Configuration Manual

MSc Research Project

MSC Fintech

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MSc Project Submission Sheet

School of Computing

Student Name:	Oladotun Oladipo	
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Program:	MSC FINTECH	**Year:2022**
Module:	Research Project	
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Word Count:		**Page Count:**

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Configuration Manual

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1. Introduction

The best way to describe information gathered for this study report is through a configuration manual. The goal of this manual is to detail the steps that were required to evaluate the data. It is thought to be a useful tool for other researchers to easily follow the steps required to evaluate data.

2. Specification of the System

The design of the computer system is categorised on the basis of
Processor : Intel(R) Core(TM)
System type: 64-bit operating system
Installed RAM : 8.00GB
Storage: 256gb

3. Software Program

Google form: A Google form was used to generate easily interpreted questions from respondents. It was additionally distributed via a link shared social media platforms.

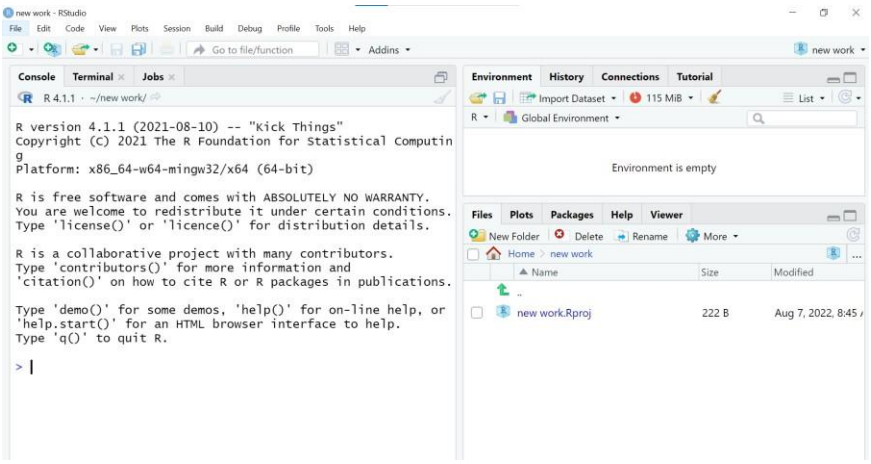
Excel: This sheet was used to extract data from a Google form and renamed variables for easy analysis using R-studio. An encrypted password was used to protect the data that was collected and stored.

R-studio: Chi-square, Kruskal Wallis, Factor analysis, and Cronbach alpha were the statistical models used in this study, and they were all run through R-studio. The r-studio version is 2021.09.0 Build 351.

4. Installation

The purpose of installing R-Studio was to perform various statistical models that made it simple to analyze data with varying results.

Following installation, it was necessary to ensure that all of the packages that came with the application functioned properly.



5. Packages installed

Dplyr: This package's function is to manipulate data and help to process codes faster; it is a valuable tool that can be used for backends and helps to reduce time wasting for the computer system. It has functions that allow data to be grouped.

LessR: This package is used to provide data visualization in the form of histograms, bar charts, and other types. This package can also be used to perform functions such as read data and summarise dataset.

Skimr: Its purpose is to provide a summary for a data frame while also providing other types of options other than the default option in r-studio.

Psych: This tool is primarily used for multivariate analysis, but it can also be used for scale construction using factor analysis and principal component analysis.

Readxl: Using this function, files can be imported from an excel file into r-studio.

Lavaan: It is used to fit various latent variable models, such as confirmatory factor analysis, structural equation modeling, and latent growth curve models.

6. Procedures for analyzing data

- **Extraction of data**: The data was extracted from a Google Sheet and converted to Excel format for easy processing in R-studio. To ensure that the data was not tampered with, it was stored in a secure location.

- **Importing data into R-studio**: The data was imported into R-studio in Excel format and given a distinct name "feedback" so that it could be thoroughly be analyzed.

- **Cleaning of data and removing outliers**: To ensure that the data was ready for analysis, missing values and outliers were removed.

- **Frequency analysis**: The use of frequency analysis was performed on demographic information from respondents as well as all possible factors that may influence a person's decision to use cryptocurrency as a means of payment. A bar chart was used to generate the frequency.

- **Mean and Standard deviation:** The use of mean values and standard deviation values was obtained on possible factors that are likely to influence a user's decision to adopt cryptocurrency.

- **Demonstrating a relationship**: The chi-square rule was used to show how demographic data influences user preference for cryptocurrency as a payment method. Assumptions were met, ensuring that two categorical variables were required to demonstrate a relationship.

- **Demonstrating a relationship**: The Kruskal-Wallis test was used to determine whether there are any significant differences between respondents' demographic information and their preference for using cryptocurrency as a payment method.

- **Measuring internal reliability** : Using the psych package, the data was divided into groups and a Cronbach alpha was calculated to identify internal reliability among variables.

- **Exploratory and confirmatory analysis**: To determine whether the variables can be used for confirmatory factor analysis, the Kaiser-Meyer-Olkin and Bartletts tests were used. A KMO value greater than 0.5 and a significance level for Barlett's test less than 0.05 indicate that there is a significant correlation in the data. The psyche package was used to carry out this test.

7. Data source

A frequency analysis was performed on the factors that could influence a person's decision to potentially use cryptocurrency as a payment method. The frequency is calculated using Likert scale responses.

Table 8 : Questions asked in relation to factors that could influence a person's decision to use cryptocurrency

Questions	Very important	Important	Neither important nor unimportant	Unimportant	Very unimportant
What extent is speed of a transaction important using cryptocurrency as a means of payment ?	**36**	**17**	**13**	**6**	**9**
What extent is trustworthiness important in the usage of cryptocurrency as a means of payment?	**27**	**22**	**16**	**3**	**13**
What extent is anonymity important in the usage of cryptocurrency as a means of payment?	**23**	**24**	**16**	**9**	**9**

Table 8 : Questions asked in relation to factors that could influence a person's decision to use cryptocurrency

Questions	Strongly agree	Agree	Fairly agree	Disagree	Strongly disagree
The degree of privacy using cryptocurrency for payment transactions	**27**	**21**	**16**	**9**	**8**
The ease of use of cryptocurrency in comparison to conventional currency ?	**23**	**12**	**24**	**13**	**9**
The degree of risk in making payment using cryptocurrency?	**18**	**23**	**25**	**6**	**9**
How likely you will make use of cryptocurrency to make payment if suggested by a family member or close friend?	**19**	**17**	**21**	**12**	**12**
The degree of public demand for cryptocurrency?	**19**	**21**	**21**	**13**	**7**

8. Assigned names

For ease of evaluation, each of the variables that could influence a user's decision to adopt cryptocurrency was given a unique name.

Table 23: Assigned names attached to individual questions

Questions	Assign names
What extent is speed of a transaction important using cryptocurrency as a means of payment ?	Speed
What extent is trustworthiness important in the usage of cryptocurrency as a means of payment?	Trust
What extent is anonymity important in the usage of cryptocurrency as a means of payment?	Anonymity
The degree of privacy using cryptocurrency for payment transactions ?	Privacy
The ease of use of cryptocurrency in comparison to conventional currency ?	Ease of Use
The degree of risk in making payment using cryptocurrency?	Privacy risk
How likely you will make use of cryptocurrency to make payment if suggested by a family member or close friend?	Influence
The degree of public demand for cryptocurrency?	Public demand

9. Conclusion.

The main goal of the manual is to provide the necessary steps that were taken to analyze the data collected from respondents, which was then used to provide useful findings. The data for this evaluation came from an online survey distributed to respondents via social media platforms.