

OPPORTUNITIES OF NEAR FIELD COMMUNICATION (NFC) TECHNOLOGY IN RESEARCH

BY | ROBERT AMU
| JANET RAGUI
| DANIEL OGECHI





Introduction

- **NFC**

NFC (Near Field Communication) is a secure and frictionless technology that allows two-way communication between a device with NFC and an object that has been embedded with NFC.

- **Market Research**

Systematic gathering and analysis of marketing-related data to produce information that can be used in decision making using the four functions namely :-Diagnostic , Predictive , Descriptive and Exploratory .

- **Consumer Research**

Part of market research in which the preferences, motivations, and buying behavior of the targeted customer are identified through various means.

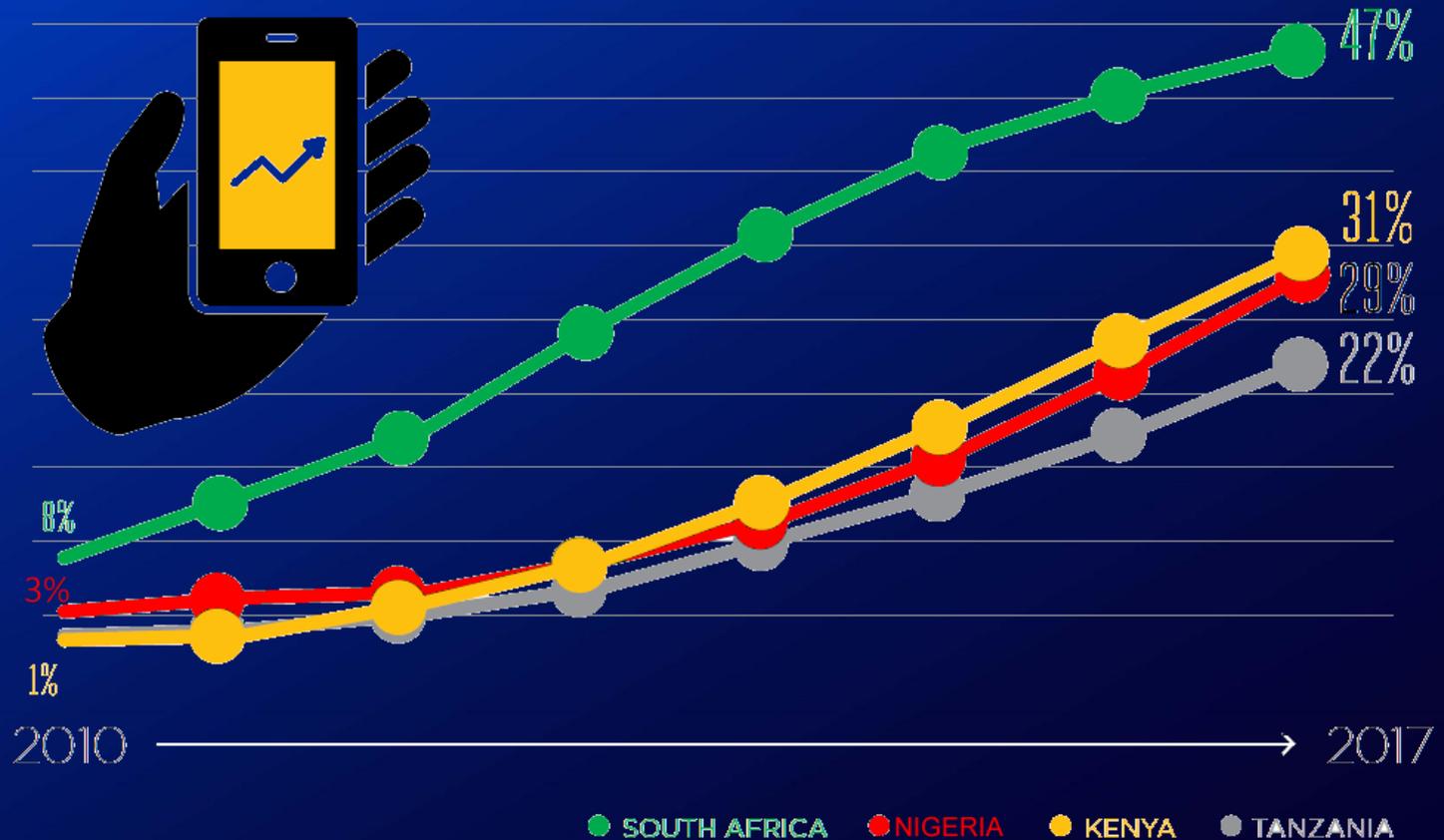


Objectives

To show opportunities of Near Field Communication (NFC) in Research

Statistical analysis of mobile penetration

SMARTPHONE PENETRATION
SELECTED COUNTRIES SSA





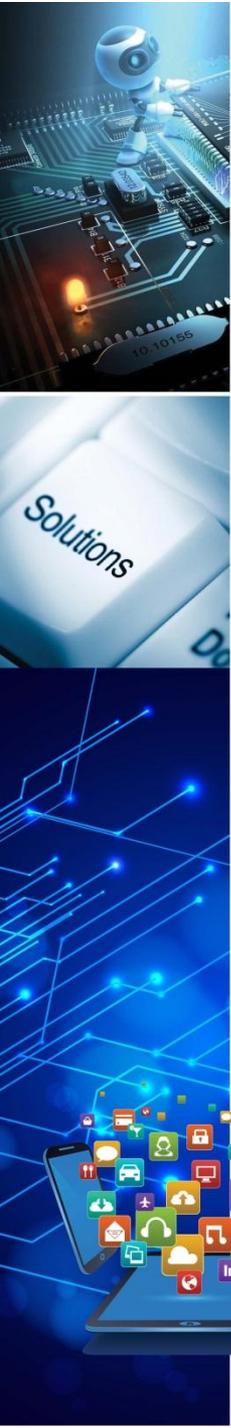
MODELS



Healthcare System

- For most people, visiting the hospital is like visiting a foreign country without a guide book and we usually seek help from strangers for the basic information before you get where you want to go.
- Generally many hospitals across the world use the paper based flow chart to capture patient information which is later passed to many other people/doctors over different shifts of time.





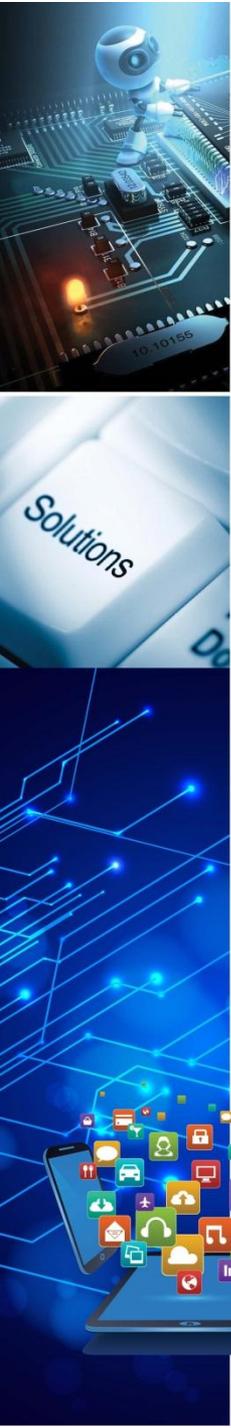
NFC Healthcare System; how it works

1. When a person gets admitted or visits the hospital, the health information about the person is accessed through this NFC tags which are then synchronized and stored temporarily on a particular hospital Electronic Medical Record (EMR) Database
2. If the patient is been asked to take any tests then those test reports will also be updated in that EMR.
3. Based on the test the updates which the doctor prescribed will be updated too in their EMR.
4. Finally while the patient Leave/Discharge all those information which have been updated in his EMR will be synchronized and transferred back to his NFC tag which will hold the complete medical report about what happened that particular day.

Model of NFC Healthcare System

- NFC is one of the most important emerging technologies that provide a better solution to Healthcare as it can facilitate automation and also provide an accurate tracking of patient identification.





Benefits NFC Healthcare System

- There are many benefits of using NFC in healthcare, this will help researchers to investigate and understand the behavioral pattern of various diseases and be able to get the right medicine to prevent these diseases.
- Track patients in low resource areas by providing an RFID or NFC bracelet that the patient is given when he or she visit the hospital.
- Help in tracking the number of individuals who use their insurance card to pay for their hospital bills. This information will be used to also inform insurance companies on how many people have paid for insurance and are using it to cater for their bills.
- Help know the demographics using the data that they collect when the patient first visits the hospital.
- Store up to date medical record of the patient such as allergies health histories and other infectious diseases.
- Other information such as insurance current medication procedures indicate the patients photo full name, age, gender ,where he leaves any additional caution when treating a patient , prescription can gotten from it .

STORE 3.0



Clip on model; store 3.0



Connecting the dots; Research and NFC

As aforementioned, this technology avails a lot of opportunities in research, But how will we put this newest technology into good use as researchers?

- Model Store 3.0, researchers can act as the middle person that is when the data is collected in the back office, the same data when relayed to the researcher through partnership with different supermarkets they can thereby analyze this data and inform manufacturers of the position of their products in the market.
- Healthcare system- In this case researchers when relayed with this data through partnership with the different hospitals, they will be able to investigate for example the likelihood of the spread of a certain virus, the number of people who visit the hospital per week, month or even annually.
- With this data also, researchers will also be able to shed light to insurance firms on the number of people who use insurance to pay for their medical bill.
- NFC being the newest technology will not only help in the field of technology, hardware, security but we believe in the years to come this technology will play a key role in every aspect of research from data collection to analysis of data and give real-time data on what is happening in the market.





Near Field Communication

Straight Ahead 