**Identity theft- the investigation, implication and alleviation on the Jamaican society.**

**Group Members:**

Ronique Dixon-0603936

Ruth Meredith-0904441

Shauntae Mitchell-0903758

Kareem Scott-0900067

The University of Technology, Jamaica.

School of Computing and Information Technology.

**Research Design**

The main aim of this research is to identify the main issues with identify theft and what system can be developed and implemented in combating this problem.

The research method that will be used to carry out this research is qualitative research; qualitative research is all about exploring issues, understanding phenomena, and answering questions. The instrument we will use to carry out this will be a questionnaire which would be used to capture information such as preferences and views from the public to decide what kind of system can be best implemented. The questionnaire will be done online in the form of a simple application, using both open and closed ended questions, to get a wide cross section of information from persons all around the island and to gather information faster. The tool used in creating the questionnaire also will aid in analyzing the information carefully and effectively. The research team also decided to do an interview, with personnel from the Jamaica Constabulary Force Fraud Squad.

The direction taken to carry out this research was to create an online questionnaire using Google Drive, this allowed us create the questionnaire, publish it online, get the sample’s feedback, collect & store the information where it is then presented in a spreadsheet and graph for easy and effective analysis. The avenue was chosen because it was it was much faster to create and distribute, quite cost effective and we could capture the responses quicker. The data will be collected and presented with the use of descriptive and inferential statistics. Descriptive statistics involves the graphical presentation of the data and the generation of summary statistics. Inferential statistics involves making predictions or estimations based on statistical evidence available. Using graphs and summary statistics will be effective in providing numerical facts. Conducting an interview will aid us in getting higher level information that cannot be answered by the general public. Seeking the assistance from these professionals from the fraud squad will provide insights on how best we can tackle the issue at hand and implement an outcome that is quite beneficial.

**Population Sample**

The parish of St Andrew and Kingston was chosen for the selected sample area because they were more reports in those areas on identity theft. The parishes of St Andrew and Kingston were administratively merged to form the Kingston and St Andrew Corporation (KSAC), with a single elected council and a mayor.

St Andrew is a residential populated area and the total inhabitants of the parish is an estimated 540, 715 and the populace of Kingston is 937,700 according to GeoNames geographical database. A random sample technique will be deployed and a sample size of Five hundred (500) individuals will be used for the study. The sample size will be broken down in two groups, two hundred and fifty (250) from St Andrew and two hundred and fifty (250) from Kingston, to get a balance within the sample size between the two parishes. The sample sized will consist of equal numbers of female and male with the age group ranging from nineteen to sixty five (19 – 65) .

The stratified sampling method was used for the purpose of selecting the sample for the study. The sample size was divided into different subgroups or strata base on income, geographical location and education.

**Instrument Design**

In order to measure the variables in our study, questionnaires and interviews will be used to collect the data required.

*Questionnaire*

The researchers will develop the questionnaire using the problem at hand along with the research questions. In order to gather quantitative and qualitative information, both open ended and close ended questions will be used. The questionnaire will be developed based on the following considerations:

* The information that is needed
* How questions should be framed
* The willingness of respondents to answer the questions
* The wording and order of questions

Questionnaire validity refers to whether or not a questionnaire measures what it intends to measure. Questionnaire reliability refers to the extent to which a questionnaire is repeatable and yields consistent scores. Questionnaires can be seen as reliable once it can reproduce similar results when administered to the same set of people on separate occasions.

A questionnaire is an appropriate instrument for collecting information for a number of reasons:

* They are relatively easy to create and interpret.
* Since the questionnaire will be administered online, the researchers will be able to contact large numbers of people quickly and efficiently.
* They are an effective means of collecting quantitative data.

*Interviews*

Interviews will be conducted face – to – face and the questions asked will be semi – structured, which will involve the researcher asking a series of open ended questions. The questions will be set beforehand so that the researcher will be able to have an idea of the type of information that will be provided. Issues such as confidentiality, setting of interviews, the length of interviews and methods of recording data will be taken into consideration.

An interview is a subjective instrument. The reliability and validity of an interview will depend on the skill of the interviewer. Validity will also decrease if different persons interview different candidates. Only one researcher will therefore be responsible for interviewing respondents in order to increase validity.

It was decided that interviews should also be used as an instrument because they would be able to provide the researchers with qualitative information that would be useful to the research. Interviews are an appropriate instrument because:

* They allow the researchers to investigate issues in an in – depth way.
* Clarification can be made for ambiguities and the researcher will be able to follow up on incomplete answers.
* They allow for more detailed questions to be asked.

**Data Collection Procedure**

The questionnaire will be designed in a way that will gain the general public’s perception on identity theft and also ways in which they think identity theft can be solved or minimized. The questionnaires will be issued to a total of \_\_ civilian online using Google drive. Using this tool will allow the researchers to easily get the sample’s feedback, collect and store the information where it will then be presented in a spreadsheet and graph for easy and effective analysis. The avenue was chosen because it will be much faster to create and distribute and we could capture the responses quicker.

The researchers will interview personnel from the JCF Fraud Squad at one of their headquarters. The questions that will be presented to the Fraud Squad is focused on giving the researchers a better understanding and new information regarding what methods were successful/unsuccessful in catching perpetrators in the past. The personnel will be briefed about the research and the proposed system for this research. This will then be followed by the question and answer session.

The questions that will be presented to the Fraud Squad personnel are as follows:

* How long has the JCF Fraud Squad been functional?
* What are the dominant ways in which criminals gain an individual’s identity?
* What methods do you use in combating identity theft?
* How effective are these methods?
* What regions in Jamaica are most affected by identity theft?
* What are the most popular form of identification
* On an average, how many cases of identity theft have been reported within the last two years?
* On an average, how many of these reported cases have been solved or the perpetrator has been captured?
* What kind of system would you recommend to best combat identity theft in Jamaica.

**Data Analysis**

The direction taken to carry out this research was to create an online questionnaire using Google Drive. This allowed us create the questionnaire, publish it online, get the sample’s feedback, collect & store the information where it is then presented in a spread sheet and graph for easy and effective analysis. The avenue was chosen because it was it was much faster to create and distribute and we could capture the responses quicker.

The data will be collected and presented with the use of descriptive and inferential statistics. Descriptive statistics involves the graphical presentation of the data and the generation of summary statistics. Inferential statistics involves making predictions or estimations based on statistical evidence available. Using graphs and summary statistics will be effective in providing numerical facts.

**Questionnaire**

**Background**

We are conducting research into identity theft in Jamaica and the measures that can be put in place to alleviate this problem. Your participation in this questionnaire will be greatly appreciated and all information provided will remain anonymous and treated as confidential.

1. Gender

Male Female

1. Age Group:

19 – 30 31 – 45 46 – 55 56 – 65

1. Occupation:  
   Student

Lecturer/Educator

Police Officer

Other

1. What parish are you from?

Kingston & St. Andrew

St. Catherine

1. Do you understand the term identity theft?

Yes No

b. If yes, in your own words state what you think it is.

1. Do you think identity theft is an issue in Jamaica?

Yes No

1. Have you or someone you know in Jamaica been a victim of identity theft?
2. In what way were you/they affected?

Impersonation

Money/cheque fraud

Plastic card fraud ( credit card, debit cards etc)

Stolen identification card/document

TRN misuse

Forgery

Postal fraud

Theft of various kinds (pick pocketing, robbery, burglary, or mugging to obtain the victim's personal information).

1. How secure do you think pins are in protecting your credit/debit cards?

Very Secure

Fairly Secure

Not very Secure

Not Secure

1. Are you familiar with the term biometrics?

Yes No

1. Would you be comfortable with a system that uses your biometric data (fingerprints, iris/retina sample etc.) in order to protect your identity?

Yes No

Give reasons for your answer

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. If your answer to question 8 was yes, what biometric option would you prefer to be used in protecting your identity?

Fingerprint

Iris/Retina Sample

Digital Photography (Live Facial Recognition)

1. If your answer to question 8 was no, how would you propose to protect your identity without the use of biometric data?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_