



# FRUGAL INNOVATION WITH SOFTWARE

Betty Enyonam Kumahor (@enyok)  
GOTOber 2018

cobalt



ACCRA



KETA



ACCRA



HATORGODO





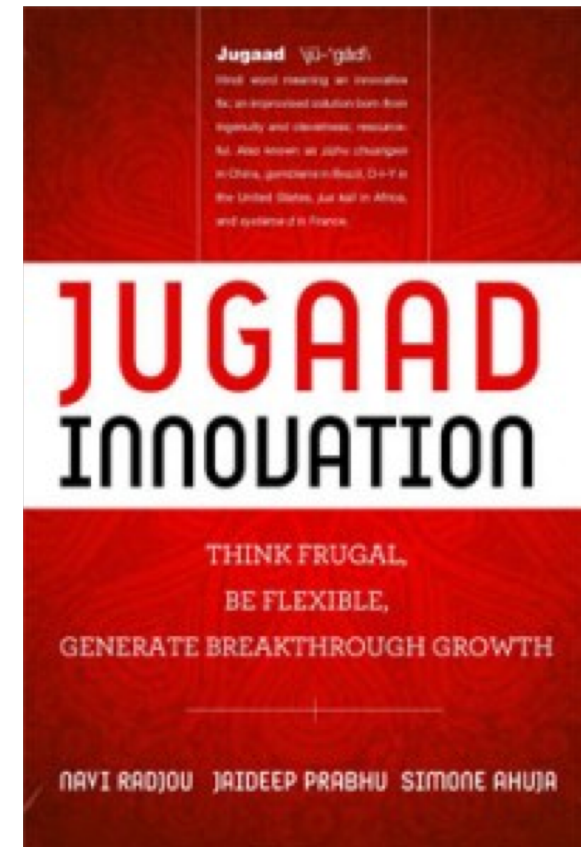
# Constraint Driven Development

Successful technology solutions on the continent require constraint-driven development.

# “CDD” leads to frugal innovation

## TYPICAL CONSTRAINTS

Power / Electricity  
Connectivity  
Literacy  
Address System  
Peripheral devices  
Cash





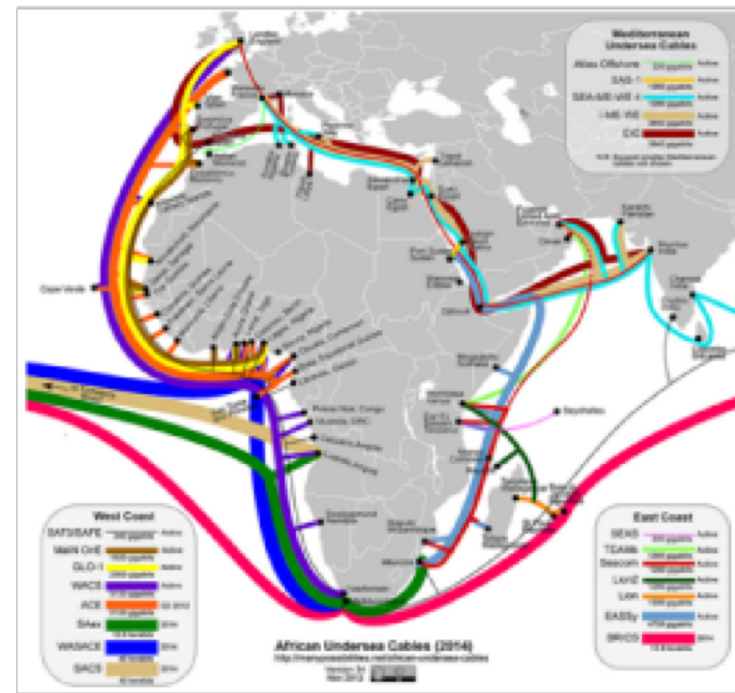
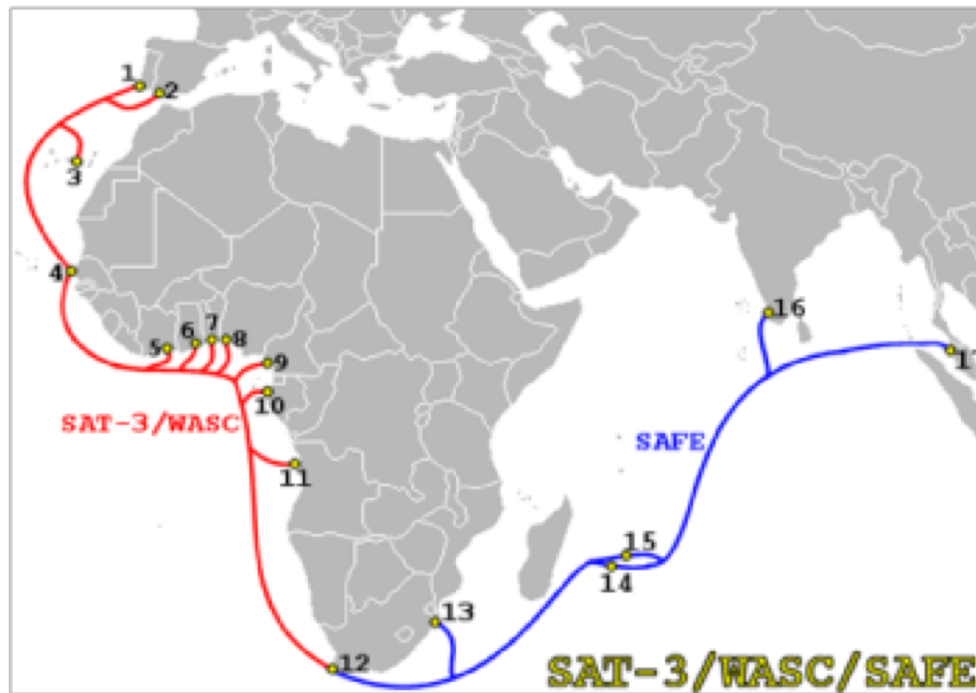


# Context... makes ALL the difference

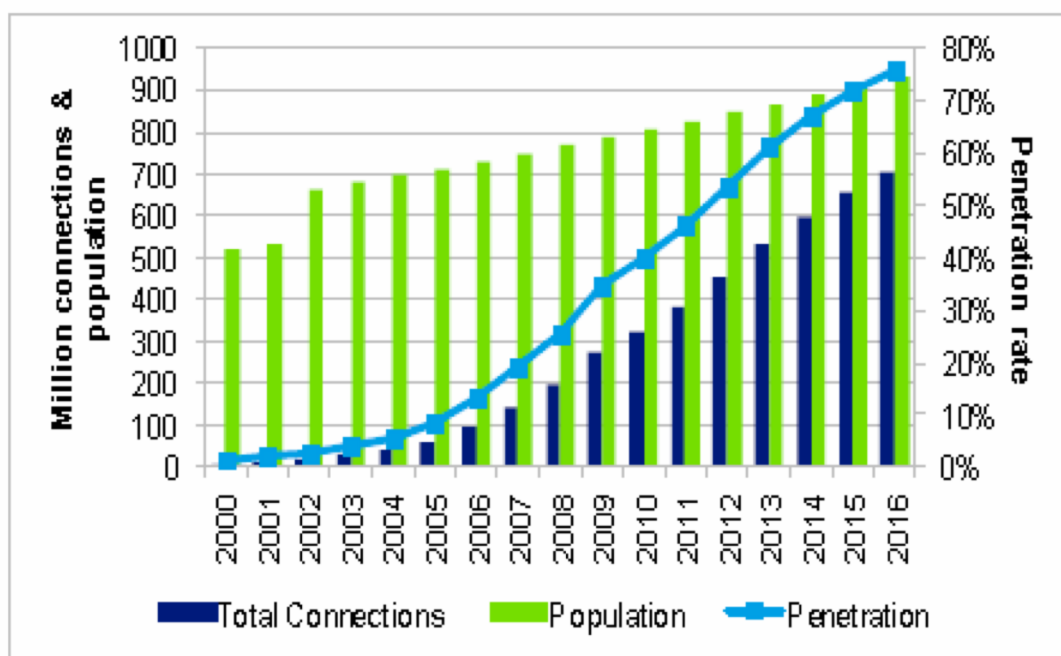




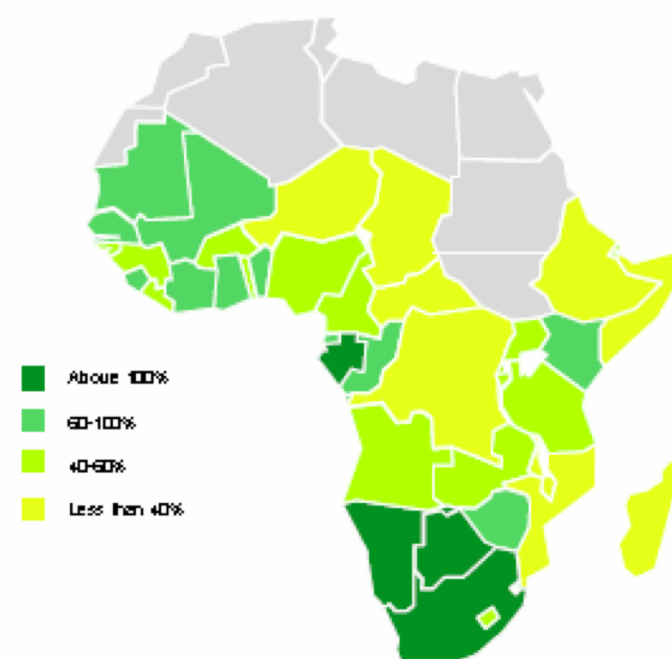
# Africa is NOT mobile first ...



# ... it is mobile only.



Source: Wireless Intelligence





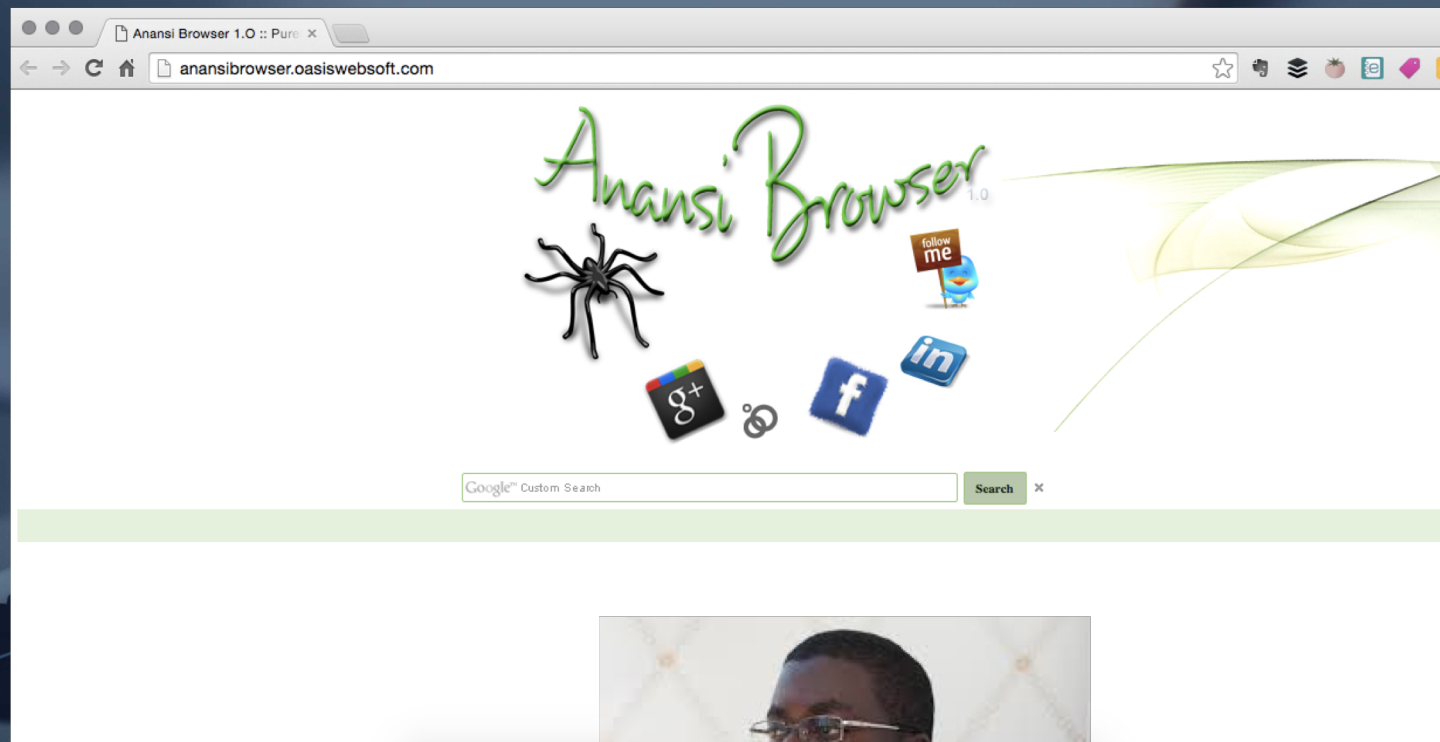
# Story 1 : Browsing on a budget ...



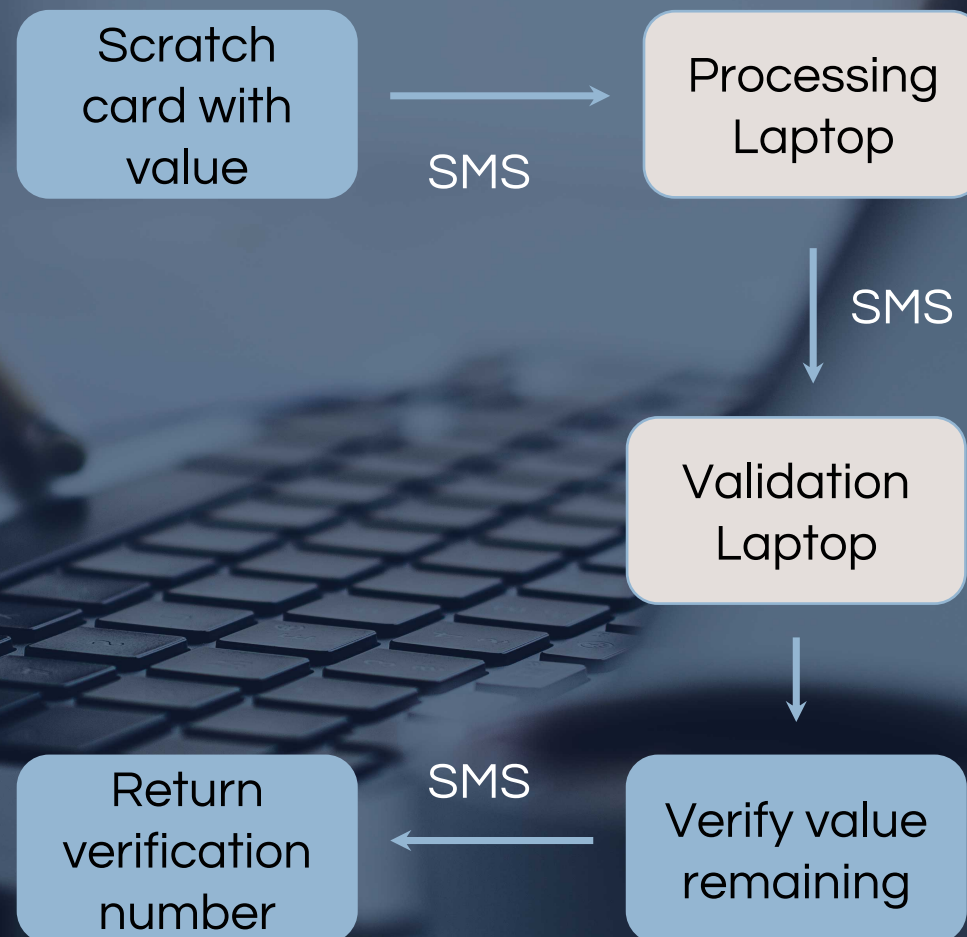
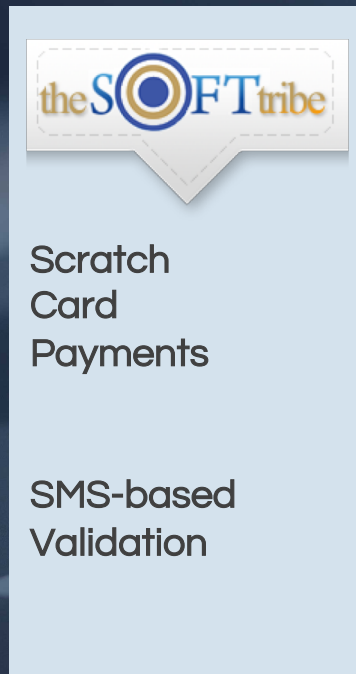
Poor connectivity

Expensive  
data plans

Poor  
download  
speeds



# Story 2 : Who needs credit cards?





# Story 3 : Its about the context ...



How to  
provide  
security  
services?



**HEI-JULOR!!!**  
EMERGENCY ALERT SYSTEM



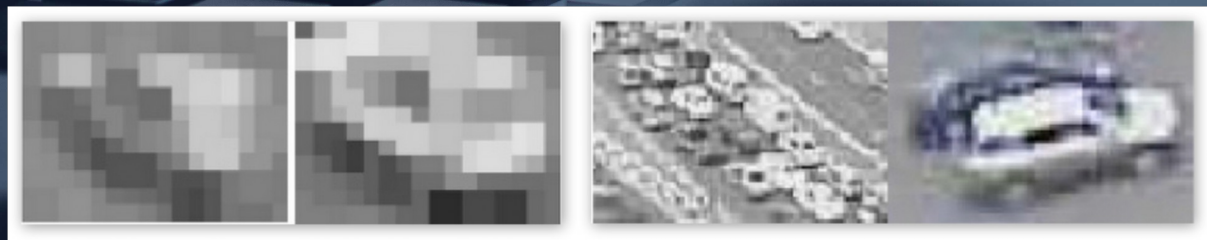
# Story 4 : Spatial analytics on a budget

TWENDE

IBM Research

Utilising low  
fidelity cameras

Directions by  
SMS





# Story 5 : Enabling micro manufacturing

**cobalt**

Facilitate  
micro-  
manufacturing

Access to  
markets





# Story 5 : Social engineering ...

**cobalt**

Technology  
manages  
paper

Many frugal  
innovations  
= one big  
innovation





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# Story 6 : Beyond borders

RAPIDFTR

Lack of an  
address  
system

How to  
enable  
package  
routing?



# Story 7 : Understanding context

**cobalt**

Design  
thinking

Many frugal  
innovations  
= one big  
innovation



ExperiencePoint®



4 Ways Design Thinking Can Be a  
Powerful Tool for Change





## BETTY ENYONAM KUMAHOR

Managing Partner

+233 24 30 30 309

[enyo.kumahor@thecobaltpartners.com](mailto:enyo.kumahor@thecobaltpartners.com)

The Cobalt Partners

F 393/4 Otswe Street , Osu Ako-Adjei, Accra, Ghana.

[info@thecobaltpartners.com](mailto:info@thecobaltpartners.com)

+233 (0)30 291 8772 / +233 (0)55 811 4526

[www.thecobaltpartners.com](http://www.thecobaltpartners.com)

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