**A Mobile Application for Determining Repair Services within a Locality:**

**A Case of Locating Mechanic Services.**

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**Chapter 1: Introduction**

**1.1 Background of the Study**

In Kenya, repair services are categorized under the informal sector. The United Nations Economic Commission for Africa report (2015) shows that Kenya is among the countries with highest informal sector employment. According to (Amenya, 2007; Irungu, 2015), the high level of the informal sector is due to increased rural urban Migration and the inability of the formal sector to be able to absorb the huge numbers of job seekers leading to creation of new job opportunities in the informal sector such as repair services.

The demand for repair services in Kenya and the rest of the world can be attributed to several influencing factors. According to the Startups Team (2015), demand for repair service jobs is due to the increasing busy and hectic lives that people lead. Finding time to juggle between family and other commitments can be troublesome and consequently an increasing number of number of odd job seekers is emerging within their places of residence.

Studies (Balasundar, 2013; Goldberg, 2015; Kenya Business Ideas, 2015) have put across that several factors such as relocation have increased the need for repair services. Additionally, Kenya among other African countries have been experiencing a decline in cost and increase of new phone models which has seen rise in use of technology to solve local problems.

Repair services are common daily services that people cannot do without and find it difficult to locate this services when they relocate or travel to new areas since these service providers are located across different regions and vary in cost, quality and type of service offered. In cases of emergency such as car breakdown, it becomes difficult for one to access these services immediately.

Another great Challenge faced by the clients is determination of quality of services to be provided by the repair person- A case in point; the mechanic. According to Soft Kenya (2015), potential clients perceive small businesses as lacking the ability to be able to provide quality service. The existing solutions are defragmented offering just contacts scattered in the web which makes it difficult to locate the repair services.

From the case study the research conducted, there are instances where a car breaks down while on transit. On normal occasions, the driver calls his mechanic who diagnoses and repairs the car. However, there are circumstances under which it becomes very uneconomical and inconvenient to bring a personal mechanic to the point of predicament. The probable solution is to identify a mechanic within the locality where the car breaks down. The research aims to develop a platform in form of a mobile application that will facilitate acquisition of repair services within a specific location by hastening the process, with ease and assured quality delivery of services by the repair persons.

**1.2 Problem Statement**

There is growing need for repair services in Kenya and other regions as well which is attributed to several factors such as local demand, market influence, having second homes, consistent travelling and individual lives becoming busier and more hectic every day. Locating service providers is a challenging task especially when one travels and moves to a new location. This is so because service providers’ i.e. Mechanics are situated across different areas and differ in cost, type of service offered and quality of the service. The existing solutions striving to solve these problems are defragmented offering just contacts Scattered on the web.

In cases of emergencies such as car breakdown in areas where it would be inconvenient to contact one’s personal mechanic, it becomes very difficult to identify a compete mechanic let alone finding one. It is also difficult to find a mechanic who has specialized in non-common car models such as Volkswagen. This creates a problem of convenience and a risk of theft in cases where one parks their car to physically look for a mechanic in an unfamiliar area. Another challenge is determining the quality of service offered by these mechanics. Potential customers are very sceptical about engaging new mechanics especially is not referred to them by their acquaintances. These makes this services to be more expensive and risky in cases where poor services are provided and one has to seek for another person to redo the job (Soft Kenya, 2015; Goldberg, 2015; Kenya Business Idea, 2015; Balasundar, 2013).

**1.3 Research Objectives**

i. To investigate factors affecting acquisition of car breakdown repair services.

ii. To analyse the deficiencies in technology currently used to locate repair services.

iii. To design and develop a system that determines availability of vehicle repair services and facilitates acquisition of the service within the locality.

iv. To test the functionalities of the system for determining available vehicle repair services within the locality.

**1.4 Research Questions**

i. What factors affect the acquisition of vehicle repair services?

ii. What are the deficiencies in technologies currently used to locate repair services?

iii. How can a system that determines availability of vehicle repair services and facilitates the acquisition of the services within a locality be developed?

iv. How can the functionalities of the system that determines availability of vehicle repair services be tested?

**1.5 Justification of the Research**

With the rise of repair person service provider i.e. mechanics as a result of the inability of the formal sector to be able to absorb the huge numbers of job seekers mainly from the informal sector in the country, this study is very relevant as it seeks to streamline the process of acquiring these repair persons. It serves to build the public trust in repair persons’ quality of service by providing them with a feature to determine the quality of service. It also serves to meet the growing need for on demand repair services by easing and fastening the process of acquiring the repair persons (Mechanic).

**1.6 Scope and Limitation of the Research**

This study will be conducted within Nairobi county and its environs. Being an urban area with a lot of people driving to their work places as well as touring different areas in Nairobi forms a good basis for the research. Vehicle repair services within different locations will be targeted. These services will be incorporated in the system and the entire process of searching and being able to access these services will be tested. The system will be in form a mobile application running on an IOS platform. Markers on maps will be used to provide information regarding one’s locality.

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