11/17/the-economics-of-human-need/]

Conclusions

- Online presence
  - ➡ Questionnaire: q.trygtsvangerskap.no
  - ➡ Translation tool: translate.trygtsvangerskap.no
  - ➡ Web access: Basic Internet infrastructure
  - ➡ Open Issues: Health Centre access
- Agenda 2030 and the Sustainable Development Goals
  - Health as basis for further development
  - “nobody pays for a health video”
  - ➡ 10 min of video or 10 months of information?
  - ➡ From TrygtSvangerskap.no to Digital Global Health
- ➡ Digital Global Health
  - Digital Information
  - Interactivity