Compiling Codebook

August 2024

Standarized variable names are used when scraping each provider's feetables. However, not all variables are present for each providers. i.e. variable related to government tax charge is not present for providers that do not disaggregate fees. This R markdown file merges the codebooks created from the first couple of feetables scrapped to create one codebook that covers all variables for the listed prices dataset.

1. Install the libraries and run. Delete # to run the installation.

```
#install.packages("openxlsx")
#install.packages("tidyverse")
#install.packages("knitr")
#install.packages(readxl)
#install.packages("writexl")

library(tidyverse)
library(openxlsx)
library(knitr)
library(readxl)
library(writexl)
```

2. Read in individual dataset codebooks:

```
Tanzania_M_Pesa_Codebook <- read_excel("Tanzania_M-Pesa_Codebook.xlsx")
#Providers in Tanzania provides tariff information disaggregated from provider fees. Load in a codebook

Ghana_Vodafone_Codebook <- read_excel("Ghana_Vodafone_Codebook.xlsx")
#merge in variable "fee_pct" and "tax_pct"
```

3. Merge codebooks.

```
merge(Tanzania_M_Pesa_Codebook, Ghana_Vodafone_Codebook, all.x = TRUE, all.y = TRUE) %>% view() -> var_

#NOTE: The merge automatically recorders the variables by alphabetical order. Can rearrange according t
```

4. Create sheet of explanation for transaction type.

```
dataset <- read_xlsx("Listed Prices Year 1 Dataset.xlsx")
dataset %>% select(transaction_type) %>%distinct() -> type_list

type_list <- type_list %>%
  mutate(definition = case_when(
    transaction_type == 'on-network p2p transfer' ~ "person to person transfer of funds between accounts
```

```r
    transaction_type == 'off-network p2p transfer'~ "person to person transfer of funds between accounts
    transaction_type == 'cash-in' ~ "cash deposit to mobile money account",
    transaction_type == 'cash-out' ~ "cash withdrawal from mobile money account",
    transaction_type == 'wallet-to-bank transfer' ~ "transfer of funds from mobile money account to bank
    transaction_type == 'bank-to-wallet transfer' ~ "transfer of funds from bank account to mobile money
    transaction_type == 'international remittance' ~ "transfer of funds to mobile money accounts outside
    transaction_type == 'account-to-cash otc transfer' ~ "over the counter transfer of funds where the s
    transaction_type == 'cash-to-account otc transfer' ~ "over the counter transfer of funds where the s
    transaction_type == 'cash-to-cash otc transfer' ~ "over the counter transfer of funds where the send
    transaction_type == 'cash-out (from off-network transfers)' ~ "cash withdrawal of funds received fro
    transaction_type == 'cash-out (by transaction recipient)' ~ "cash withdrawal by the receiver of the
    ))

type_list %>% arrange(transaction_type) -> type_list
```

5. Save output.

```r
codebook <- list('Codebook' = var_definition, 'Definition' = type_list)
write_xlsx(codebook, "Listed Prices Year 1 Dataset_Codebook.xlsx")
```