

**CONTRIBUTION OF MOTORCYCLE TRANSPORT SERVICES
UTILIZATION ON URBAN TOURISM PRODUCT PERFORMANCE IN
BUSIA COUNTY, WESTERN KENYA TOURISM CIRCUIT**

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**A Thesis Submitted to the Graduate School in Partial Fulfillment of the
Requirements for the Award of Degree of Masters in Tourism Management of
Chuka University**

CHUKA UNIVERSITY

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DECLARATION AND RECOMMENDATION


Declaration


This Thesis is my own work and has not been submitted for an award of a degree or conferment of a diploma in any other University.


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DEDICATION

I dedicate this thesis to my beloved family specifically parent, wife and kids for their staunch support and reassurance throughout this academic journey. The love and believe you showed, pushed me towards this achievement. Moreso, I appreciate the communal research efforts of various scholars who guided and motivated my research and therefore I offer this report for those who aspire to explore further into travel forces affecting product consumption in tourism. May this research form the foundation for indulging deep into the dynamic elements of tourism and their contribution in promote tourism consumption both nationally and internationally. May the findings also fast track development and formulation of policies that may assist in enhancing, improving and advancing both tourism and public transport system.

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ABSTRACT

Motorcycle transport services provide affordable and convenient means of public transport within the urban environments. Alongside public transportation motorcycle was used in tourism transport for short day trips or to nearby tourist attractions. However, the roles of motorcycles transport service utilization in enhancing urban tourism products had not been done in exhaustion by previous studies. Therefore, the study focused on determining the contribution of motorcycle transport service utilization on urban tourism's destination access, product innovativeness and urban product consumption within the two Busia County's urban centers that is Malaba and Busia towns. Majority of destination sites had record on motor vehicle transport and less or not reports on motorcycle use on leisure activities. Motorcycle transport services have not been realized and accommodated formally within the transport sector and their services are totally not reported within the tourism sector. Therefore, the study sought to examine the outcome of using motorcycle transport services in enhancing urban tourism product performance if substituted or integrated with other conventional tourism means. The study objectives were; to determine the contribution of motorcycle transport service utilization on urban tourism destination accessibility; to investigate the contribution of motorcycle transport service utilization on urban tourism product and to examine the contribution of motorcycle transport service utilization on urban tourism product consumption. The null hypotheses were that these objectives have no significant contribution of motorcycle transport service utilization on urban destination access, product innovation and product consumption. The research focused on the outcome of integrating and legalizing the motorcycle transport use within urban destinations. The study was anchored on graph theory-travelling salesman problem, KANO model and utility theories. The study used retrospective cohort research design adapting embedded research approach which guided data collection from two urban centers at the same time about visitors' motorcycle utilization preferences within Busia County, Western Kenya Tourism Circuit. The population of the study was 20000 tourists, and from which of 392 respondents were sampled. Quota sampling was used to obtain information from different study units. This comprised of tourists visiting the Busia urban center and Malaba urban center area. Data was collected using structured questionnaires between May and August, coded using SPSS-Version 20. Demographic features were analyzed using descriptive statistics, while regression analysis was used to analyze motorcycle transport service utilization, categorical regression used to analyze destination access, product innovation and product consumption. The results indicated that majority of the respondents preferred to use motorcycles transport services ($p \leq 0.001$), promoting destination access was important ($p \leq 0.001$), enhancing product innovativeness was imperative ($p \leq 0.001$) and contribution to product consumption was essential ($p \leq 0.001$). The null hypotheses for these variables were rejected. The findings clearly demonstrated the collective role motorcycle transport services have in promoting urban tourism product destination access, urban product innovation and urban tourism product consumption.

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ACRONYMS

AMA:	American Motorcycle Association
BPS:	<i>Badan Pusat Statistik</i>
CNCC:	Centre National du Cuir et de la Chaussure
DFT:	Department of Transport
DTTAS:	Department of Transport, Tourism and Sport
ed:	Edition
GoK:	Government of Kenya
HDC:	High Developed Countries
IDL:	International Driving license
ITDP:	Institute for Transportation and Development Policy
LDC's:	Least Developed Countries.
MTS:	Motorcycle Transport Services
MTSU:	Motorcycle Transport Service Utilization
NACOSTI:	National Commission for Science, Technology and Innovation
NTA:	National Tour Association
PTS:	Public Transport service
RTO:	Regional Tourism Organization
SPSS:	Statistical Packages for Social Science
UNWTO:	United Nations World Tourism Organization
UTD:	Urban Tourism Destination
WHO:	World Health Organization
WTO:	World Tourism Organization

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Motorcycle transport service utilization entails the use of the informal transport services (motorcycles means) either for public, private and/or tourism transport services (Gutierrez & Mohan, 2020). Publicly, motorcycle transport service utilization has become popular in many urban centers of developing countries due to their affordability and convenience to urban dwellers. Demand forces such as changes in consumer preferences and choices to flexible means of transport has accelerated the use of motorcycle transport services (Berrones-Sanz, 2018). Similarly, in tourism, motorcycles services have provided tourists with alternative transport means towards attractions located within the urban periphery (Transaid, 2015a) while triggering rural tourism destinations access, despite its tourism functions remain to be less reported (Transaid, 2015b).

Motorcycle Transport Services Utilization (MTSU) consumption rate has been observed to be significant globally. Rekhviashvili (2020), states that motorcycle transport services are the highest consumed informal transport means in the global public transport sector as a midway alternative within the public transport industry. High registration of motorcycles for public transportation functions averagely settles at around sixty-one million motorcycles; with an anticipated projection of 6.9% between 2023 and 2027. Increased registration of MTSU has also been associated with intra-mean and intramodal competition, inadequate infrastructure and congestion within the public sector.

Motorcycle transport service utilization contributes to urban socio-economic benefits (Caroll & Benevenuto, 2023), which favors its acceptance amongst the host communities. The benefits are either commercial, non-commercial or both. Socio-economic services have essentially been facilitated by motorcycle public transport services due to reduced travel time, costs management and changing consumer demands (Caroll & Benevenuto, 2021; Sgibnev, 2020); motorcycle use gained competitive advantage over conventional public transport due to challenges such as limited resources, poor infrastructure, long waiting hours, intensive planning among

others. Therefore, MTSU came in handy necessitating the services by bridging the gap created by inadequacy of Public Transport Services, (PTS) (Sgibnev, 2020). Hine and Workman (2019) sum up that motorcycle functions are mainly enslaved in the transportation of goods, and for leisure related activities within developed countries while in the developing countries they are purely for goods and public passenger transportation with informal or no leisure utilization.

Historically, MTSU, promoted industrial and economic development during World War 1 and II. Historic information shows that it supported an approximate of 50% of the general global mobility (Rehman, 2021 & WTO, 2015). Despite motorcycle transport service utilization providing public transportation, in some regions they were perceived as income and employment opportunistic to the owners and operators respectively (Cox, 2018 & Okebiro, 2019); while Kenya there are at least 17% of registered motorcycles used in public transportation (Wanjau, 2023).

Globally, motorcycle transport service utilization is prevalent in middle-level countries such as China, India, Indonesia, Malaysia, Thailand and Vietnam where formal utility value of Motorcycle Transport Service (MTS) are 54.51%, 71.93%, 73%, 47%, 63% and 95%, respectively of all convectional public transport services available (Campisi, 2021 & Younis, 2021). Within these countries, public services have outweighed the private functions of motorcycle transport service utilization (Campisi, 2021). The location of motorcycle stages around major bus terminals and intersections provide a spot check and easier identity for the operator to the customer and vice versa. Motorcycle transport service strategic locations assist in offering feeder connections between the mainline bus routes and the neighboring area at a reasonable fare. MTS widespread within major public transport terminals has enabled distribution of public transport services to other destination wherever public means remain inadequate, exclusively where increased congestion on existing public transport means has lowered revenue obtained (Younis, 2021).

European continent is a leading region with the highest motorcycles registration at 30% for public transport, as well as leisure travel and tourism within France and Spain (Ali, 2021; Neef, 2018 & WHO, 2013). Eventually motorcycle transport

services spread to other countries like Britain, Australia, Cambodia, New Zealand, and Malaysia. Supplementarily extending into developing countries like Nigeria as a solution to commercial transport inadequacy (Shah, 2021). Consequently, motorcycle transport services are viewed as alternatives for balancing social life and local economy by enabling local operations through mobility, where by the local community members have been able to attain direct and indirect jobs thus earning income (Wandera, 2020; Shah 2021). Although motorcycle transport service utilization has been reported to serve general public transport needs, it's utility to serve leisure and tourism functions is less reported (Lorente, 2021 & Page 2014).

Within the African continent commercial operations of motorcycles transport service are more pronounced than leisure and industrial services, this has been linked to her urban centers' dependency on agriculture and trade activities (Diaz, 2015). MTSU was observed to dominate the general public transport by 30% of both urban and rural transport operations in countries such as Nigeria, Niger, Cameroon, Benin and Kenya (Diaz, 2015; Olorunfemi, 2014 & 2020), while in some African countries like Uganda and Togo motorcycle transport services dominates by 80% and 70% of the total urban mobility needs, respectively (Assamoi & Liousse, 2010 & 2018; Berrones-Sanz 2018; Bishop & Porter, 2018; Tusimwesigye, 2018 & Yakubu, 2019).

Along with agriculture, trade and commercial activities in Africa, motorcycles transport services are well-known to provide a hand in transport sector, since it serves as a reliable and convenient mean in linking various enterprises, as well. The high dependency ratio has been due to poor road networks; not favorable for public transport motor vehicle investors, for instance a case of Uganda (Olorunfemi, 2020). Perceptible issues such as poor road network system, inter public transport competition, consumer portfolio, undesignated motorcycle networks and responsibilities, inadequate policies and low traffic demand for public transport services and political challenges have destabilized conventional public transport operations paving way for informal motorcycle transport services (Diaz, 2015). Although public transport vessels offer quality services, motorcycles transport services are perceived to provide and contribute to the overall quality of transport service, justifying the reason as to why the government has liberated its importation for transport use.

In spite of the little legal requirement for motorcycle transport operations, formal functions of motorcycle transport services have not been realized within the African continent, making to operate illegally within the public cycle Rekhviashvili (2020); whereby majority of motorcycle owners and operators do not have the required permits and registration for market entrance and also do not fulfill the commercial standards in terms of safety and capacity for acceptance as formal carrier vehicles. Motorcycles transport service utilization within public transport network as alternative means in transportation spheres, therefore its use could not be accounted due to its unregularized crop-up into the transport sector (Dorocki, 2021; Muir & Howard, 2018).

Similarly, there has been limited information reported on integration and use of motorcycle transport services into public transport system which have ignored motorcycles transport services as public user vessels within the general transport sector, but since tourism transport services do not factor in capacity details, motorcycle transport services can be considered as an opening in tourism industry (Ganzoni, 2022; Diaz, 2012; Bishop & Porter, 2018; Tembe & Tanaka, 2020; Rollason, 2020; Savino & Rizzi, 2020). The feasibility of motorcycle transport services in tourism development has been supported by Wu, Ai and Chang (2021) who suggest that motorcycle transport service utilization promotes regional tourists' mobility thus activating demand towards developing and emerging destinations that are less visited due to weakened motor vehicle transport services.

Initial motorcycle transport service inception was to support interlinkages in commercial services for economic mobilities, the insights views shifted to general transportation functions. Attributes such as frequency of travel, flexibility, daily trips, poor living conditions and high population growth within African continent than the anticipated, which generally accelerated the utility of motorcycle transport services within the continent (Kimengsi & Agyingi, 2022). Kimengsi, (2022), extends that, the above attributes have made motorcycle transport services functions to overlap from commercial to non-commercial services, hence unclear separation. Lastly, the systematic collapse of the public transport in Africa promoted the increase of this para-transit means that are highly operated by the private sector. There is still scant

research reporting the essence in supporting tourism activities; with only scenarios where travelers request for unrestricted and independent travel experiences, they have been considered. Similarly, majority of the leisure activities are not addressed since there are no tour operators committed to these activities (Prideaux & Carson, 2018; Wu, Ai & Chang, 2018).

Motorcycle transport services in Kenya, were traditionally used by the government parastatals for parcel delivery, express services and services delivery purposes (Nyaga, 2017). Liberalization and free importation of the motorcycle made the transport sector to be dominated by the private investors who are taking control over the public sector (Khayesi, 2021). Rivalry and competition amongst the investors have resulted in pursue of alternative means that will be able to reach the entire market at either a national or local level. Competition from taxi operators has lowered the demand for public transport service resulting to business recession or closure and/or shift of businesses. This led to reliance on motorcycle transport service as means of devolving transport services towards the outskirts and small urban centers, reason being, to jointly serve mega urban centers. Similar to other destinations motorcycle transport services have not been clearly distinguished whether commercial or non-commercial thus overlapping its operations (Mafuta, 2015).

Motorcycle transport service utilization functions are dissimilar from developed to developing countries (Hisashi & Shah 2022), this has been difficult for policy makers and transport planners to come up with informed decisions on appropriate implementation of motorcycle transport services. The government of Kenya is currently integrating Motorcycle regulation bill of 2023, which emphasizes formation of motorcycle associations as a regulatory approach and penalty management acts. Motorcycle transport service utilization persist to be an informal transport system without a formalized scheme of operation (Ganzoni, 2022). This has resulted to differed approaches to be ensued within the public transport operation sectors across the globe amongst transport stakeholders. Studies are focusing on eliminating restrictions on utilization of motorcycle transport services into the general transport circles or substituting it to supplement tourism transport system (Motorcycle Regulation Bill, 2023).

Busia County is having both historical and current information on the operation of motorcycles support services in Kenya. Additionally, high daily urban population, high motorcycle figures and traffic congestion makes it suitable for evaluating how motorcycle transport services are likely to ignite the development and consumption of urban tourism products (Broughton & Stradling, 2005; Pfaffenbichler & Circella, 2009). The successive transition of two-wheel transport system from non-mechanized bicycle system to motorized motorcycle activities makes the area reputable for the study. Supporting terrain (Krishnan, 2016); availability of cycle tracks, non-residential destination, urban engagement and proximity to green space makes Busia County a relevant area for this study (Otieno, 2020). The area also has some urban attraction sites that the study notices that they are less visited, which includes Kakapel Museum, Alupe Leprosy Centre, Busia Border, Broderick Falls, Teso gardens, El'Molo Crocodile Park and Mawazo Botanical Gardens. The study seeks to find whether such transformations will guide in evaluating the changes in tourism transport if MTS's are considered and incorporated as among the major means of tourism mobility in Busia County (Mutiso, 2011).

1.2 Statement of the Problem

Motorcycle transport service utilization is an important alternative means of travel that provides cheap and convenient travel services over short distances in most residential areas alongside other formal public transport service providers. Some regions especially rural and sub-urban destinations are purely relying on motorcycle transport service utilization due to inaccessibility and deficiency of transport infrastructure that have rendered public transport means invaluable. Similarly, its wide use within the developing world countries has been linked to youth employment rather than a service provision as to the first world countries. Despite its wide use, motorcycle transport services have not been realized and accommodated formally within the transport sector and their services are totally not reported within the tourism sector. Furthermore, the roles of motorcycles transport service utilization in enhancing urban tourism products had not been done in exhaustion by previous studies. Research shows that motorcycle transport service utilization has increased in majority of the urban areas, there are many urban tourism destinations have not capitalized and approved its tourism use, thus many urban attractions remain unvisited

by tourists, which results to limited urban destination access, urban product innovation and urban product consumption. Majority of public transport service providers have not been able to fully provide interactions within the urban environment, therefore motorcycle transport services have found themselves serving some urban tourism attraction but in an informal state which makes its transport services not to be reported. Although motorcycle transport service utilization has increased in urban and rural destinations it for commercial operations, its leisure services have not been addressed adequately. There are no records of MTSU in tourism and related activities, since they have not been realized as formal means of travel, yet it provides alternative options in tourism transport. Therefore, the study sought to examine the outcome of using motorcycle transport services in enhancing urban tourism product performance if substituted or integrated with other conventional tourism means.

1.3 Purpose of the Study

The purpose of the study was to determine the contribution of motorcycle transport service utilization on urban tourism product performance in Busia County; Western Kenya tourism circuit.

1.4 Research Objectives

- i. To determine the contribution of motorcycle transport service utilization on urban tourism destination accessibility within Busia County; western Kenya tourism circuit.
- ii. To investigate the contribution of motorcycle transport service utilization on urban tourism product innovativeness within Busia County; western Kenya tourism circuit.
- iii. To examine the contribution of motorcycle transport service utilization on urban tourism product consumption within Busia County; western Kenya tourism circuit.

1.5 Hypotheses

H₀₁: There was no significant statistical contribution of transport service utilization on urban tourism destination accessibility.

H₀₂: There was no significant statistical contribution of motorcycle transport service utilization on urban tourism product innovativeness.

H₀₃: There was no significant statistical contribution of motorcycle transport service utilization on urban tourism product consumption.

1.6 Significance of the Study

The research findings provided knowledge to tourists on alternative options of transport to reach various micro circuits. Motorcycle transport providers were able to access the value of MTS utilization in terms of revenue collection, consumer mobility, cost of operation and management, congestion and consumer co-creation. The county government of Busia was able to increase tax base via collecting taxes, road tolls, having a basis for policy formulation and strategic planning. The researcher benefited through acquisition of basic ideas in policy development of transport development, unearthing the contribution of informal transport services on tourism development and also developed the baseline for future studies on how mobility affects tourism.

The county government of Busia was able to have an insight into feasibility studies that are necessary in investigating the local resources available for developing tourism resources. Once the service will be incorporated as a public mean of transport the locals will have an advantage to explore their own attractions as well as marketing their local products. This in extension will diversify the products to a broader scale. Integration of motorcycle transport services into tourism product consumption will assist in amalgamating the contributions of various stakeholders within the transport sector. Policy guidelines will be able to be stipulated to control and manage the performance of motorcycles to regulate competition. This will also attract the interests of various private shareholders who may provide inputs in decision making cycles of MTSU at a given destination. This research provides a foundation for future research to explore the outcomes of fully implementing the integration of MTSU into tourism industry.

1.7 Scope of the Study

The study focused on utilization levels of motorcycle transport services by tourists in sub-urban and urban tourism sites of Busia County and how its utilization affected

tourism product performance within the specified urban destination. The study took place in the two county's municipalities, (Busia municipality and Malaba municipality), focusing on town centers such Busia town and Malava town within the County. The research focused on tourists arriving at the destination within selected tourism sites, (Kakapel Museum, Kavirondo rocks, Samia Hills and Sio Siteki Swamp). The study was carried out from May 2024 to August 2024.

1.8 Limitation of the Study

The study had potential limitations; whereby the estimates obtained through questionnaires limited the extraction of in-depth information, similarly they were conservative which led to underestimation of fully effects of MTSU in tourism industry. The study was limited to a small area due time and financial resources that were inadequate for extensive research. The area had concentrated feasible resources in few areas where motorcycle transport service utilization was possible whereas other urban destinations lacked due to topographical challenges like hilly landscape, forested or waterlogged surfaces. The target population lacked any tourism information or had little knowledge about exploitation of tourism resources through MTS utilization and/or had not encountered a formal tourism event, due to limited secondary information on motorcycle transport service utilization in tourism operation. Lack of know-how made many respondents not to be considered in the study. Despite these limitations the study was carried out counteracting the constraints by including almost all variables in the study, sensitizing the respondents on the relevance of the study and collecting in-depth information essential for effective generalization.

1.9 Assumption of the Study

The study assumed that the recent observation made and data collected will uphold even to the future of tourism development. Secondly, the study assumed that motorcycle services utilization in Busia had been purely informal as from the past. Finally, the study assumed that all attraction sites receive equal number of tourists annually in respective of each urban area. The study assumed that, the targeted tourists had a least used motorcycle service.

1.10 Operational Definition of Terms

Destination Access	The measure of the ease of reaching (and interacting with) destinations or activities distributed in space.
County	Political and administrative division of a state.
Motorcycle	Refers to a road vehicle with two wheels, driven by an engine, with one seat for the driver and often a seat for a passenger behind the driver.
Motorcycle Operator:	Riders of commercial motorcycle transport.
Tourism Packaging	Does not refer to physical bundle surrounding a product; but the process of putting together core tourism products/services with additional services demanded by tourist, (Oxford Hachette Dictionary (2008 ed.).
Motorcycle Transport Service Utilization	Is one of the informal transport services relying on motorcycles function for public and tourism transport services. They operate as town service or last mile connection to passenger's destination.
Motorcycle Transport Services:	These refers to mobility services which depend on motorcycles.
Motorcycle Integration:	Organizational process through which the planning and delivery elements of transport system are brought together across mode, sector, operators and institutions with the aim of increasing economic, environmental and social benefits. Integration is measured by checking on absence or presence of elements or provisions in policy and practice. These are compared to best practices.
Urban Tourism	UNWTO 2019 define urban tourism is defined as "a type of tourism activity which takes place in an urban space with its inherent attributes characterized by non-agricultural based economy such as administration, manufacturing, trade and services and by being nodal points of transport. Urban/city destinations offer a broad and heterogeneous range of cultural, architectural, technological, social and natural experiences and products for leisure and business

**Urban Tourism
Product Performance**

The ability of urban product to generate profit through its consumption.

Product Innovativeness

Refers to the process of coming up and implementing tourism transport new ideas that result in the introduction of new goods or services, improvement of the existing ones and/or improving the approaches of how goods and services are offered in a manner that will add value to the already existing products.

**Urban Tourism
Consumption:**

Describes and explains the consumer practice of buying and using motorcycle related services and urban tourism goods or services that have of a higher quality or in greater quantity than the existing ones. It may also explain the spending of money on and the acquiring of luxury commodities (goods and services).

1.11 Expected Output

The findings from the research provided information on the informal means of transport reflecting its importance on enhancing service industries such as tourism. Research results also led to development of a masters' thesis in tourism transport which will support decision makers in their policy formulation process. The study finding will also be published in at least one of the refereed journals for knowledge sharing.

CHAPTER TWO

LITERATURE REVIEW

2.1 Overview of Motorcycle Transport Service Utilization

Motorcycle transport services utilization has acquired important recognition in the current years as a form of transport within the conventional public means of transport (Rose, 2013, 2014 and 2016; European Commission, 2021), it is one of the highly consumed means since it is noted to serve about 15% of the global public transportation services; out of the 15% global usage. Developing countries comprise of 30% public utility values of motorcycle transport services (Ferreira & Talamini, 2019; Kamalipour, 2021). The high use in Least Developed Countries (LDC's) is associated with high demand, acquisition and management inception costs comparative to public transport means (Geels, 2019; Raven, 2016). European Union (2022), motorcycle transport services vary from developed to developing countries where the prior is more of private use while the latter is for public use. In nations such as France, Spain and England motorcycle transport services are mainly used for leisure related activities.

Although the initial absolute use was to service rural areas, there is an observed steady growth of motorcycle transport service utilization within developing countries' urban areas. The large urban population of mid and low-class earners, high mobility functions, and agricultural dependency of motorcycle transport services utilization is relatively high in most developing countries urban centers (Hsu, Sadullah & Dao, 2003 & 2015; Pfaffenbichler & Circella, 2009; 2010 & 2020). Starkey (2016), adds that the rising world population in third world countries has also rendered the formal public transport services less useful due to travel changes in travel scheduling and limited travel time for the tourists, who prefer customized travel means. Similarly, in comparison formal transport means which require high labor costs, running capital and high maintenance cost, thus hindering investment by potential venture capitalists (Ma, Niu, & Sun, 2021). With diverse urban tourism attractions, investors have not been able to adequately service the tourism products. They therefore have ventured into motorcycles transport services because it remarkably requires either low labor or little financial capital compared to formal public transport means.

In distinct, economically, High Developed Countries (HDC) countries have well-structured transport network with adequate transport facilities and high motor vehicle ownership contrary to the LDC which have unstructured transport network with a mixed travel pattern combining both formal and informal systems (Hoffmann, 2019). Inadequate provision of public transport and infrastructure within middle level countries like India, China, Nigeria and Ghana have forced them to choose motorcycle transport services as the main means of travel in order to sustain their economies and fill the public transport gap (Tukudane, 2015). Within such countries motorcycle transport services is expected to extend transport services to areas that have low or no superior transport means thus sustaining various urban transport functions (Hine, 2014; Tzvetkova, 2017).

The Local settings has also favored motorcycles transport service utilization relevance thus assisting in developing their low-level economies through mobilization of economic resources, promoting entrepreneurial growth and as well as circulation of goods and services from production to consumption points (Tseng, 2005; Konkor, 2021). Some local community production resources such as capital and labor have been effectively circulated through the local economy by use of motorcycle transport services. Lobby efforts by motorcycle users and operators has assisted in devising transport policies on local infrastructural development, this has created the sense of recognition of motorcycle transport services to the general public, (Chen, 2019; Docherty, 2018; Smith, 2018 & 2019; Geels, 2019). The local government planners are considering motorcycles a basis of developing mixed economic and transport system plans in various residential areas (World Bank, 2020).

Globally, motorcycle transport services utilization contributes to the general urban growth, where they link and open up the central urban to her neighborhoods (Kazi, 2021). The cases of Ho, Minh, Vietnam and Doualas urban centers depict their layout network through the use of motorcycles transport services (Sharmeen, & Houston, 2019). Availability of demand, user information awareness and sharing by concerned states has resulted to motorcycle registration has realized where more than 40 nations having a registry of at least 0.77 million motorcycles in various service ventures with

associated with a definite market segment (Motorcycle Tourism-MT, 2011; Morris, 2009).

Within the developed Nations-(North America), have launched a bike share structure planning policy aiming to improve transport network, enhance mobility functions of dense urban centers and distribute services within the urban environment (Midgley, 2011; Nikkar, 2019; Lin & Yang 2011). Bike share structure and planning policy does not clearly document the commercial functions as well as leisure motorcycle functions within the assumed nations. Within North America no records of commercial motorcycle transport services have been found, while little leisure functions and mainly from private ownership have been reported (Prideaux & Carson, 2011). In areas where this service has been evident, they are merely organized as sport biking and rallies (Carson & Schmallegger, 2011; Prideaux & Carson, 2011; Dewailly, 2006; Lozato-Giotard, 2006; Stock, 2007). In this regard it can be reasoned that motorcycle transport services utilization is a good accelerator of tourism development especially in marginalized areas since it flickers the consumption and circulation of revenues within the local areas (Portet, 1998; Oudin, 2009; Dabson, 2011).

Regionally, the geographical and topographical features of the African continent, makes it a suitable hub for motorcycling and motorcycle transport services utilization zone. The region has been linked with the European continent through a traversing route from Paris via Senegal and Tunis to South Africa, serving intercontinental and intra continental transport functions (Ogunsanya & Galtima 1993; Agossou, 2003; Sambo 2010). Within the continent, motorcycle transport service utilization has taken course in countries like Nigeria, Uganda, Tanzania, Ghana, Zimbabwe and South Africa; all befitting the geographical structure. Leisure values of motorcycle transport service utilization are observed to be well-developed within South Africa due to her developed, structured and planned framework for leisure motorcycles (Chalya, 2010); Jombwe, Fualal & Gakwaya 2009; Roehler, 2013; Salako, Abiodun & Sholeye, 2013; Solagberu, 2006).

Climatic conditions, public transport immobility, limited resources and increasing population within the continent broadly have promoted the motorcycle transport services utilization as well (CERTU, 2010; Rios 2021 & Centre National du Cuir et de la Chaussure, (CNCC)-2007; Olaore, 2011; Sahara Reporter, 2015; Elliott, 2003; Park, 2014). Wide use of motorcycles has also been associated with its flexibility to the dynamics of transport sector, structure and setting, governing framework, shifting economic statuses and target market; making it to acquire appropriate market share along with other the public transport means (Rizzo, 2011; Kemtsop & Starkey, 2013; Njenga, 2013). Progressive efforts of reviewing national policies are underway by transport industry stakeholders to accommodate motorcycle transport services utilization into the general public transport system (Khayesi, 2021; Venter, 2013). These efforts to integrate motorcycle into public transport is likely to initiate its use in tourism transport due to its availability (Wood, 2015b & Rizzo, 2015; Cervero, 2000; Ehebrecht, 2018; Behrens, 2016; Cervero, 2000; Cervero & Golub, 2011; Gakenheimer, 2011; Khayesi, 2021; Venter, 2013).

East African commercial zone, adopted motorcycle transport services utilization especially in the areas of Southern Uganda, like Kabale and Nangara. MTS utilization serviced these urban centers that were isolated from the main capital city by connecting local and national economic resources. MTS utilization was further extended to Kenyan border and Tanzania inform of taxi, for both goods and people purposely for average and short distances (Chamberlain, 2007; Hine 2013; Stiefel, 2008; Carruthers, 2005; Olvera, 2008a, 2010; Godard, 2002). Public transport services such as delays, limited public services, confined route system, high urban populace, fatigue, fixed transport costs and traffic congestion which makes the region not an exception in assimilating motorcycle transport services utilization (Kumar & Barret, 2008; Lombard & Zouhoula, 2008). Sprawling of MTS utilization to secondary urban towns led to development of secondary industries which have remained isolated for a long time due to inaccessibility, (Carruthers, 2005). Despite commercial use motorcycle transport services there still exist no legal framework binding the operation of motorcycle in public use (Luambano, 2020). Leisure services remains unreported; the available ones are only planned by societies inform of sport biking.

Kenyan Uganda border was the first point for national contribution of motorcycle transport services utilization without any formal or government-controlled process. Due to the positive benefits motorcycle transport services utilization brought at the border point, forced other municipalities to accept motorcycle transport services utilization as an approach to revolutionize their economic transportation services (Carruthers, 2005). Carruthers, further adds that Kenyan rural areas rely on motorcycle transport services utilization for public transportation functions of both goods and people (Ahsan, 2006); whereas in urban areas it is used alongside public transport means to service public transport sector and connect various destinations to the main city. Long distance and high concentration for the majority of public transport means plying routes, has necessitated inter-state and short distance areas depend on motorcycle transport services utilization (Government of Kenya (GoK, 2009).

More so, Kenya espoused the motorcycle transport services utilization to fast track her economic development, Sykes and Kelly (2014), where motorcycles transport services utilization was opted out as alternatives of simplifying transport operations and liberalizing the economy, where it resulted to increased entrepreneurship opportunities that were unexplored (GoK, 2009; KNBS, 2010). Currently, there is advocacy among the stakeholders to incorporate motorcycle transport services utilization into the general public transport system to promote modal share, split and complements in public transport services (GoK, 2009; Mutiso & Behrens 2011; Behrens 2016; Njagi, 2014). GoK *et al.*, (2009), further notes that motorcycle transport services utilization has less been reported to promote tourism product in Kenyan tourism industry.

Busia County having both historical and current information on the motorcycle transport services utilization in Kenya, high daily urban population, high motorcycle figures and traffic congestion makes it suitable for this study (Broughton & Stradling, 2005; Pfaffenbichler & Circella, 2009). The operations started from non-mechanized bicycle system to motorized motorcycle transport services utilization activities, which will guide in evaluating the changes transport has gone through for future planning (Mutiso, 2011). Supporting terrain, availability of cycle tracks, non-residential

destination, urban engagement and proximity to green space makes Busia County a relevant area for this study (Otieno, 2020).

Motorcycle transport services utilization in tourism industry has been less described, either as an upshot of ignorance by the developers, informal operation activities, low motorcycle tourism transport service utilization, less marketing and unreported and undocumented motorcyclist's activities (Lumsden, 2020; Page, 2002; Lee, 2010, 2019 & 2020; Brahmasrene, 2013; Page 2014; Lohmann & Pearce 2012; Larsen, 2001; Motorcycle Tourism-MT, 2011; Agbiboa, 2016). This has justified the need for research to determine whether the recognition of motorcycle transport services as a mean of transport will have an impact on urban tourism development.

Recently, stakeholders in tourism and transport are collaborating in planning to incorporate motorcycle transport use into public transport. Incorporation aims at harnessing the massive imported motorcycles by the government (Motorcycle Tourism-MT, 2011). The developers have a perception that motorcycle transport services utilization have the possibility of developing tourism products, enhancing transport network product connectivity and encouraging social capital and bonds due close encounters within the participants (Haworth, 2012; Pfaffenbichler & Circella 2009 & 2020). Motorcycle transport services utilization is likely to provide a feasible mean of networking for opening up the tourism projected areas; which initiates their meaning by experiencing them (Larsen, 2001; Larsen & Guiver, 2013; Urry, 2007; Sheller, 2018).

To extension, tourism resources are mobilized by use of motorcycle transport services through resource engagement, thus increasing tourism product offers as well as consumption (United Nations and Permanent Forum on Indigenous Issues, 2009; Luban, 2017; Mamo, 2020). Furthermore, it has been realized to catalyze the tourism purchase cycle, increasing time devoted at a destination while also providing increased chance to consume more tourism resources through touch point experiences (Beckert, 2007; Walker, 2011; Graham & Wood, 2017).

Motorcycle transport services utilization is considered as an experience enhancer, (Haworth, 2012). The shift in tourism demand characteristics from conventional, inactive and predetermined packages to more individual, active and customized experiences illustrate the need for a more outgoing mean than a conservative one (Kumar & Barrett, 2008; Haworth, 2012; Berg, 2016). The market diversity of motorcycle transport users makes it a suitable means to tap. Motorcycle transport service reliability aggregates the travelers trust of travelling process. Participants time constraints can also be weighed out by this considered non-essential means and finally its customization abilities enable to meet different market needs; these attributes signify the relevance of motorcycles transport in tourism development and consumption, (Gao, Yang, Li, Li, & Yu, 2021). Additionally, travel consumers are seeking more reliable, fast, cheap, customizable and sustainable travel means (Cebon and Samson 2011); that offer diversity of experiences within the available short travel period (Moscardo & Pearce 1996; Walker 2017).

Motorcycles transport services is considered as a luxury item within HDC's, and has been linked to the affluent individuals of the society making it less consumed and documented by the tourism developers within those destinations (Moscardo & Pearce 1996; Walker, 2012; 2017). During radical changes from mass tourism products to customized products and resultant increase in the number of active travelers, motorcycle transport services utilization was predicted to be relevant in servicing leisure needs, (Sykes & Kelly, 2014; Bentley, Cater, & Page, 2010; UNWTO, 2015). The mean has been able to provide extended leisure services beyond the motor vehicle operations, (Horner, 2002; Swarbrooke & Horner, 2002; UNWTO, 2015). Travel organization in motorcycle transport services has led to inception of motorcycle hire services, daily pick-up points, station sharing and motorcycle organization (Midgley, 2011; Shaheen, 2018; Illum, 2011).

Europe has been documented as a leisure motorcycling destination since average motorcycle daily trips were oriented towards recreation, leisure and sports activities (CERTU, 2010). Motorcycle leisure transport services is traced back to France (Georgano, 2001; Institute for Transportation and Development Policy- (ITDP, 2009), before spreading to other continents. The mid aged are the main target and potential

groups who passively embraces the motorcycle transport services utilization in leisure services (Northern Ireland Tourism Board, 2006; Giglio, Musmanno & Palmieri, 2021), through sports. Motorcycle destinations have been developed in countries such as France and Italy which are overhauled by Transalpine motorcycle route; the route provides a chance for individuals to explore nature at a nearby point and the route has attracted more tourists' flow (Cahn, 2008; OECD 2014). Extensively, Tibet Stretch, Mohan (2020), Route 66, Thompson, (2013) and Ruta 40, United Nations, (2015) have been documented as some of the main motorcycling destinations across the European continent.

Motorcycle transport governance has linked to the private sector due to inadequate government policy formulation on adoption and implementation of motorcycle transport services utilization into the general public contributing to its informality (GoK, 2021 & 2010; Kemtsop & Starkey, 2013; Warner, 2005). More so the officious believe on motorcycle ownership among the Kenyan citizens for leisure services makes the activity not to be effectively implemented into the tourism business (Morandi, 2016; Ferdinand, 2012; Wang 2020). Destination managers have been lobbying for the inclusion of motorcycle transport services utilization into tourism businesses, while their national, regional and county counterparts are contributing little in lobbying for the same inclusion, as a result of unawareness (Walker, 2012; Haworth, 2012). Furthermore, misconceptions and regional limitation about motorcycle activities limits its promotion and consumption among the user groups (Travel Promotion Act, 2010). Additionally, limited levels of self-drive among tourists effected by trust issues; has been perceived to lower the levels of utilizing motorcycles in tourism making it a guided trip rather than a self-drive activity (Dzikowski, 1996).

The study aims at developing Regional Tourism Organizations (RTO) that could concentrate on motorcyclists' market, since they have different desires which may be difficult for destination to develop appropriate supporting infrastructure and facilities (Sykes & Kelly, 2016).

2.2 Contribution of Motorcycle Transport Service Utilization on Urban Tourism Destination Access

UNWTO, (2015), states that urban tourism involves all activities that are carried out within urban areas, characterized with non-agricultural based economy; these activities comprise of trade, administration, manufacturing and services. Urban tourism products are quite diverse and heterogeneous making their accessibility and utility complex. Urban tourism destination access on the other hand refers to a measure of the ease to reach and interact with destinations or activities spread out within a given geographical area of interest (UNWTO, 2015). Urban tourism has been a product of interest among developers and consumers, but due to high urban population, massive and progressive development they remain unvisited via public transport means. Enterprises are utilizing motorcycle transport services to support in the distribution of tourism services and demand within a destination (Lattman, 2016). Therefore, motorcycle transport services utility has been found to be and an option to reach various tourism urban destination thus reducing the travel cost, time spend on travel and increase in urban encounters (Hui & Habib, 2014).

Traditionally, motorcycle transport service was adapted as a mean to service local area without major travel needs attached to it (Hansen 1959; Hardy 1994; Handy 2002; Lattman, 2016). Studies carried out within local economies explained that an area is only potential for development if it has noticeable, comfortable and humble accessibility network, availability of supply and potential demand, resources viability and support services (Martín, Calvo, Guaita, & Ribeiro, 2022). Noticeable accessibility means that there is even distribution of both transport network and means that are likely to service majority of people and from all social classes in a more affordable approach (Duggin, 2016). On the other hand, low accessibility makes a place, space or service be limited to a group of specific individuals due to limited serviced transport networks (Handy, 2005).

Motorcycle transport services utilization has been perceived as a comfortable and humble transport services means that there is luckily acceptance by users, can be managed and serviced with available resources and skills. The humbleness of motorcycle transport services utilization increases its scope due to low skill

requirement and management thus serving a large designated area for any intended purpose (Rokicki, Ochnio, Bórawski & Żak, 2021). Rokicki *et. al.*, (2021), also add travel access stimulates that adequate alternative transport stimulates economic development by providing flexible access to various resources and trade markets thus appreciating the welfare of the local economy and tourism sector by connecting people to places of work, recreational points, and education and health sectors.

Urban tourism destinations are faced with a challenge of transport monopoly of public motor vehicle services, which is incapacitated to effectively service the risen public transport demands as well as tourism travel demand (Schrank & Lomax, 2005). Motor vehicle public transport services have some challenges such as cost, unreliability, shifting in demand, limited utility options and foregone opportunities contribute to the unsatisfactory nature of public motor vehicle transport services (Minnesota Department of Transport, 2003; Miller, 2005; Muñoz, Soza-Parra, & Raveau, 2020). Commercially, motorcycles transport service use is observed to provide last mile connection from the conventional public means of transport, thus linking from where the public service was unable to serve (Minnesota Department of Transport, 2003; Miller, 2005). It is argued that Collaborative decision-making process from various stakeholders on the integration of motorcycle transport services is also likely to develop tourism product or extend its experiences (Kumar, 2011). Motorcycle tourism transport services will be achieved through devising appropriate action plans that assist in controlling the activities of motorcycle transport service utilization alongside motor vehicles. In spite of the restrictions of motorcycle transport within the central urban transport network means their services remain viable within the outskirts of most urban centers that eventually contributes to their accessibility and connectivity to various tourist activities and resources that lie idle within the outskirts hence exploitation of sidelined tourism destinations (Hurst, 2011; Venter, Mahendra, & Hidalgo, 2019).

Motorcycles transport service use has been promoted as an alternative form of both public and tourism transport services by its ability to increase the number of travelers, travel network, service stations and distributions of services (Lucas, 2021). Whereby, motorcycle travel links assists in networking and distributing economic goods, people

and essential services to their user points (Wood & Willems, 2012). More so, on urban leisure values, motorcycle transport services have been suggested as an alternative option for improving urban connectivity to either nearby destinations or within the urban center for different demand characteristics. It is observed to promote promoting modal split, modal share and trip generation; although its operations are informal and they remain unreported (Wood 2017; JICA, 2013).

Location properties of most of the urban tourism sites renders most public transport service means useless (Zheng, Ji, Lin, Wang, & Yu, 2020). Therefore, the products can be effectively be exploited by having a more adaptable, flexible and reliable mean of travel, of which the motorcycle transport service ought to the potential option. Motorcycle transport services have the tendency of frequenting a particular attraction site at a relatively low operation cost. Active utilization of urban tourism products requires not only structured network but also a mean that can easily reach various destinations within a geographical set-up, within the stipulated time frame (Ripple, 2017). Further-more, motorcycle transport services have the ability to co-ordinate various networks and dispersed destinations into a continuous loop that will increase consumption without detour. Since the location of green tourism sites lies on the outskirts of various urban towns making public transport quite expensive, thus the implementation motorcycle services utility by the stakeholders will be of essence in serving these sites (Cole, & Yakushiji, 2020).

Motorcycle transport services are considered to be more sustainable means of travel. Motorcycles' ability to consume less fuel per kilometer of travel, relatively small parking space and less road requirements for its operation qualifies it to be more sustainable (Darcy, 2008). Motorcycle utilization will reduce the over dependence of motor vehicle transportation services by moderating the operating intensities (Ramirez, 2022). Diversifying means of transport increases the existing value of marginalized tourism resources, these reduces the concentration of tourism activities at a specific area thus spreading the risks prospected to be generated, typifying the geographical dispersion of tourism product and the associated risks. Motorcycle-motor vehicle blended transport system in an urban tourism destination is likely to attract more consumers by creating options to choose from, compared to only when

only public motor vehicle is used. This is due to a combined effort that makes it possible for developers to reach a wide market geographical scope (Sheller & Urry, 2006; Imrie, 2000).

Motorcycles transport services are easily traced, have a flexible en-route system and attractions close range values makes it a more convenient mean of travel compared to the motor vehicle transport services (Midgley, 2011; Chin, 2017). Motorcycles' ability to access destinations as close as possible due to their route flexibility and size attributes, it will be able promote close range and first-hand tourists' experiences within tourism destinations (Swedish Transport Administration, 2018). Motorcycle transport service utilizes routes with more resources thus providing an option for tourist to encounter multiple attraction sites, which could otherwise be not possible through the use of motor vehicle alone. Thus, providing access to pristine areas perceived inaccessible (Shih, 2006).

Globally, the rise in motorcycle transport services usage has been almost equal or surpass that of motor vehicle public transport means especially in countries with high population densities; this has been linked to its affordability, low skill requirement and flexibility nature of motorcycles (Ahmed 2010 & Chin 2017). Its utilization is quite tremendous in global remote areas and densely populated urban areas where it is used for general economic transportation services (Motorcycle Tourism-MT, 2011). In remote areas motorcycle transport services use serves as the primary means for both commercial and agricultural transportation services, while in urban areas it supplements the motor vehicle transport services (Heinen, 2010). Motorcycle transport services high availability equally relinquishes it services readily available for tourism use.

Motorcycle transport services on leisure and recreation activity development and promotion are less reported (Motorcycle Tourism Strategy, 2013). Existing reports have not clearly differentiated the functional values of motorcycle transport services on either leisure or other commercial operations. Within the United States there was a registry of about 0.77 million motorcycles by 2008 used in the transport services (Morris, 2010 & 2022). Some global destinations embraced motorcycle transport

services to facilitate access to outlier attraction sites. The rising motorcycle transport use, it has been observed that at least 40 countries globally have incorporated motorcycle transport services in promoting the accessibility of different destinations which lie far away from the motor vehicle access sites (Midgley, 2011). Location of tourism resources within the urban destinations in more populated and inaccessible sites, will make it appropriate for motorcycle transport services use; since it has a possibility of enhancing pick up and drop off from various terminals to sites respectively (Shaheen 2016; García-Palomares, 2012).

More so, regions such as North America launched motorcycle transport service share system within Baltimore town in 2016 in order to improve customer ability to access other transport services, terminals and areas within the congested urban areas. Motorcycle adoption within Baltimore promoted the distribution of various destination products (Nikkar 2019; Lin 2009; Yang 2013). The process of adopting non integrating motorcycle the destination reported an estimate of 11 million motorcycle users for leisure purpose; this information incorporates motorcycles that have at least once transported tourists (Market Line, 2012). The city, Heddebut, (2014), was highly accessed by use of motorcycle transport service beyond its normal public functions, thus influencing the access to leisure sites as well as connecting the remote environment paths to the high-end urban motorways. Motorcycle transport services can be observed to augment urban connectivity which may lead to emergence of new centers which offer services to the local residents. Liberalization of motorcycle transport services in tourism has the probability of modifying urban tourism transport network system (Graham, 2017).

Motorcycle transports services use have provided opportunities to access information that assist in easing the process of travel through various modes, such services include distribution and travel towards various tourism information centers and complementing public transport services (Lattman, 2016). The access to information creates better understanding of various points of interests that are not be able to be served by public transport means. Lattma's research carried out in Sweden disapproves the finding that motor vehicles are most accessible means of

transportation; where it was argued that by use of public transport means inner attractions are difficult to identify, connect and access (Larsen & El-Geneidy, 2011).

Motorcycle transport services were also observed to be able to assist in the distribution of travelers towards various consumption points (Khadem, 2019). But there has been limited information on values of motorcycle transport services in tourism transportation due to unreported data on motorcycle tourism services utilization (Albritton & Stein, 2011; Caton & Santos, 2007; Cater, 2017; Colarič-Jakše & Ambrož, 2015; De Moraes, 2014; Price-Davies, 2011; Sykes & Kelly, 2014 & 2016; Viegas, 2015). Other developed countries like France, Italy, Spain and Greece also worked on implementing motorcycle transport services (Shih, 2006); in areas where public transport is lacking or limited or to complement the public transport services.

Since most urban tourism resources are housed on the urban outskirts and densely populated areas which tend to be inaccessible by motor vehicles, they thus remain idle for a long period of time. Motorcycle transport service has promoted the travel towards these unique areas from the central urban sites making them viable for development and consumption (Haddour, 2000; Ingold 2000; Gandy, 2002). Rightfully, an accessible destination is supposed to have well developed, parking space, right direction support facilities, these results to more destinations to remain unknown to the travelling groups. Austin (2010), states that motorcycling has become an activity of the day where majority of American citizens are relying on motorcycle transport services. Its usage within America has been for officious purposes especially prestige and status recognition and its ownership were linked to the level of income of an individual.

In African continent motorcycles transport services utilization have been on the rise in promoting destination access due to its high flexibility, poor African states' roads, high market response and easy management arrangements (Kumar, 2011; Berrones-Sanz, 2018). Motorcycle transport services being an informal transport mean, within Africa, has been the main stimuli for transport, communication and technological development; by its ability of connecting various dispersed areas into a central pool

for networking (Smith & Raven, 2014). The acceptance of motorcycle transport services utility by investors has assisted in the revolution of the local economy (Berrones-Sanz, 2018; Smith & Raven, 2016). Massive development of urban centers, urbanization, congestion, insufficient resources, easy acquisition and entry of motorcycle transport services has made it to operate almost as a formal transport services.

The transport network within Africa is composed of unconvincing trails and roads which are not being used by motor vehicles which has created a playground for most motorcycles especially motorcyclists from the European countries travelers who are after travel experiences (Harvey-Davison, 2013; Harvey, 2014). The harsh climatic conditions within African states favors motorcycling activities; where, the desert conditions and semi-desert expanses of the Sahara alongside the stretches of weathered and unpaved roads provide fascinating scenery for tourism experiences. African Saharan features and sceneries have been exposed to the global world by the impact of European motorcyclists.

Africa cities' roads are characterized by high number of motor vehicles, urban population and insufficient resources, which have lowered the services of urban public transport network which have made motorcycle transport service utilization to gain significance (Dewi, 2016). Motorcycle transport service utility has assisted in enhancing public transportation within urban areas easier, especially in cases where motor vehicle services are limited (Van Mead, 2016). Similarly, non-participatory transport planning approaches within major towns have accelerated the wide use of informal transport sector (Leather, 2011). Therefore, Piston, (2010); Sanjiv and Simon, (2010) argued that integrating motorcycle transport into the general public transport increases the efficiency of both conventional and independent tourists in accessing the physical resources that are spatially located where motor vehicles have inadequacy of access.

Motorcycle transport services utilization have become inevitable in economic development and its control in public transport services is difficult. Public transport services within the African continent have been faced by challenges such as,

insufficient public transport enforcement personnel, lack of technical support experts, overlap of services, high popularization rate and resurgence of concealed services outside the regulated areas (Starkey, 2016). Therefore, motorcycle transport services have been perceived as an alternative mode of transport which can substitute motor vehicles services especially during the peak season when there is inadequate means of travel to accommodate the swollen demand, especially to the exterior parts the urban set up (Macieira, 2009). Alternatively, it can be capitalized as a main mode of transport during the low season in order to reduce the cost associated with the high number of empty seats in tour vans thus saving on cost. On contrary, stakeholders' ideologies remain diverse and are not customer centered basing development procedures on gender, comfort and satisfaction; this has made the perception of users and non-users to be understood differently by the stakeholders and the general public (Starkey, 2007; Starkey, 2013a & 2013).

2.3 Contribution of Motorcycle Transport Development on Urban Tourism Product Innovativeness

Scuttari, (2019), states that tourism product innovativeness based on attributes of mobility refers to the new and discovery of journey experiences that links various destination through a network system using means and modes of transport. Scuttari adds that more innovative products should create more opportunities for encounter, in a more differentiated and competitive manner. Innovation takes into consideration two approaches which includes; development of new products that are totally new to the market and also development of a new niche market that can be serviced using alternative technologies. The development of the product is only necessitated by effective circulation of raw materials and distribution of finished goods within urban areas effecting creation and co-creation of products and services which would be essential to the receptive sectors. Conventionally, motorcycle transport services have been perceived to be a more convenient and affordable means without restricted boundaries across the globe that could necessarily web all the other factors and sectors of production (Kelly, 2012).

Motorcycle transport service is a product on its self. Kelly and Sykes (2012), state that motorcycle transport services have been used in tourism industry to provide tourism

activities like bike cruising, touring bikes and short tours on either group or individual basis. Leisurely, Cervero, (2000), says that there is deficit information on prime utilization of motorcycle transport service utilization in urban regions and yet the regions remain deserted with minibuses services; thus, forcing the publics to craft their means of travel within the urban and suburb areas especially during peak seasons. Less tourism innovative products are more familiar, less uncertain and may have the feasibilities of high success rates in the long run, if a suitable sustainable and blended mean of tourism is introduced to improve the total output of the public transport services. More so, Hjalager (2015); adds that designing memorable and exceptional product experiences for consumers is a management initiative that aims at producing and of products that may satisfy the current and future human needs.

Motorcycles transport services utilization have been observed to reduce the extremities of immobile tourism resources by dispensing demand to their respective vicinities. The complexity of understanding tourism experiences heavily relies on the travel routes encounters rather than the final destination of interest, which serves as the point of focus for majority of tourism operators. Little concentration has been placed on various journeys important and fascinating points along travel continuum, Mokhtarian and Salomon, (2001), where the notion is based on the argument that the transit route is equally important as the final destination where the touch points are quite diverse and tourists make stop overs for photography sessions and scenery viewing.

European Commission, (2021), states that new products are not much different from the general conventional products, with exception that they entail a single differentiated element in the approach taken to execute the package or the product. New innovative products aid in moderating and mitigating the negative attributes or poor qualities that are likely to be attached on existing conventional products. Furthermore, European Commission, (2021), adds that transport aids in discovery and development of various places, citing destinations such as Australia and US which could have not been possible without the immigrations from Europe. Within these destinations motorcycles transports service were found to initiate trips amongst consumers. Whereby, their deliberate alignment within people-based hubs such

theaters, show halls and museums and closeness to retail shopping centers (Hopkins, 2020; Barth 2015); is likely to define a destination, causeway and attraction, hence a necessity in transport planning and distribution. Therefore, motorcycle transport service utilization has been found to promote high accessibility functions and knowledge within different areas as an effect of its high maneuverability (Chin, 2017).

Hamilton, (2018), states that newness of a product to the market as well as to the company requires new approach and a lot of more concentration for it to be clearly differentiated from other existing products. This means that developing motorcycle transport services within the urban tourism destination will introduce new strategies in the production and management of tourism related activities within the urban environment. Nilsson (2019); Lohmann 2017 and Pearce, (1996); state that information concerning the uniqueness of the transit route is still missing in tourism sector since the middle-of-the-road experiences are not factored in itinerary planning and thus focusing on the final destination attributes, this may be associated with the inabilities of the public motor vehicles to product reroute services. Secondly, the technical approach of working out beautiful sceneries along the travel route has not been easy and thus ignored in the planning process. Therefore, destinations and regions that are likely to pursue motorcycle tourism transport services utilization will be able to increase their destination know-how toward various consumers thus increasing the number of products to the consumers (Walker, 2011; Pinch & Reamer, 2012). As well as to enrich awareness of tourism experiences based on motion attributes thus promoting positive perceptions amongst destinations through close interactions of travelers and tourism sites (Bell 2018).

Regional dispersal of tourism resources makes it impossible for motor car services to access the finer attractions that normally exists within the periphery of the urban environment (Predeaux & Carson 2010). Pinch and Reamer, (2012), noted that despite the fact that the car services provide access to various tourism destination motorcycle transport service utilization has the potential to offer a variety of tourism product experiences within the local diversity, since it provides an opportunity to travel as a group which emphasizes and captivates on the transit journey experiences. These

outweighs the motor car services which offers aspects of the scenic area visited alone, motorcycling provides an opportunity for physical encounters and liveliness of the travel participants (Walker, 2011). Therefore, inclusion of motorcycle transport services is clearly going to actively engage tourists in active leisure activities, while promoting destination connectivity and networking which enhances the physical motivation of the tourists and product quality due to co-creation (Szymanska, Panfiluk & Kiryluk, 2021).

Walker, (2011), states that integrating motorcycle transport services utilization into leisure activities will be more advantageous than it being only directed towards public services. Where, motorcycle transport services ability to generate journey frequencies, journey disruptions and the comfort experiences during long travel hours allied to public transport services. Motorcycle transport service utilization has the probability of increasing the innovations by discovering alternative attraction that may likely differentiate emerging destinations from well-established tourism destinations by offering an increase or a continuous new product experience alongside main product (Ratz, 2017). Therefore, Motorcycle transport service utilization offers an opportunity to create a new product and new product ideas through provision of the best product initiatives and repetitive product interactions which results to new products or their alternative thus lessening pressure on the final destinations.

American Motorcyclists Association, (AMA 2014), explain that the utilization of motorcycle transport services in tourism assists in the development of tourism products and resources with a focus on creating fascinating and continuous tourist routes that are likely to promote unique and enhance connectivity and distribution of tourism related services while also assisting in the guaranteeing accommodation facilities that offer services such as food, accommodation and entertainment to the tourist participants surety of business. The overall aggregate is the increase in the quality of tourism product and services offered. Labeling of motorcycle transport service utilization-based destination brings an up-turn in the sale of various tourism related activities.

Motorcycles transport services utilization is socially and environmentally sustainable approach of tourism product development and consumption (Zhang, Zhang, Duan & Bryde, 2015). Experiential features of tourists using motorcycle transport services is a crucial sustainable management tool of our destination due to the low carbon emission and fuel consumption levels of motorcycle vessels. Urban tourism attractions are sensitive and prone to deletion due to urban developments the motorcycle carriage capacities will not create a lot of pressure on the urban attraction resources. This means that developing motorcycle transport is a more sustainable approach of developing tourism industry for the benefits of the current and the future generation (Giuver, Lumsdon & Weston 2012; Larsen & Guiver 2013). To add on, Urry, (2007), says that motorcycle transport services utilization offers a multi-dimensional approach to experience tourism resources and products along the travel routes which may reduce the concentration of tourists at the attraction site. Ryan (2020); and Boyer, (2018), explain that for motorcycle transport services being used in tourism will not mean there are constraints in public transport facilities but as chosen options due to interests which it has on a defined circuit and real tour with strong product extensions, experiences and discoveries. Motorcycle transport service utilization has been used to a large extend across the globe to discover new tourism lands which have not been utilized due to transport issues thus appreciating the value of the idle resources. Walker, (2011) adds that, motorcycles transport services make the road more appealing than the destination itself due to variation in scenic views along the travel route. Motorcycle tourists avoid the monotony of the motor ways and utilize their small roads which have a lot of curves, hilly terrain and availability of close-range attractions (Duret, 2005).

Terzic, (2023), states that within the French government motorcycle trips have been observed to pursue and explore the various alpine regions which appear to be more interesting and pleasurable but were initially not exploited due inaccessibility shortcomings. In this region motorcyclists did link driving with the discovery of new attractions that have not been explored by humankind. In European continent there has been evident of motorcycle developed routes; these includes the famous route that link Paris to the capital of Senegal whereby motorcycle events have been organized every year for the cycling enthusiasts. Other popular route in African continent that

has pulled majority of motorcyclists to ride for over 18,000 km is from Cape Town in South Africa to Tunis.

Similarly, Harley and Davidson, (2013), explain that some African countries have also developed motorcycle transport services in tourism as events. South Africa has been dominating with activities such as; *Africa bike week*, *Buffalo Rally among others* which utilize motorcycle transport services, while nations like Tanzania are also adopting the activity. Morocco has been eyed by the European customers as a destination for motorcycles tourism as a result of limited risks of the wilderness and rolling on track scenarios. South Africa has been faced with monopoly of activities by offering similar riding experiences for the arriving customers (Scol, 2016). Vast tourism resources cannot be held together and interlinked without efficient means of transport, therefore interdependence across tourism element can be necessitated by convenient, affordable and flexible means of transport to enhance product development and delivery.

In Kenya motorcycles transport service utilization have been used in providing tourism services in form of activities such as sport biking; same to other countries. Motorcycles transport service utilization is popular in areas where standard taxis are difficult to find and operate tourism services and/or are insufficient supply (Murenzi, 2021). Towns such as Malindi, Mombasa and Lamu have been found to have the highest use of motorcycle transport service utilization where cycle boys act as both touts and cycle guides. People also engage motorcycle transport service utilization for public transportation in order to get access to areas of employment, education, retail, health and recreational facilities (Obudho, 2020). Through transport; men, material, money, machinery and management have been able to be assembled at the place of production. Motorcycle transport services in leisure has not been reported

Motorcycle transport services use in tourism lead to inauguration of new urban tourism products such as rallies and sports which will pull majority of participants to actively or passively pursue motorcycle activities (Sobry, 2022). These will emphasize capitalize on the long and short journeys that feeds the main urban routes. Rally bikers spend at least one night in a camping ground (Hjalagar, 2015); which

appreciate the roles of camp grounds. Such inventions meant that tourism facilities like camping activities will be revived in areas where motorcycle transport service utilization will be incorporated (Candela 2012).

Motorcyclists are outgoing tourists who are after experiencing new and unusual tourism encounters, with the changed in climatic conditions, motorcycle users are after challenging it. Thompson, (2013), said that motorcyclists are not impacted by weather conditions since they are after braving out the situation to satisfy their pleasures, for instance the research carried out in France showed that more than 3500 riders visited the French destination during the winter period just to brave out the bad weather to satisfy their passion. Therefore, CERTU, (2010) suggests that motorcycle transport services in tourism is an all-round product that can be developed and promoted throughout the year since it is not affected by seasons and climatic conditions; this makes a more suitable product for the developing countries to capitalize on. Similarly, most destinations are faced with poverty issues, motorcycles transport has the ability to raise the individuals' well-being both the participants and the host communities. Whereby, those in company of the motorcyclists is that they have the pleasure of being among the bikers to share a common culture or passion of motorcycling; as well all being able to improve the local and marginalized areas' social well-being through offering of services directly or indirectly emanating from motorcycling activities (Oudin, 2007).

Furthermore, highly weather affected destinations such as Czech Republic and Austria that are highly impacted by extreme winter condition, have gained popularity as a result of motorcycle tourism transport services, this is significant to peri-urban areas that have not received any substantial public transport recognition due to low economic profiles. Consequently, developing motorcycle travel routes means we are finding out new and alternative routes with the highest number of attractions, so improving of the brand and identity of a marginalized urban tourism region (Sykes & Kelly, 2014 & 2016). This shows that overshadowed tourism regions can be developed through the adoption of motorcycle transport services which will attract tourism services at the local set up resulting to development of local tourism resources (Kirsch, 2020).

Motorcycle transport services is mainly organized in form of associations and societies; this may result in more organization and sponsorship of tourism activities. Broughton (2007) and Walker, (2010), state that motorcyclists do not travel alone, they are in company of their sponsors or club members making the service to offer an opportunity to enjoy group activities such as walks, concerts and games and devising new alternative to explore a given destination in a new way that could be interesting and enjoyable than the previous one even if the attraction still remains the same. Cater (2017), adds that, with group and club travels, motorcycles transport services have been observed to cover a distance of more than 6500 miles just for recreational purposes. Henceforth, motorcycle transport services have the probability to promote diversified packaging and repackaging and consumption of tourism resources beyond the unadventurous developed tourism products.

Adjacent destinations can develop motorcycle transport networks and gateways for appropriate connections to offer diverse and extended tourism product experiences which is likely to attract assorted market for economic development, Thao, von Arx and Frolicher, (2020); furthermore, Cheng and Gill, (2017), state that this has been evident in areas where local public transport is often the mode of choice for transport for the arriving tourists; yet its supply is limited. Despite motorcycle transport being able to develop the tourism environment, Walker, (2009 & 2010), assents that ordinarily, the global developing countries have not capitalized on a motorcycle tourism transport service use due to lack of information on its benefits it brings on tourism product innovativeness; by the fact of it being perceived to a cheap substitute of public transport services (Bennett, 2019).

According to the above literature, motorcycles transport service utilization can be categorically be convened into two approaches of product innovation. First as a collective intelligence system that can aid in the development of new products (Cater, 2017). Cater says that, on demand side the group traveler can modify the product depending on their personal interests and needs which will initiate development of products that are more customer-centered, whereas, on supply-side it brings together all stakeholders on a collective bargaining agreement contributing to development of a more unified concrete and quality urban tourism product and tourism transport

network. Furthermore, Cater, (2017) and Price-Davies, (2011), explain that, tour operators who are in charge of the motorcyclist groups and clubs obtain key information from the participants which can be used to develop more superior quality products which suites future travel group. The ideas obtained serves as a platform for improving and renewing the existing tourism products; more so, motorcycle development will also improve the existing conditions of the urban transport network by extending the packing slots, motorcycle lanes and functional road furniture.

Secondly, Harley-Davidson (2013) and Walker (2011), assert that motorcycle transport services can be organized and packaged as a product for sale. Hard core form of biking can be packaged as an adventure package which can be promoted to various customers especially those interested in biking. More so the biking events attract both active and passive participants which make it a tourism product. Motorcycle transport services in tourism has various ways in which it has been packaged as a product for sale (Gardiner & Scott, 2018). Where some of adventure packages of motorcycling activities such as cruising, racing, rallies have been seen as the main offers for sale to young and energetic travelers alongside other amenity packages, this refers to where motorcycling can be packaged and offered to clients as extended product, this is done to compliment the product being offered by a given organization at a destination (Scott, 2018).

Gronau and Hokamp, (2018), summarize that the concepts of ‘serious leisure’ remain the binding unit of the motorcyclists’ community. Stebbins (2011) further that the serious motorcycling leisure activities will be promoted by the availability of skills, knowledge and exposure to cycle events which will enable the current managers to be able to effectively develop motorcycle activities within the general arena of tourism events. The above will replace the ‘informal casual leisure’ being practiced by a few affluent members of the society.

2.4 Contribution of Motorcycle Transport Service Utilization on Urban Tourism Product Consumption

Chen, (2016) and Zhang, (2019), state that urban tourism product consumption entails the description and explanation of the consumer practice of buying and using goods or

services that have of a higher quality or in greater quantity than the existing ones. It may also explain the spending of money on and the act of acquiring of luxury commodities (goods and services). Emotional motivations of tourism resources have been found to impact on the consumption of tourism resources in an area (Pearce 1996; Zara 2021). Tailoring of tourism products and services to be within the specification of consumers greatly sums up the earning from a given tourism enterprise (Arteche, 2007; Hannachi, 2015). Additional; new products, ideas, activities, processes and systems that aim at increasing touch point experiences across various customers' points of encounter, may elevate the consumption rates (Scuttari, 2021).

Aguilera & Grebet, (2014), note that motorcycle tourism transport utilization has gained popularity in the recent years where it is attracting majority of leisure and recreation tourists who have specific interests of travel-mainly sport biking. Destinations like U.K. motorcycle transport services have contributed to the 1.5 million tourists' arrivals to various destinations, from which 1% were motorcyclists (Morris & Lowler, 2022). More so, CERTU, (2010), explains that despite the role of motorcycle transport to only support marginal transport services; it has been highly used in some European countries like France for daily trips, recreation and tourism support transport services which has accelerated tourism practices (Lecoutre & Dautheville, 2011). This helps in servicing the national goal of linking agriculture, industry, trade and commerce into the national development.

CERTU, (2010), adds that despite the overall utility of motorcycle transport services for public transportation services across the globe some continents such as Europe has realized the benefits and contribution of motorcycle transport service utilization services in tourism industry. Professionals are recently carrying out intensive research to evaluate the benefits associated with the motorcycle tourism transport services utilization and are assigning their attention towards its significant. This research aims at exploiting the ties which exist between motorcycle transport and its growth in tourism sector on various developed and proposed tourism itineraries (CERTU, 2010). Motorcycle tourism transport services utilization can be used in the reinvention of travel concept in marginalized areas and peripheral urban (Ouadi & Errouso 2022).

Additionally, motorcycle transport services utilization offers a free encounter for interacting with natural attractions in relation to other means of transport such as air, rail and car transport services which may obscure the visibility of various attractions. Unlike other vessels where the trip is often seen as a connection or a move from one point to the other, motorcycle transport makes the trip out the journey, as an experience on its own (Boyer 2018). Hargen (2016), observes that motorcycles transport services have gained a significant role in provision of tourism services through the organization of chartered motorcyclist clubs which uses motorcycle transport to experience various tourism attractions; this has resulted to adequate distribution of tourism benefits in a specified region. AMA also verified that various motorcycle routes in countries like Switzerland that has cycle routes which transverses through popular attractions like mountains, forests and cities and towns, thus providing sight excursions for both special, rural and urban attractions, and also first-hand experience.

Motorcycles transport services have the ability to create more destination time at a low cost compared to other public means of travel (Huang, 2024). Motorcycle transport service relative travel time from one point to another is quite low thus sparing more time for the destination activities. More so, the travel cost is also low will make the tourist to more disposable income for destination expenditures. More time and more income at the destination is likely to trigger more consumption compared to when time is highly constrained. Hence motorcycle transport service being considered as an alternative option for motor vehicle transport in service provision will maximize urban tourism product consumption.

It is usually believed that when all factors are held constant, price and convenience determine the satisfaction levels due to available transport means at a given destination (Malhado & Schnierer, 2013). Sam, and Roy, (2023), additionally note that locals are troubled with punctuality, frequency and waiting times issues which arise from the common means of transport delays; therefore, proper means of travel have to be adopted. Le-Klahn, Hall and Gerike (2015), further add that tourist experiences and satisfaction are influenced by means of transport; in the sense that, a mean that is likely to promote higher destination interaction and/or able to enhance

more information sharing about the destination attracts more utility. They also argue that motorcycle transport services utilization creates high visibility of signage towards various attractions driving demand towards distinct and new areas.

Motorcycle transport services utilization encourage close contact and encounters with various attraction systems thus an impulse and spontaneous consumption of different products. More so, increased consumption of tourism resources is boosted within open vessels than the enclosed vehicle vessels (Schofield, 2019). Thompson adds that the parking space for motor cars is relatively far away from the consumption point which creates wastage of time in moving from the vehicle to the attraction site and then returning back, which means that visitors have to use more time on travel.

Walker, (2011), adds that utilization of motorcycle travel services means that you are taking the road, eating the road and living by the road where the route map is equally important as the final destination. Countries such as Argentina have specific destinations like Andes Highland where motorcycle transport services have been consumed by conventional tourism fanatics, who perceive the challenges encountered on the long stretches of the desert, being rained on and stormy or windy conditions as part of the experience being sought (Scherhag & Gross 2022; Scol, 2016). Similarly transit experiences are quite important as they assist in dispersing population concentration at a given centralized destination, making tourism product to be sustainable. It is believed that the attractiveness of the road is part of tourism and its enjoyment has been mentioned by many of French cyclists. This has meant that if the road can be experienced as a tourist attraction, then MTS utilization designates a lot of time within tourism visited areas (Pinch & Reimer, 2012).

Thompson, (2013), supports that the activity is well known within the North American countries due to the famous rallies like the *Sturgis Motorcycle Rally* in the Dakotas and the *Daytona Beach Bike Week* in Florida. Gronau (2013), enlightens that American continent has also been served by the use of motorcycle transport services in tourism where it's famous Route 66 that connects western and eastern part of the United States serving thousands of tourists a year. Similarly, a bike trail is observed from Chicago to Los Angeles and is unidirectional for people who are willing to

attend an essay or a film shooting within Los Angeles, which resulted to relocation from northern America and eastern America. This meant that with motorcycle transport service utilization in an area can be used to appreciate the existing natural resources as observed in the US where they film production of Dennis gain recognition through the influence of motorcyclists (Frash, Blose & Smith, 2018). Cater (2017), adds that whether the travelling is formally or informally organized the stay tends to be longer, hence the viability of the product. Furthermore, Weddell's (2014) findings, back Cater's idea, where majority of the travelers spent their nights in motels at an expenditure of more than \$1000 on entire trip. Thus, motorcycle transport has the possibility of increasing the revenue base of a given tourism destination.

The current rise in urban mobility has forced the shift from ordinary travel means to more informal ones; this has contributed to the intrusion of motorcycle transport services utilization into the general public urban transport system; thus, making motorcycle transport service utilization to control an adequate share of almost 30% of urban mobility. Adventure motorcycles within the European continent have been observed to have a share of around 6.8% of the overall 14.3% of motorcycle transport service utilization within the continent.

More so, the impact of corona virus resulted in the drop of common means of public transport in the sense that motorcycle transport service utilization effectively filled the gap in the year 2020, (Cheng, 2020; WHO 2020). Motorcycle transport service utilization has also been observed provide the most stable road capacity utilization in relation to car services, (Cheng, 2020). Areas with low population density and low income will only or effectively attract motorcycle transport service utilization, (Yang & Chen, 2008).

Kelly, (2016) states that an adequate transport network aids in sustainable development and consumption of not only static but also mobile tourism experiences. This provides a connection between human capital, infrastructure and social capital at the central point of economic development. Furthermore, emerging destinations have to focus on devising and developing products with appropriate means of transport for

accessing those wide spread tourism resources (Gu, Kim & Currie 2021). High and ease access will promote more sales and revenue generation within attraction sites (Ramirez, 2022). Ramirez further argue that, high accessibility cultivates the experience due to frequent interaction with tourism facilities, potential resources and products; correspondingly, continuous interaction with crowds' experiences that will immerse guest to experiment new and alternatives resulting from encounters along their travel routes.

Kraft, Blazek and Krovova, (2024), suggest that tourists find more pleasure in motor vehicles and cycles that offer private transport services rather than public transport means hence influencing their length of stay and the number of areas visited per session; thus, increasing expenditure levels within a given destination (Le-Klahn, Gerike & Hall, 2015). High expenditure levels within the motorcycle sector have been related to club activities and bike-sharing, making a destination to project a positive sheer in her tourism business. Similarly, transport means that offer flexible transport services at a relatively low cost provides extra income and time for tourists to spend at a destination (Julio & Gutierrez, 2021). Therefore, motorcycle transport services will be of value to tourists via offering more utility for the existing tourism resources and experiences (Lew, 2008 & McKercher, 2004).

Guiver, (2013) and Stanford, (2014), further note that a mean of transport that requires less planning and involvement is a first-choice preference for the guests since it creates a humble time for tourists to consume destination services by focusing demand towards a given destination. Mobility functions of motorcycle transport service use has increased consumption of tourism resources along busy motorized highways, Ganzoni, (2022), as an effect of limited requirements in terms of resources, information and diffusion. Therefore, integrating motorcycle transport services into the general transport industry will lead to increase in the number of arrivals at a particular destination (Susilowati, 2019).

Khayesi, (2021), notes that the failure of many tourists being unable to access self-drive services of motor cars reduces the propensity levels and the participation for independent tourists to explore destination, therefore an alternative form of transport

that could offer cheap, less skills and proficiency of operating in travel operations such as motorcycles, will encourage individuals in the middle and low class levels to pursue leisure activities as conceivable rather than the affluent class alone. Furthermore, Behrens, (2019), claims that majority of local citizens and domestic tourists have been unaware of the locally defined geographical tourism destinations due to transport problems; of which can be leveraged by developing and proposing suitable means of travel that will offer an insight into the existing tourism product ultimately increasing the consumption of various products.

African cities being nether most on motorcycle use in leisure activities, the activity has been promoted virtually through sharing of various videos showing how the activity is appreciated by different states across the globe. Scol, (2016) and Bourdeau, (2009), state that motorcycle transport services assist in the utilization of adventure products which are preferred by the adventure seekers such as desert cruises, mountain biking, sport and rallies. Such adventure encounters have been limited exposure from the conventional public transport means. More so, Scol (2016), noted that African continent had positioned herself as a best destination for motorcyclist tourism where 34 of her countries have been witnessed to entice motorcycle transport service use in consequence attracting a market share of between 5%-6% for the foreign nationals in her major adventure destinations after Europe where 39 of her countries integrate motorcycle transport in the inclusive tourism sector.

Weddell, (2014), says that motorcycle transport services have gained significant value in international tourism transport services, where Weddell observes that motorcycle have been realized to cover a distance of more than 1500 miles on touristic activities and an average stay of four nights away. Additionally, it has been found to also serve intercontinental tourist transportation where great rallies have been organized across Paris and Senegal. Within the continent there was also an organized group of travelers from Tunis to South Africa (Ogunsanya 1981; Olawo 2014 explain that some African countries have also adopted motorcycle transport services, this has been evident in countries like Nigeria, Uganda, Tanzania, Ghana, South Africa and Zimbabwe with South Africa leading in the organization and hosting of cycling events for local, national and regional tourism development.

Cater (2017), notes that motorcycle leisure activities have also increased with increased motorcycle transport services licensing in some countries like US, UK and Wales compared to the past years where it was mainly use for commuting purposes. The motorcycle transport service consumer group is observed to be a more economically viable due to the diversity of interest in terms of travelling characteristics, activity participation and exploration of more unknown places (DfT, 2009). Active forms of travel in tourism encourage participation of the guests in leisure activities, augmenting the satisfaction levels; whereby satisfied guests positively market a destination or become loyal to the brand (Bentley, 2010; Currie, 2014), hence they maintain and/or increase the expenditure levels.

Falconer, (2014), adds that availability of travel means in an area increase the mobility and accessibility options which provides reliable sources of information that may promote transportation and consumption of services. Delivery of information and service substitutes for the physical travel, which serves as a crucial function raising consumption within a given area. Improving land use features and infrastructure such as aviation structural sites, development of natural sceneries, mobility and transport services through a good network system surges the value of destination both locally and internationally, (Currie & Falconer, 2014; Toth & Vasa, 2014). Additionally, Tang and Cai (2022), argue that some means of transport that characterize a particular place may become tourist destinations in their own way and forms main attractions in some cases.

2.5 Theoretical Framework

The study integrated various theories where each research concept was addressed by a respective theory. Majority of transportation functions have been explained by network transportation theory that combines both routing and networks graphic models. The theory was developed and applied by Chen, Xi, Liu and Li (2020). They reflect on how various elements of the transport systems have been interlinked and behave to enhance transport services. The theory explained that a well-distributed network and routes enhanced the effective flow of people and goods to the market areas. The studies were based on assumption that an adequate road network reduces the immobility rates of items which reduces wastage and associated costs. The study

exploited the network transportation theory by discussing three concepts that are related to it. This includes the second phase of the graph theory, the KANO model and the utility theory.

Destination accessibility was discussed using the graph theory which explains the traveling salesman problem where the salesman has to travel to various points but only once through a specific point in order to reduce the re-visitation of points. The salesman also wishes to use the possible shortest route to access various points in order to cut the cost of operation. The Hamiltonian circuit in tourism applies to these concepts in the sense that the traveler wishes to select the route that is more interesting and with more possible serviced areas, which could provide the shortest and most effective means of travel. Efforts to reduce the distance, travel time, and cost are significant in enhancing profitability margin within an attraction site. The graph has vertices and edges which define various points and connecting links that make it function as a whole. This provides a possible combination that will connect various nodes to the entire system using the diversity of paths that can be used to access the nodes.

The graph theory uses the Traveling Salesman Problem to explain travel patterns, whereby an individual has to pass through various cities using the shortest route with a lot of ease at a relatively lower cost (Qin, 2020). Salim, (2020), says that Travelling Salesman Problem is used in analyzing consumer problems using a time series of sequence-to-sequence framework to analyze how people and goods move from one to another without regressing or detouring.

Traveling Salesman Problem, has been used in analyzing routing vehicle problems, that provide minimum distance covered from one point to the other while offering maximum independence among the users (Ngnotchouye, 2017). It provides an opportunity for one to transverse a particular City, town or attraction site only once using the minimum total length possible to the neighboring destinations. Traveling Salesman Problem aims at evaluating the performance of a given element using alternative means other than the fixed routes or procedures that are normally taken on (Yapicioglu, 2018).

Local visitation within attraction sites can be capitalized by the use of motorcycle transport services either in a hybridized manner or in a generic manner to complement motor vehicle services or provide feeder services as a common means of travel in remote areas (Tilahun & Goshu, 2017), Traveling Salesman Problem explains available alternatives where various means of transport can access our destination at the same time by use of different routes rather than relying on the main transport highways.

Tourism product innovativeness was addressed using the KANO model, identified impacts by prioritizing features of a product to define its preferences and chances in satisfying customers. Product planners may be on the margin of developing a satisfying product and the cost of implementing it, on whether it will impact positively or negatively on product options developed versus the returns. Finding an appropriate route to which the product team can prioritize the initiatives for maximum benefit generated is the main objective of the model. Potential new features are also included the categorization of products through the imposition of decisions aiming to achieve higher satisfaction levels that make the customer delighted. The model distinguishes the strict focus on how customers react to each feature hence distinguishing it from other popular frameworks.

The model provides the value for which product features can be evaluated against the complexity of implementing them according to how much actual or potential value will be brought; this assists in standardizing the decision-making parameters. KANO model explains the framework through unique factors that can contribute to high customer satisfaction and loyalty levels amongst the current and potential consumers (Pandey, 2022).

Urban tourism product consumption was discussed based on utility theory which focuses on individual preferences by explaining how individual behaviors ranks their various preferences upon numerous decisions. It explains how different individuals will show varied partialities that are significantly different from the other individuals. The theory focuses on individuals' observed behavior and choices. Utility theory assumes that individuals have clear preferences that enable them to rank the order of

services depending on desirability and level of satisfaction, in a command that is from the most satisfaction to least satisfaction.

Utility theory argues that however many options have been placed in combination at the presence of the consumer an individual will always run ranking scale on the desirability to suit the preferences available. This means that individuals can compare your bundles and define the order of preference that is more reasonable and complementary. The completeness of a service will initiate more preference and desires in relation to products or services that do not have finality in terms of enhancing customer satisfaction. Motorcycle transport services provide an opportunity for customers to experience more final destination and experiences that could be otherwise be overseen by motor vehicle services.

Mapfurira (2023), also states that a bundle which provides more opportunities to the consumer is better than one which offers only a single product especially where individuals prefer to consume complete halt products in comparative to discrete products for experience consistency. Therefore, promoting motorcycle transport service alongside motor vehicle transport services will promote consumption levels of the urban recluse tourism services and products within areas that have the potential of consumption.

Motorcycle transport services was found to offer a mixed and more options from which the customer can select from; depending on his or her convenience, affordability and preference. This provides an option to increase consumption levels of a given tourism product services in relation to when motor trade was only focusing on vehicle transport services. The theory also explains the rationality principle where individual principles avoid all kinds of circularity making the main preference be considered over other multiple choices, motorcycle transport services can offer an option for individuals to select depending on their preferences. The theory works in the mode that people make decisions by assigning imaginary values to the original monetary values decisions.

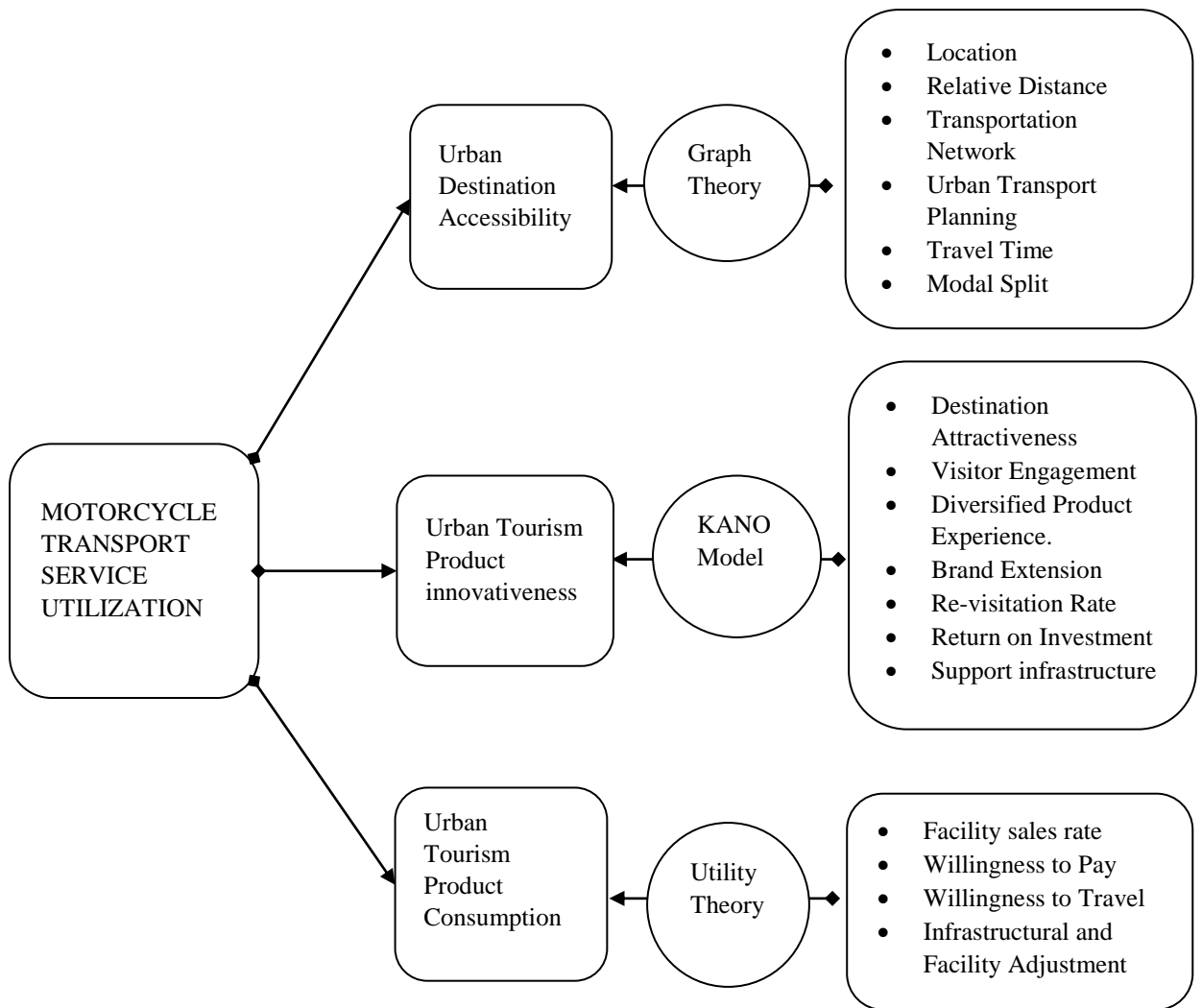


Figure 1: Theoretical Framework (Belio 2016; Kano 1979 & 1984; Kahneman & Tversky's 1979).

The above theoretical framework will be supported by the conceptual framework in Figure 2.

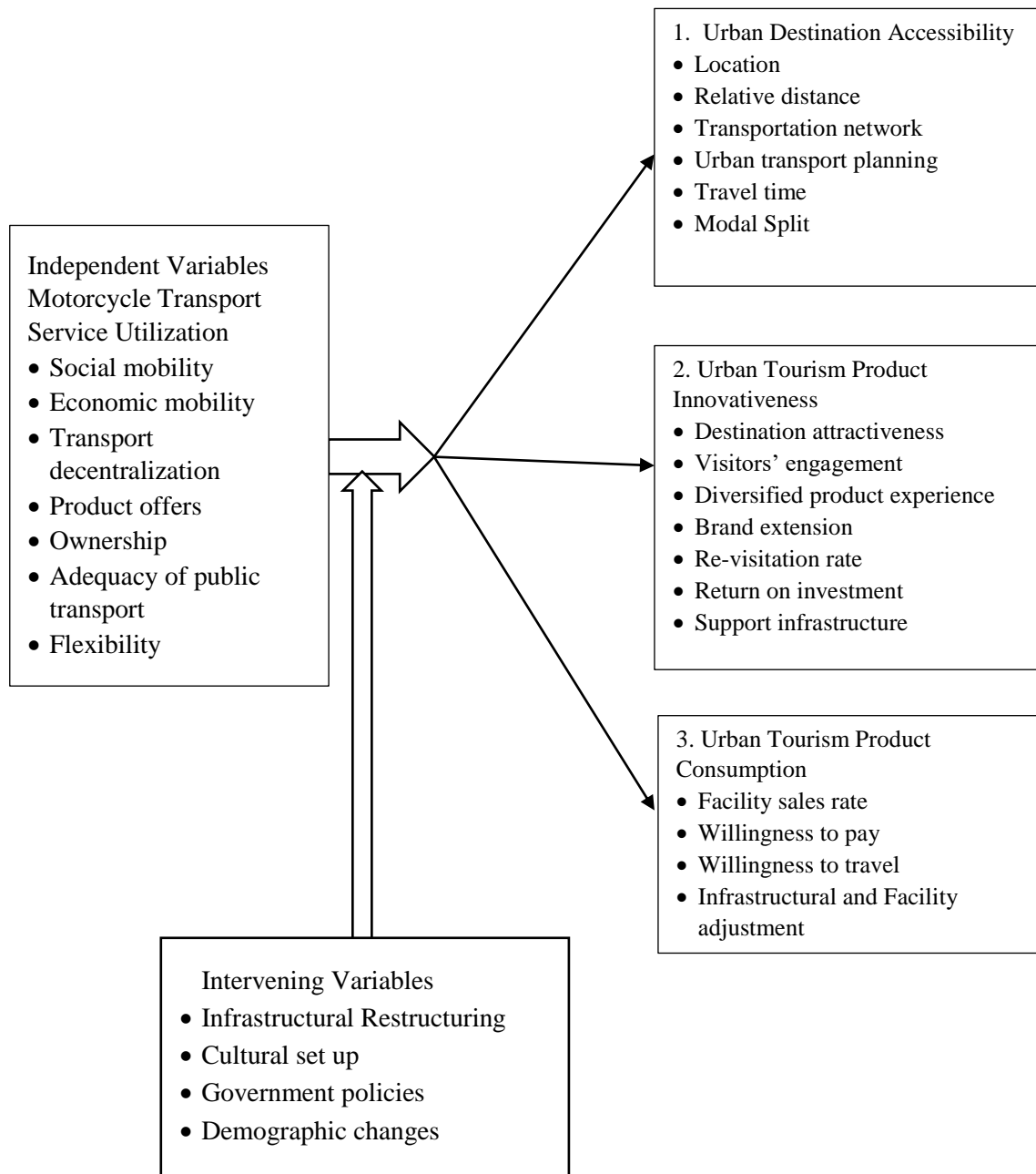


Figure 2: Conceptual Framework (Author, 2024)

CHAPTER THREE

METHODOLOGY

3.1 Study Area Characteristics

Busia County is located in Western region of Kenya at latitude 0° 25' and 59.99" North and longitude 34° 08' and 60.00" East. The County covers an approximate area of 1,700 Km² with a hot and wet climatic condition, averaging between 760mm and 2000mm of rainfall with a temperature range of 26°C-30°C annually. It has two urban areas with a population of about 886856; while the urban population is 85604, (KNBS, 2019), aged between eighteen years and above (KNBS 2010; 2019). The main economic activities in the area are agriculture (both livestock and crop production), bee keeping, mining, tourism and trade.

Tourism within the county is at involvement stage. The main urban and proximal attractions include attractions not limited to; border town border point, Alupe Leprosy Centre, Samia Hills, Kavirondo Series rocks and Sio Siteki Swamp in Busia town. Malaba town has attractions such as Malaba Border Point, Kakapel National Monument, Chelelemuk Hills, Mawazo Botanical gardens, Teso Gardens, Katotoi Hills and Amagoro open air market which have the potential for development to service both local or international market levels, (Busia County Integrated Development Plan, 2020).

The county currently receives an approximate of about twenty thousand tourist per annum of the total tourist arrivals. Tourism in Busia County has advanced due to cross border activities and has been serviced by informal transport means, (Busia County Integrated Development Plan, 2020). The diversity of potential products such as; cross border tourism product, urban nature-based tourism, cultural tourism, museum tourism and agricultural tourism defines the county as a viable tourism hub suitable for development. The research was confined within the urban centers like Malaba and Busia, where motorcycle transport services are observed to services destinations such as Chelelemuk hills and Katotoi hills to the north; while Kakapel rock monument, Samia hills and Sio Siteko Swamp to the south as shown in the Figure 3.

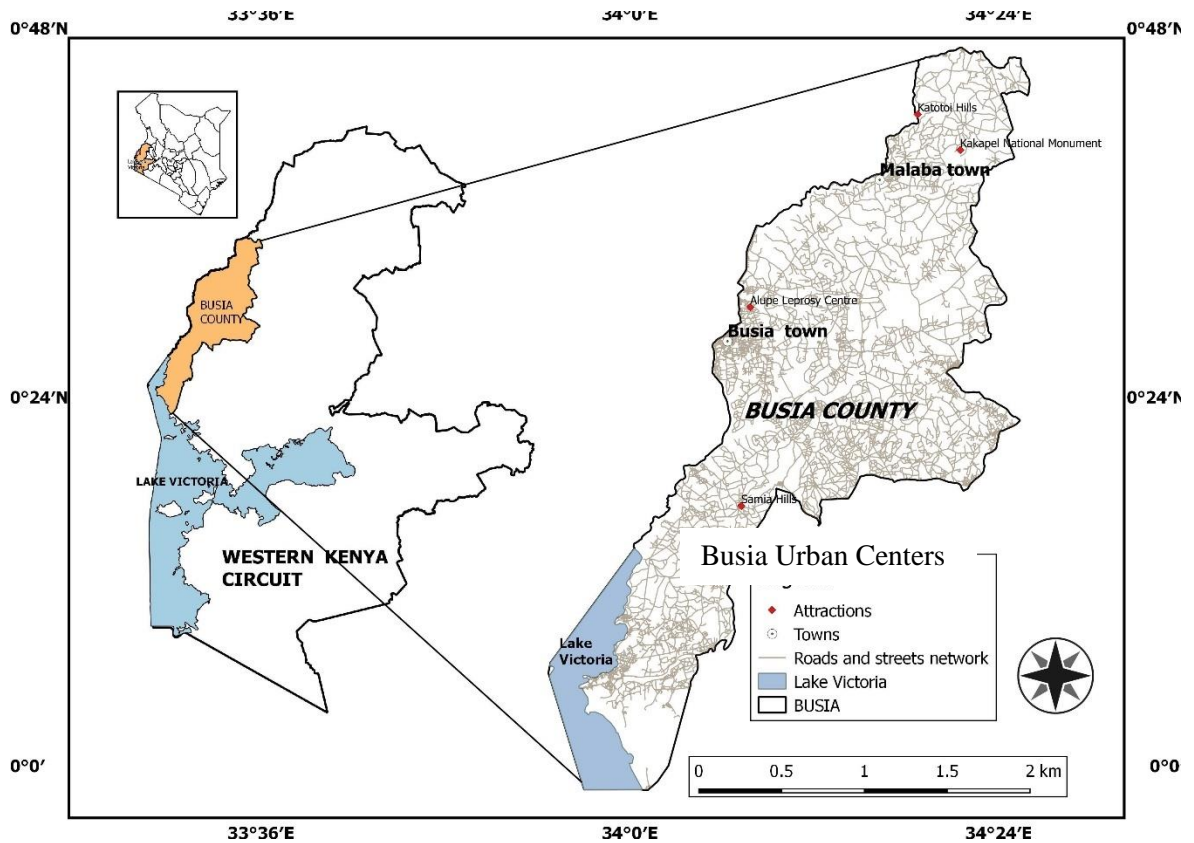


Figure 3: Map for Busia County and Teso Sub Counties

3.2 Research Design

The research utilized retrospective cohort research survey design adapting embedded research approach which guided data collection for the study. The assisted in determining the effects of motorcycle transport services inclusion in tourism transport system by gathering information from different groups of people within a specified time from different geographical areas; while the approach enabled the collection of qualitative and quantitative data from the study sites, (Thomas, 2022). The design assisted to obtain similar data in different areas from similar respondents, who are tourists, arriving within Busia County urban areas. The respondents were grouped into pools drawn from various wards that helped to collect data.

3.3 Population of the Study

The study focused only on demand side by targeting the tourists who visited the destination's attraction sites, facilities and visitor information centers. The study population was 20000 tourists' (Busia County Integrated Development Plan, 2020); annual arrivals within Busia County. Both domestic and international tourists formed

the target group. The criterion of deriving the target population is illustrated on the Table 1. The target sample (tourists) per study site was obtained from tourism facilities within selected sampling units wards.

3.4 Sample Size and Sampling Procedures

3.4.1 Sample Size

The study targeted 112 tourists from Malaba town from all of its six main attraction sites and 280 tourists from all five attraction in Busia town. The sample size was determined using Slovin Sampling Formula ($n=N/ (1+Ne^2)$). Despite using the Slovin's formula to determine the sample it is difficult from the formula to identify the statistical power and population proportion per each site in research.

$$\text{Sample size}=n=N/ (1+Ne^2)$$

N=Target population

e=Error Term

Confidence level at 95%

$$=20000\{1+ (20000*0.05^2)\}$$

$$= 20000(1+50)$$

$$=20000/51$$

$$=392.1568\approx 392$$

An error term of 5% a sample size of 392 respondents was selected from the target population that focused on tourists' numbers in Busia County. The wards near urban centers were purposely selected to form the sampling regions.

3.4.2 Sampling Procedures

Busia town and Malaba Municipal study regions were purposely selected for study because of the increased social functions of motorcycle transport services; the topography and economic potentials of motorcycle services. The regions fall into two divisions (Teso North-Malaba town and Teso South-Busia town) each with six administrative wards, four wards were selected purposefully based on their nearness to town, motorcycle activities and availability of tourist attractions. These formed the research areas from which the research sites were generated. Census sampling was carried out on all the urban attractions that have been listed by the tourism registry

and arrival scheme of Busia County in each urban area. Quota sampling was used to select the respondents from each study area until each quota sample population is saturated

Table 1: Population of the Study

Sub-County Population n-A	Urban Population n-B	Number of Tourists/Target Population n-C	Sample Population -D	Sample Population per Sub County-E	Sampling Area/Attraction Area-F	Sub population Per Study Site-G	
Teso North-138034-A1	24659-B1	Annual tourists' arrivals =20000	$n=N/(1+Ne^2)$ =392 tourists	$E1=(B1 \div B)D$	F1=6	G1= $E1 \div 6$	
				112 tourists	Malaba Border Point	19	
					Kakapel National Monument	19	
					Chelelemuk Hills	18	
					Mawazo Botanical Garden	19	
					Teso Gardens	19	
					Katotoi Hills	18	
					$E2=(B2 \div B)D$	F2=5	G2= $E2 \div 5$
					280 tourists	Busia border Point	56
						Alupe Leprosy Centre	56
		Samia Hills	56				
		Kavirondo Series	56				
		Rocks					
		Sio Siteki	56				
		Swamp					

3.5 Data Collection Procedures

The data was collected by the researcher who administered the semi-questionnaires to individual respondents. Primary data was collected from selected respondents from

the field; questionnaires were issued out, filled by the respondent at the researcher's presence; for clarification in case of any ambiguity and collected. Data collection was done only within the urban areas of Busia County that is Busia and Malaba municipalities from various tourism and hospitality sites.

3.6 Data Collection Instruments

The research used one set of questionnaire to obtain specific individual details from the target population. The questionnaire comprised of closed-ended questions with a Likert scale and some open-ended questions for collecting specific data while allowing respondents to generate details without giving lengthy explanations for qualitative data. Questionnaires helped in collecting data from various study areas for analysis. Data on specific objectives was collected using a 5- Likert scale based on various independent attributes. Using the questionnaire only was necessary to reduce data collection time and provide accurate results free from researcher's biasness, as for the case of interviews and observation. From the study a sample of 392 respondents 350 was accurate for analysis while 42 had incomplete, some were not filled at all while some had duplicated responses.

3.7 Piloting Study

The pilot study was carried out in Trans Nzioa County Kitale town, which had reputable activities of urban motorcycling services. The town has also appropriate urban tourism attractions sites such as Kitale national museum, Kitale club, Kitale nature conservancy and Ndura Park. The pilot study assisted in determining the content validity and internal consistency for this study. It also enhanced the improvement of the research instrument being used.

3.7.1 Validity

The degree of accuracy in the research instruments was ensured through carrying a reconnaissance study to test the instrument for evaluation of its content applicability by the supervisor. Simple structured, clear and similar questions probing similar or almost similar understanding was used in the questionnaires. The instrument assisted in finding out the extent to which the indicators measure each respective variable

(Content validity). The headings were bolded and clearly in all the questionnaires for clear visualization by the respondents

3.7.2 Reliability

The research was carried out from similar groups of participants within a comparable defined time frame to ensure consistency and accuracy in data collection. Incorrect, incomplete and duplicate data was not be included in the final analysis. The research tool was used to determine how different respondents provided similar information on various indicators under study (Internal Consistency); by analyzing the level of understanding of each variable under study.

3.8 Data Analysis

The data collected was first of all organized and transformed based on various variables and indicators under study. Data was categorized and sorted based on various attributes such age, education, occupation, motorcycle usage, and objectives indicators measurements attributes as a primary basis for organizing and reporting the findings. Data was edited, cleaned by removing duplicate and incomplete data sets and then coded using the Statistical Package for Social Sciences (SPSS). The analysis was based on each variable and its predictors to determine the relationships across various determinants.

Coding assisted in interpreting the information and introducing the interpretations into quantitative methods, descriptive statistics was used to determine the mean, mode and averages of the data set using tables and percentages. Findings from each objective were analyzed independently. Demographic and socioeconomic characteristics were analyzed using descriptive statistics, motorcycle transport services utilization was analyzed using regression analysis, using the formular below.

$$Y=a_1X_1+a_2X_2+a_3X_3+b$$

Depended variables on motorcycles transport service utilization like urban tourism destination access, urban tourism product innovativeness and urban tourism product consumption were analyzed using categorical analysis, to determine how different

explanatory variables contributes and relates to the variable under investigation. Qualitative data obtained was analyzed using narration to gain better understanding from the data for variables under study. Each objective was discussed based on the various independent indicators under study.

3.9 Data Presentation

Data was presented using tables so as to be able to obtain intermediate information. Tables and percentages assisted in presenting key variations in each indicator.

3.10 Reporting

The research was reported in written format supplemented by oral presentation to the panel. It was addressed based on objectives and shared with the affected individuals to use for decision making process.

3.11 Ethical Consideration

All the results collected included both the primary and secondary data from the respondents with no control or guidance of their views and ideas during the field study. Privacy and confidentiality of the respondents was enhanced in order to provide room for free, just and easy time for feeling the questionnaires. The research was carried out based on objectives but not the intentions or views of the respondents and the researcher. The findings were reported as the way they were collected with no element of subjectivity on either the positive or negative results collected. The researcher obtained introductory letter from the Chuka University ethics committee (Appendix II) and from Chuka University Board of Postgraduate Studies (Appendix III). The researcher also obtained a research permit from (NACOSTI) National Commission For Science, Technology & Innovation (AppendixV) before conducting the study in Busia County.

CHAPTER FOUR

RESULTS, ANALYSIS AND DISCUSSION

4.1 Introduction

The target population for the study was 20000 tourists visiting Busia County annually from which a sample population of 392 tourists was chosen and the response rate was 89.3%. this study was set with objectives of determining the contribution of motorcycle transport services utilization on urban tourism destination access, product innovativeness and product consumption. The findings are reported with reference to above objectives; through the descriptive, regression and categorical regression analysis. Inferential statistics (regression and categorical regression assisted in testing the hypothesis at a significant level of $p \leq 0.001$).

4.2 Socio-economic Characteristics of the Respondents

The tourists were asked to indicate their origin; it differed considerably where 239 (68.3%) respondents were Kenyans while 111(31.7%) respondents were foreigners. In relation to gender 218 (62.3%) tourists were male and 132 (37.7%) were female.

Tourists were requested to specify their education statuses; education levels differed showing that 159 (45.4%) respondents had achieved their college/vocational training, 151(43.1%) had achieved secondary education, 19 (5.4%) had attained primary education, 15 (4.3%) had tertiary/university training while 6 (1.7%) had not attained formal education. This is shown in Table 3.

Table 3: Level of Education

Level of Education	Frequency	Percent
None	6	1.7
Primary	19	5.4
Secondary	151	43.1
College/Vocational	159	45.4
Tertiary/University	15	4.3
Total	350	100.0

Tourists were requested to designate their state of employment which showed that 50.3% (176) of tourists were self-employed, 40% (140) employed and 9.7% (34) were unemployed. This is as shown in Table 3 below.

Table 2: Employment Status

Employment Status	Frequency	Percent
Employed	140	40.0
Self-employed	176	50.3
Unemployed	34	9.7
Total	350	100.0

Tourists were asked to indicate in which their ages differed whereby 43.1% of the tourists were aged between 31-35years, 35.4% were aged between 36-40years, 6.9% were aged between 41-45years, 5.4% were aged 26-30 years, 4.3% were aged 46-50years while 2.9% tourists were aged above 51years. Only 2% of the tourists were aged between 18-25years, as shown in *Table 4* below.

Table 3 : Age of the Tourists

Age in years	Frequency	Percent
18-25yrs	7	2.0
26-30yrs	19	5.4
31-35yrs	151	43.1
36-40yrs	124	35.4
41-45yrs	24	6.9
46-50yrs	15	4.3
51 years and above	10	2.9
Total	350	100.0

Tourists were requested to state their monthly income which showed that 45.7% of the tourists had a monthly income of between 21000-30000Kshs., 35.1% earned between 31000-40000Kshs., 10.6% earned between 11000-20000Kshs., 6.3% earned above 40000Kshs. while only 2.3% earned between 1000-10000Kshs.

Table 4: Monthly Income of Tourists

Monthly income in '000 Kshs	Frequency	Percent
1- 10	8	2.3
11-20	37	10.6
21-30	160	45.7
31-40	123	35.1
Above 40	22	6.3
Total	350	100.0

Tourists were asked to indicate their monthly expenditures; which showed a considerable variation whereby 45.4% spent between 10000-20000Kshs., 43.7% spent between 20000-30000Kshs., 4.6% of the tourists spent between 5000-10000Kshs.,

4.3% spent between 10000-5000Kshs., and at least 2% of the tourists spent above 30000Kshs, as shown in *Table 6* below

Table 5: Tourists Monthly Expenditures

Expenditure in ‘000Kshs.	Frequency	Percent
1- 5	15	4.3
5-10	16	4.6
10-20	159	45.4
20-30	153	43.7
Above 30	7	2.0
Total	350	100.0

Tourists were asked to rate their expenditure levels on leisure services; the results showed was different ratings, where 68.3% were spending between 5000-10000Kshs., 19.7% were spending between 10000-15000Kshs and 12% were spending between 1000-5000Kshs on leisure services and related activities. This is illustrated in *Table 7* below.

Table 6 : Monthly Expenditures on Leisure Services

Leisure Expenses in ‘000Kshs.	Frequency	Percent
1-5	42	12.0
5-10	239	68.3
10-15	69	19.7
Total	350	100.0

4.3 Tourists’ Perceptions of the Use of Motorcycle Transport Services

Tourists were requested to indicate their perceptions on the use of motorcycle transport services. The results showed there was a relationship between motorcycle’s availability and its use in travel within attraction site. Motorcycle transport service utilization variable; was measured using 11 predictors from which 7 predictors were limited to preference means of travel, servicing substantial distance of travel, urban connection, acceptance rates suitable for urban networks, observable within attraction sites and contributing urban sites movability were analyzed by regression to determine their relationships while the first 4 predictors; limited to use, frequency of use and possible alternative used; were described qualitatively. The findings showed that majority of the respondents had used motorcycle transport services to reach at least a tourism destination, where 197 (56.3%) agreed to have used while 153 (43.7%) disagreed to have used two-wheeled motors. As the number of users was observed to

be high (56.3%), the frequency of use tends also to be high as well. Table 11 below shows that motorcycle transport services were more often 212 (60.2%) used for tourism services. It is also evident that an adequate number of tourists could have or infrequently 113 (32.3%) use motorcycle services. A low number of 15 (4.3%) reported to use motorcycle transport services. Those who don't use at all and most often use motorcycle transport services were found to be the least at 5 (1.4%) each. This is illustrated in the *Table 8* below.

Table 7: Frequency of Motorcycle Transport Use

Usage rate	Frequency	Percent
Not at all	5	1.4
Very rare	15	4.3
Rarely	113	32.3
Often	212	60.6
Most often	5	1.4
Total	350	100.0

The tourists were asked to rate their frequency of use; tourists showed varying perceptions and opinions responses as to why they used or intended to use motorcycle transport services while pursuing their leisure activities within Busia County. Tourists' opinions were broadly grouped into five specific issues of interest limited to; cost efficient, time management, flexibility, accessibility and personalized services. The majority said that motorcycle transport services were effective on time management 226 (64.6%); followed by cost-effective 220 (62.9%); moderately viewed MTS as flexible and accessible means of travel at a frequency of 121 (34.6%) and 120 (34.3%) respectively while a few 51 (14.6%) noted it a more personalized mean of tourism travel. On the other hand, non-users presented alternative means they have been using to access destinations rather than motorcycles. These included scooters, taxis, and squads; whereby the majority 121 (34.6%) associated themselves with scooters, 70 (20%) with taxis, and 32 (9.1%) with squads; as illustrated in the *Table 9*

Table 8: Reasons for Use of Alternative Means Used

Variable	Predictor	Response	Frequency	Percent %
Why use motorcycle transport services	Cost efficient	Yes	220	62.9
		No	130	37.1
	Time management	Yes	226	64.6
		No	124	35.4
	Flexibility	Yes	121	34.6
		No	229	65.4
	Accessibility	Yes	120	34.3
		No	230	65.7
Personalized services	Yes	51	14.6	
	No	299	85.4	
Which alternative means of transport	Scooters	Yes	121	34.6
		No	229	65.4
	Taxi	Yes	70	20
		No	280	80
	Squads	Yes	32	9.1
		No	318	90.9

The independent variable was motorcycle transport service utilization.

The dependent variable was, “urban tourism product performance in Busia County” was analyzed focusing on various parameters such as destination access, urban product innovation and urban product consumption. Additionally, qualitative data (respondent opinions) obtained on motorcycle transport service utilization was analyzed using descriptive statistics.

Tourists were asked to indicate some of the services motorcycle means provide in tourism transport for it to be conserved an appropriate mean of leisure travel. Regression analysis was used for inferential analysis of the independent variable on its various indicators. The scores for the model fit were: $R^2 = 0.782$, Adjusted $R^2 = 0.603$, $F = 76.753$ and $p \leq 0.001$. Adjusted R^2 was 0.603. This means that the model can explain variability of approximately 60.3 % of the data. Six out of seven coefficient predictors proved significant at $p \leq 0.001$, which included; motorcycle transport services as preferred means of travel ($p = 0.000$); they cover a sensible distance ($p = 0.000$); appropriately connects urban tourism sites ($p = 0.000$); suites well within the urban transport network ($p = 0.000$); accepted by the locals and tourists ($p = 0.000$). and contribute to urban attractions movability ($p = 0.000$). Only one predictor was insignificant which was motorcycle noticeability within attraction sites ($p = 0.253$). This is as shown in Table 10.

Table 9 : Coefficients of Motorcycle Transport Service Utilization

Motorcycle transport service utilization	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
Do you think motorcycle transport service can be a preferred means for use in accessing attraction sites?	1.031	.116	.313	8.910	.000
Does it have the ability to serve a reasonable tourism distance (40kms)?	1.490	.109	.479	13.657	.000
Do you think motorcycle transport services can appropriately connect urban tourism sites?	1.132	.110	.367	10.322	.000
Do you think the locals and visitors have accepted and appreciated the roles of motorcycle transport services in this area?	.792	.116	.243	6.851	.000
From your observation, do you think the urban network system has suited use of motorcycle services?	1.164	.147	.295	7.910	.000
Motorcycles can be easily noticed in urban tourism attraction sites	.133	.116	.041	1.146	.253
In your opinion, does the body size of a motorcycle contribute to its urban attraction movability and flexibility in the area?	1.356	.125	.394	10.851	.000

Concerning the global statistics of more than 0.77 registered motorcycles for transport, this research also reveals that its use is preferred both the local and non-locals in servicing urban centers. There is a positive relationship with a value of 0.313 on its availability and preference rate among the users, thus supporting the findings of Motorcycle Tourism-MT, 2011; Morris, 2009. Similarly, the findings also showed that motorcycles had the ability of covering more than 40km of travel for leisure and recreation purposes by 47.9%; supporting some research conclusions of Weddell, (2014), who found out that motorcycles have been observed to cover a distance of more than 1500 miles on touristic activities. Its availability will adequately connect the urban areas and link to the neighboring zone 36.7%; this is similar to cases of Ho, Minh, Vietnam and Doualas whose urban centers have been effectively linked through the use of motorcycle transport services according to Kazi, (2021); Sharmeen, and Houston, (2019). Presence of urban transport network with limited public transport means favored the use of motorcycles supporting the results of GoK, (2009) which showed that majority of public means have concentrated on major highways

leaving short and inter-state distances to motorcycles; at B value of 0.295. High urban populace comprising of mid and low-class earners, high mobility functions and agricultural dependency contributed to high movability of motorcycle transport services utilization is relatively high in most developing countries urban centers (Hsu, Sadullah & Dao, 2003 & 2015; Pfaffenbichler & Circella, 2009; 2010 & 2020). The study backs the verdicts by showing a positive relation between motorcycle availability on its acceptance 24.3% and movability 39.4% within urban areas. On the other hand, motorcycle noticeability within attraction 4.1% showed a negative relation thus contrasting Duggin's (2016) observation of being an easily noticeability to serve diverse social spheres of citizens.

4.4 Contribution of Motorcycle Transport Service Utilization on Urban Tourism Destination Access

Tourists were asked to indicate on the questionnaire whether motorcycle transport service utilization contributes to urban destination access. Eight aspects of destination access were considered. Categorical regression analysis was used for inferential analysis of the contribution of motorcycle transport service utilization on urban tourism destination access. The indicators were computed by averaging scores of the 8 indicators on the dependent variable specifically transporting visitors to attraction sites, having quality transport services, availability at various attraction sites, maneuverability, last mile connection, spreading out transport services, reduced cost of travel and encouraging interactions between tourists and attraction sites. Scores indicated that the model was statistically appropriate where: $R^2 = 0.972$, Adjusted $R^2 = 0.969$, $F = 342.790$ and $p \leq 0.001$. Adjusted R^2 was 0.969. This means that the model can explain of approximately 96.9% variance of the data which is acceptable for analysis.

The rate scores of all the eight coefficient predictors showed a significant value at a probability value of less than or equal to 0.001, predictors included: transporting visitors to attraction sites ($p \leq 0.001$); having quality transport services ($p \leq 0.001$); availability at various attraction sites ($p \leq 0.001$); maneuverability ($p \leq 0.001$); last mile connection ($p \leq 0.001$); spreading out transport services ($p \leq 0.001$); reduced cost of travel ($p \leq 0.001$); and encouraging interactions between tourists and attraction sites ($p \leq 0.001$). This is as shown in Table 11 below.

Table 10: Coefficients For Contribution For Contribution of Motorcycle Transport Service Use on Urban Tourism Destinations Access

	Standardized Coefficients		df	F	Sig.
	Beta	Bootstrap (1000) Estimate of Std. Error			
Motorcycles can easily be observed transporting visitors to attraction sites.	.393	.023	4	293.60	.000
Motorcycles are assumed have quality transport services just like the motor vehicles.	.387	.026	4	224.57	.000
Motorcycles are readily available at various urban attractions sites.	.388	.023	4	285.57	.000
There are urban places not accessible by use of motor vehicles.	.314	.022	4	207.72	.000
Motorcycle services act as last mile linkages to majority of urban attraction sites.	.341	.021	4	252.56	.000
Motorcycles assists in spreading out transportation services within urban attraction sites.	.313	.021	4	218.19	.000
Motorcycle transport services have reduced the cost of travel within urban attraction sites.	.391	.020	4	376.99	.000
Motorcycles will encourage close interactions between tourists and attraction sites	.278	.023	4	151.87	.000

Dependent Variable: Destination Access

The results from categorical regression model depicted that all the predictors were significant at $p \leq 0.001$ in determining the contribution of motorcycle transport service utilization on urban destination accessibility. The significance levels of $p \leq 0.001$ of the predictors makes the null hypothesis that “*there is no significant contribution of transport service utilization on urban tourism destination accessibility*” to be rejected. Motorcycles transport service in transporting visitors towards various attraction sites positively enhances destination access. The moderate increase on destination access may be associated to world-wide general perceptions such as its flexibility to the dynamics of transport sector, structure and setting, governing framework, shifting economic statuses and target market; making it to acquire appropriate market share along with other the public transport means as per the conclusions of Rizzo, 2011; Kemtsop and Starkey, 2013; Njenga, 2013. Equally, in some places they are the primary means of transportation, therefore the guest may not or has not option to select; this support Heinen’s 2010 findings.

Motorcycles are assumed to have quality transport services attributes just like the motor vehicles in enhancing destination access. The argument is that if they had poor services they could not be massively imported by the government for use within the general economic sector, Motorcycle Tourism-MT, 2011; Khayesi, 2021. On the contrary, massive importation has compromised quality since the private sector has taken advantage of the liberal importation to control its operations.

Motorcycle transport services are readily available within the urban areas for short-distance travel backing up Moscardo and Pearce 2004; Walker 2017 results, that they are readily available at various urban attraction sites. They are able to reach destinations which motor vehicle are unable to reach confirming Heinen's 2010 findings. There is a positive relation of motorcycles in assisting the spread transportation services within urban attraction sites and connecting urban areas. This matches the American Motorcyclists Association's (AMA 2014), outcomes which showed that utilization of motorcycle transport services in tourism assists enhancing connectivity and distribute tourism-related services.

Furthermore, motorcycle transport services were noted to reduce the cost of travel within urban attraction sites. They are considered to be cheap means of travel that are affordable to many individuals. Previous research also showed that motorcycle transport services had a wide coverage because it was cost effective therefore can traverse large areas alongside it requiring less skill to operate according to Cebon and Samson's (2011) output. Finally on accessibility motorcycle transport services were found to encourage close interactions between tourists and attraction sites, supporting Gerike's (2014), results where he found that the mean is likely to promote higher destination interaction and/or able to enhance more information sharing about the destination due to its physical attributes thus can attract more utility.

The results of this objective agree with the traveling salesman problem in the graph theory Tilahun and Goshu, (2017). The results suggested that motorcycle transport service utilization is essential in ensuring tourist are able to adequate access to a given tourism destination using shortest but more profitable street networks. This has clearly been represented by the Hamiltonian circuit concept within the graph theory.

4.5 Contribution of Motorcycle Transport Service Utilization on Urban Tourism Product Innovativeness

The tourists were asked to indicate whether there is a linkage between MTSU and urban tourism product innovation. The indicators were computed by averaging scores of the 8 indicators on the dependent variable limited to; enhancing urban tourism experience, co-production, packaging for sale, enhancing urban tourism experience, discovery of new urban tourism sites, facility development, attracting tourism investors and initiating active leisure activities were computed by averaging scores of the dependent variable. The scores indicated that the model was statistically significant where: $R^2 = 0.971$, Adjusted $R^2 = 0.968$, $F = 331.415$ and $p \leq 0.001$. Adjusted R^2 was 0.968. This means that the model can explain of approximately 96.8 % variance of the data which is acceptable for analysis.

Categorical regression analysis was used for inferential analysis to determine the contribution of motorcycle transport service utilization on urban tourism product innovation variable. All the eight coefficient predictors were significant at a probability value of less than or equal to 0.001, this which included: enhancing urban tourism experience ($p \leq 0.001$); co-production ($p \leq 0.001$); packaging for sale ($p \leq 0.001$); enhancing urban tourism experience ($p \leq 0.001$); discovery of new urban tourism sites ($p \leq 0.001$); facility development ($p \leq 0.001$); attracting tourism investors ($p \leq 0.001$); and initiating active leisure activities ($p \leq 0.001$). This is as shown in Table 12 below.

Table 11: Coefficients for Contribution of Motorcycle Transport Service Use on Urban Tourism Product Innovativeness

	Standardized Coefficients Beta Bootstrap (1000) Estimate of Std. Error	df	F	Sig.
Motorcycle transport use is likely to enhance urban tourism experiences.	.368 .021	4	303.75	.000
Motorcycle transport service use will promote urban tourism customer engagement (co-production).	.371 .026	4	198.42	.000
Motorcycle transport services is likely to be packaged for sale.	.412 .023	4	329.92	.000
Motorcycle transport service use will enhance the overall urban tourism product.	.376 .019	4	402.32	.000
Motorcycle transport service use is likely to discover new urban attraction sites.	.315 .024	4	174.62	.000
New facilities such as motorcycle fueling points and travel lanes) are likely to be developed in the area.	.420 .025	4	289.08	.000
Motorcycle transport services are likely to attract tourism investors in the area.	.334 .022	4	233.59	.000
Active leisure products such sport biking can be developed	.391 .021	4	363.22	.000

Dependent Variable: Product Innovativeness

The results from categorical regression model depicted that all the predictors were significant at $p \leq 0.001$ in determining the contribution of motorcycle transport service utilization on urban destination accessibility. The significance levels of the variables of $p \leq 0.001$ makes the null hypothesis that “*there is no significant contribution of transport service utilization on urban tourism destination product innovation*” to be rejected. Motorcycles transport service in transporting visitors towards various attraction sites positively contributes to urban tourism product innovation. Although the predictors significantly contributed to urban tourism product innovation their contribution proportions differed.

Table above showed that motorcycle transport use contributed development of new facilities by 42%. Dewailly’s 2006 findings noted that tourism facilities like camping

sites and events were revived in areas where motorcycle transport service was incorporated, thus aligning with the study's findings. Motorcycle transport services is likely to contribute to the packaging of urban tourism product by 41.5%. This is in agreement with Cater's 2017 findings who said that motorcycle transport services can be packaged and repackaged as products sale and consumption like other transport services outside other safe developed tourism products.

Similarly, active leisure products such sport biking are likely to be developed by 39.1%. As of research carried out by Luambano, (2020), it is stated that MTS use within the public transport sector is likely to initiate promotion of sport biking through organizations. Furthermore, tourists are going to be actively engaged in active leisure activities rather than being passive participants while in the process of connecting and networking their itineraries at attraction sites (Szymanska, Panfiluk & Kiryluk, 2021).

Overall urban product and urban tourism experience were likely to enhanced by 37.1% and 36.8% respectively through the use of motorcycle transport services. Motorcycle transport service use is likely to enhance the overall urban tourism product by 37.1% if it can be developed; this is in agreement with Scuttari's find out, he said that the fascinating journey experiences are likely to neutralize the negative encounters at various tourism sites, thus improving its overall image. Its ability to enhance overall urban tourism experience by low value of about 37.1% may either be attributed to lack of documentation, organization or overlap of functions; this is in relation to the results Prideaux and Carson 2011 in their studies within the North American continent by stating that bike share structure was not well documented making it difficult to determine the extent of use in leisure and related.

Additionally, its ability to promote consumer engagement (co-production) was about 37.1%, although being significant but is in disagreement with other research findings which concluded that MTS promotes high level of visitor engagement through direct and active participation hence contradicting with the study findings. The findings of Baeglehole, 2011; Mueller 2015 outcome who said that engaging tourist in active leisure activities contributes to production of quality services. Finally motorcycle

transport services ability to attract tourism investors in the area was at 33.4% and its ability to discover new urban attraction sites was at 31.5%. These findings are in disagreement of European Commission in 2021 which concluded that majority of the attractions within Australia and US were discovered through the use of motorcyclists migrating from Europe; just like Scuttari’s 2019 findings who stated that motorcycles’ journey experiences contributed to discovery of new activities and sites along the travel route.

Table 12: Potential Motorcycle Transport Service Visitor Packaging Options

Variable	Predictor	Response	Frequency	Percent %	Valid Percent %
Ways in which motorcycle services can be packaged for sale	Sport biking	Yes	213	60.9	60.9
		No	137	39.1	39.1
	Motorcycle racing	Yes	131	37.4	37.4
		No	219	62.6	62.6
	Motorcycle events	Yes	188	53.7	53.7
		No	162	46.3	46.3
	Motorcycle transport services	Yes	137	38.3	38.3
		No	216	61.7	61.7

Table 13 above shows various tourism motorcycle packages that were proposed to be feasible within Busia County as a tourism destination. Majority of the respondents recommended sport biking 213(60.9%); adequate portion of 188 (53.7%) proposed motorcycle events, a few 137 (38.3%) recommended motorcycle transport services and few respondents 131 (37.4%) suggested motorcycle racing. Product innovative findings feature within the scope of KANO model whereby the initial cost of investment into this mean of leisure travel is relative cheap both to the developer and users. It will be effective since it will prioritize route activities hence generating maximum benefits.

4.6 Contribution of Motorcycle Transport Service Utilization on Urban Tourism Product Consumption

The respondents were asked to show on the questionnaire whether motorcycle transport service utilization donated to the overall consumption of urban tourism product within Busia County. Categorical regression analysis was used for inferential analysis to determine the contribution of motorcycle transport service utilization on urban tourism product innovation variable. 7 indicators which included; means for

consumption of urban tourism products, cheaper transport means, encouraging group visits, encouraging repeat visits, creating enough destination time, increasing sales and diversifying visitor activities were computed by averaging scores on the dependent variable. The scores indicated that the model was statistically significant where $R^2 = 0.970$, Adjusted $R^2 = 0.967$, $F = 364.881$ and $p \leq 0.001$. Adjusted R^2 was 0.967. This means that the model can explain of approximately 96.7 % variance of the data which is acceptable for analysis.

All the seven coefficient predictors were significant at a probability value of less than or equal to 0.001, this which comprised: mean for consumption of urban tourism products ($p \leq 0.001$); cheaper transport means ($p \leq 0.001$); encouraging group visits ($p \leq 0.001$); encouraging repeat visits ($p \leq 0.001$); creating enough destination time $p \leq 0.001$); increasing sales ($p \leq 0.001$) and diversifying visitor activities ($p \leq 0.001$). This is as shown in *Table 14* below.

Table 13: Coefficients for Contribution of Motorcycle Transport Service Use on Urban Tourism Product Consumption

	Standardized Coefficients	Beta Bootstrap (1000) Estimate of Std. Error	df	F	Sig.
Motorcycle transport service is an important mean for consumption of urban tourism products.	.332	.020	4	262.59	.000
Motorcycles is likely to offer cheaper transport services	.340	.016	4	424.73	.000
Motorcycle transport services encourage group travels	.325	.022	4	210.71	.000
Motorcycle transport will encourage repeat visits towards urban sites	.362	.019	4	363.96	.000
Motorcycle transport service will be relevant in creating enough time at a destination due to less transport time.	.343	.020	4	304.01	.000
Motorcycle transport service is likely to increase sales rate within urban attraction sites	.363	.019	4	376.43	.000
Motorcycle transport service has a possibility of diversifying urban visitor activities.	.398	.025	4	243.96	.000

Dependent Variable: Product Consumption

The results from categorical regression model indicated that all the predictors were significant at $p \leq 0.001$ in determining the contribution of motorcycle transport service utilization on urban tourism product consumption. The significance levels of the variables of $p \leq 0.001$ makes the null hypothesis that “*there is no significant contribution of transport service utilization on urban tourism product consumption*” to be rejected. Motorcycles transport service use positively enhanced urban tourism product consumption but on a relatively low level. Generally, the low level of motorcycle transport service use in promoting urban tourism product means that there a low correlation across the individual indicators on the main dependent variable.

Table above shows that motorcycle’s ability to diversify visitor activities (39.8%) scored more compared to other variables under study. The studies outcome conforms with the findings of Sheller, Urry, and Imrie, (2000) that motorcycles had the possibility of expanding urban tourism destinations by tapping marginal tourism resources and spreading out associated tourism risks. Moreso, MTS use in tourism is likely to pull new markets cohorts/segments who tremendously may increase tourism market share through expenditures at a destination. From the findings it is evident that when products are diversified the sales rate tend to increase as well; where a 39.8% increase in product volume results to a 36.8% sales increase. The finding supports the scholar’s ideas who noted that the more and effortless the process of access precisely through the use of motorcycle, tends to bring more sales and resultant revenue accruing at the attraction. To add on, motorcycles’ ability to attract crowd prompted more purchases at a given destination, according to Ramirez’ (2022) findings. Likewise, motorcycle transport services utilization was noted to encourage close contact and encounters with various attraction systems thus an impulse and spontaneous consumption of different products, (Thompson & Schofield, 2007). Besides, with diversified tourists’ activities there appeared to be a substantial increase in number of repeat visits at the destination, either to consume services not consumed previously, re-encounter a previous service or experience the diversity at a destination.

Motorcycle transport service was found relevant in creating enough time at a destination due to less transport time, 34.3%, correspondingly motorcycles was observed to offer cheaper transport services 34% within attraction sites. These outcomes conform the finding of other research where it was reported that motorcycles had abilities to promote product consumption by creating more destination time and income compared to other public means of travel (Huang, 2013). More time and more income at the destination is likely to trigger more consumption compared to when time is highly constrained. Hence motorcycle transport service being considered as an alternative option for motor vehicle transport in service provision will maximize urban tourism product consumption. Additional acquiring self-drive services for motorcycle vessels was cheaper than acquiring a taxi or other public means, according to Khayesi's 2021 observation. Previous research confirmed the same by stating that actual travel time reduced significantly by use of motorcycles which was dedicated to destination sites., and provided more chances for touch point experiences, according to Beckert, 2007; Walker, 2011; Graham and Wood, 2017; Hui and Habib, 2014; Winter, 2009.

Table 15 above shows that most tourists visited gardens by use of motorcycles 258 (73.7%); more visited old buildings 178 (50.9%); many tourists went towards museums 169 (48.3%); a few visited sport arenas 159 (45.4%) and few visited archives 110 (31.4%).

Table 14: Possible Destinations Visited Via Motorcycle Transport Means

Variable	Predictor	Response	Frequency	Percent %
Tourism sites likely to be visited by use of motorcycles	Museums sites	Yes	169	48.3
		No	181	51.7
	Archives	Yes	110	31.4
		No	240	68.6
	Old Buildings	Yes	178	50.9
		No	172	49.1
	Sports arena	Yes	159	45.4
		No	191	54.6
	Gardens	Yes	258	73.7
		No	92	26.3

The findings of this study align with the provision of the utility theory, whereby from the findings it can be deduced that MTSU has the ability to offer various options that

a tourist can easily select from while making his/her purchases. Touch point exposures through the use of MTS increases or may trigger the consumers' ability to purchase and/or experience a specified tourism product. Last mile connection attribute initiates completeness of experience where one can consume the extremes which could otherwise not realized through the use motor vehicles.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary of the Findings

The analysis focused on determining how motorcycle transport service utilization contributed on urban tourism product performance within Busia County. Three main aspects were used to measure urban tourism product performance, these are: urban tourism destination accessibility, urban tourism product innovativeness and urban tourism product consumption were measured against one independent variable that is motorcycle transport service utilization.

The outcome showed that many of motorcycle users were mid aged, domestic travelers who were employed and spend normally. The results showed that tourists perceived motorcycle transport services as considerable means of travel within the destination. Whereby moderate number of tourists agreed to be using motorcycle services on a frequent basis. The reasons for use of motorcycle transport services were mainly linked to operational benefits such as managing travelling time, cost efficiency, flexibility, accessibility and personalization of services

The findings of the analysis revealed significant outcomes on the contribution of motorcycle transport service utilization on urban destination access. Tourists perfectly/strongly agreed that motorcycle transport service utilization contributed to urban destination access within Busia County.

The findings also established that there was a statistically significant contribution of motorcycle transport service utilization on promoting urban tourism product innovativeness within Busia County. The outcome showed that tourists averagely agreed that motorcycle transport service utilization contributed to tourism urban product innovation within a given destination.

The findings also further revealed there was statistically significant contribution of motorcycle transport service utilization on urban tourism product consumption within Busia County. The results showed that an average number of tourists agreed that motorcycle transport services enhanced urban tourism product consumption.

The findings also supported various theories that have been applied within the study to address MTSU in tourism sector. The street network with vertices and nodes typified circuit routes and attractions respective solidifying the application of graph theory. TSP and KANO model addressed the associated cost issues against the benefits generated, while touch point exposures and close interactions with the destination were effectively addressed by the utility theory. Therefore, the study confirmed the application of these theories within tourism transport sector.

5.2 Conclusion

The research revealed that motorcycle transport services had a significantly strong influence on urban tourism product performance. It positively impacted urban tourism destination access, urban tourism product innovation and urban tourism product consumption. Majority of the variables on motorcycle transport services portrays the high rate of motorcycle use similar to other global countries, with a single variable (motorcycle noticeability) portraying a negative relation from the research findings. Urban destination tourism access predictors explicitly, transporting visitors to attraction sites, having quality transport services, availability at various attraction sites, maneuverability, last mile connection, spreading out transport services, reduced cost of travel and encouraging interactions between tourists and attraction sites were found to be effectively enhanced by motorcycle transport use.

Urban product innovation indicators limited to enhancing urban tourism experiences, co-production, motorcycle transport service packaging, enhancing overall urban tourism product, discovery of new urban tourism sites, new facilities development, attracting tourism investors and initiating active leisure activities relied on motorcycle transport service utilization for their actualization. And, also urban product consumption variables such as being an important for consumption of urban tourism products, offering cheaper transport services, encouraging group travel, encouraging repeat visits, creating enough time spend at a destination, increasing sales within attraction sites and feasible in diversifying visitor activities were significantly influenced by motorcycle transport service utilization. The findings matched similar studies in varied tourism destinations as shown in the literature. This can be summed that an increase in motorcycles and motorcycle transport services has a possibility of

increasing urban tourism product performance within urban destinations through increasing respective destination accessibility, enhancing urban tourism product innovation and influencing urban tourism product consumption levels. Finally, Tourism act 2014 has failed to recognize the roles two-wheeled motors play in promoting, distributing and enhancing product experiences. The act has not clearly highlighted the policies to govern informal transport means, with it only having a provision that a destination should have motorable ways for it to effectively execute its product and services.

5.3 Recommendations of the Study

A set of recommendations emerged based on the extensive analysis of motorcycle transport service utilization on promoting urban tourism product performance within Busia County. These recommendations are stuck in the findings surrounding its utilization on urban destination access, urban product innovation and urban tourism product consumption within the study site.

- i. The study recommends continuous investment in motorcycle transport services within the tourism sectors. This could be through training travels operators, tourism developers and the local communities on the essence and value MTS in a given tourism destination.
- ii. The government should propose policies and plans for incorporating motorcycle transport services in to the general public transportation services.
- iii. MTS service stations and lane should clearly be demarcated to ensure their transport services are planned to avoid overlapping with other public transport means.
- iv. Tourism destination sites should document all motorcycle transport services tourism related activities such as arrivals by MTS, events and sports activities.
- v. There should also be motorcycle labelled destinations to promote their services within the tourism industries.
- vi. Tourism product innovation should be more dynamic and revolutionary to accommodate the changes in transport sector.
- vii. Motorcycle transport services should be incorporated in tourism transport sector to promote touch point experiences thus initiating impulsive buying of tourism products and services.

Based on the analysis and findings motorcycle transport service utilization on promoting urban tourism product performance within Busia County, the following recommendations were proposed for future studies:

- i. Explanatory research should be carried out to find out the potential contribution of motorcycle transport services in tourism product performance when fully implemented as tourism means of transports
- ii. Exploration should be done to map out all feasible destinations suitable for motorcycle transport services and be branded as motorcyclists-based destinations.
- iii. Comparative studies should be carried out in different regions to be able to effectively generalize the concepts of motorcycle transport service utilization in tourism.
- iv. Assess how well effective MTS can adapt to the changing transport environment and its suitability in serving the general public needs.
- v. Determining various approaches in which mobility/dynamic/transport elements of tourism can be packaged for commercialization.

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APPENDIX I

APPENDIX 1: RESEARCH QUESTIONNAIRE

Dear Respondent

The questionnaire seeks to obtain information to get an understanding on how motorcycle transport services have affected urban transport services, urban tourism transports functions, its support in servicing urban tourism destinations, promoting urban product development and its overall consumption within Busia urban centres. I kindly request for your attention and your generous contribution towards this research by filling in this questionnaire. Your response will be highly appreciated and treated with confidentiality, observe honesty while responding. *(Tick Appropriately)*

NB: Participating in filling in the questionnaire is voluntary.

PART A Socio-demographic Characteristics

A1 Type of Tourist based on origin **i.** Domestic **ii.** Regional

A2 Age group in years

i. 26-30yrs **ii.** 31-35yrs **iii.** 36-40yrs **iv.** 41-45yrs **v.** 46-50yrs

A3) Please indicate your gender **i.** Male **ii.** Female

A4 Please indicate your level of education

i. Secondary **ii.** College/Vocational **iii.** Tertiary/University

A5 Please indicate type of employment

i. Employed **ii.** Self-employed **iii.** Unemployed

A6 Please indicate your monthly income bracket **(in '000 kshs)**

i. 1- 10 **ii.** 11-20 **iii.** 21-30 **iv.** 31-40 **v.** Above 40

A7 Please indicate your monthly expenditure bracket **(in '000 kshs)**

iv. 1- 5 **ii.** 5-10 **iii.** 10-20 **iv.** 20-30 **v.** Above 30

A8 Please indicate your monthly expenditure on transport and leisure services **(in '000 kshs).**

- i. Below 1 ii. 1-5 iii. 5-10 iv. 10-15 v. Above 15

PART B. Motorcycles transport service utilization.

Bi) Did you use motorcycle services to reach this attraction site?

Yes No

ii) If **yes** how often have you used a motorcycle when visiting attraction

- a) Most often b) Often c) Rarely d) Very rare e) Not at all

iii) Justify your answer in Bii) above

iv) If **No** which alternative(s) means of travel have you been using?

Please indicate how you agree with the following statements on motorcycle transport service utilization, (Answer Yes=Y/Not Sure=NS/No=N)

Bii)	Motorcycle Transport Service Utilization	Respondents Reactions		
		Y	NS	N
B1	Do you think motorcycle transport service can be a preferred means for use in accessing attraction sites?			
B2	Does it have the ability serve a reasonable tourism distance (atleast 40kms)?			
B3	Do you think motorcycle transport services can appropriately connect urban tourism sites?			
B4	Do you think the locals and visitors have accepted and appreciated the roles of motorcycle transport services in this area?			

B5	From your observation, do you think the urban network system has suited use of motorcycle services?			
B6	Motorcycles can be easily noticed in urban tourism attraction sites			
B7	In your opinion, does the body size of motorcycle contribute to its urban attraction movability and flexibility in the area?			

PART C: Motorcycle Transport Service Use enhances Visitor Access towards Urban Tourism Attraction Sites.

Rate the levels of agreement regarding the functions of motorcycles in ensuring urban tourism destination access. Which it runs from 1-5 with 1 indicating strongly Disagree and 5 indicating strongly Agree; *and (SA-Strongly Agree, A-Agree, U-Unaware, D-Disagree, SD- Strongly Disagree)*

C	Motorcycle Transport Services Utilization on Urban Destination Accessibility	Respondents Reactions				
		SA	A	U	D	SD
C1	Motorcycles can easily be observed transporting visitors to attraction sites.					
C2	Motorcycles are assumed have quality transport services just like the motor vehicles.					
C3	Motorcycles are readily available at various urban attractions sites.					
C4	There are urban places not accessible by use of motor vehicles.					
C5	Motorcycle services act as last mile linkages to majority of urban attraction sites.					
C6	Motorcycles assists in spreading out transportation services within urban attraction sites.					
C7	Motorcycle transport services have reduced the cost of travel within urban attraction sites.					
C8	Motorcycles will encourage close interactions between tourists and attraction sites					

PART D. Motorcycles Transport Services Utilization Promotes Urban Product Revolution

Rate how likely will motorcycle transport service utilization encourage/enhance urban tourism product innovation and reinvention. *Where it runs from 1-5 with 5 indicating Most likely and 1 indicating least likely VL-very likely, L-likely, N-neutral, U- unlikely and VU-very unlikely.*

Di)	Motorcycles Transport Services on Promoting Urban Product Innovation	Respondents Reactions				
		V	L	N	U	VU

		L				
D1	Motorcycle transport use is likely to enhance urban tourism experiences.					
D2	Motorcycle transport service use will promote urban tourism customer engagement (co-production).					
D3	Motorcycle transport services is likely to be packaged for sale.					
D4	Motorcycle transport service use will enhance the overall urban tourism product.					
D5	Motorcycle transport service use is likely to discover new urban attraction sites.					
D6	New facilities such as motorcycle fueling points and travel lanes) are likely to be developed in the area.					
D7	Motorcycle transport services are likely to attract tourism investors in the area.					
D8	Active leisure products such sport biking can be developed					

Dii) List various ways in which motorcycle transport services can be packaged for tourism sale among consumers

- i.* -----
- ii.* -----
- iii.* -----
- iv.* -----
- v.* -----
- vi.* -----

PART E. Motorcycles Transport Service Use is an important means that enhances Visitor Consumption Rates of Urban Tourism Product.

Rate the levels of agreement regarding the roles of motorcycles in ensuring urban tourism product consumption. Which it runs from 1-5 with 1 indicating strongly Disagree and 5 indicating strongly Agree; *and (SA-Strongly Agree, A-Agree, U-Unaware, D-Disagree, SD- Strongly Disagree)*

Ei)	Motorcycles Transport Services on Urban product Consumption	Respondents' Reactions				
		SA	A	U	D	SD
E1	Motorcycle transport service is an important mean for consumption of urban tourism products.					
E2	Motorcycles is likely to offer cheaper transport services					
E3	Motorcycle services encourage group travels					
E4	Motorcycle transport will encourage repeat visits towards urban sites					
E5	Motorcycle transport service will be relevant in					

	creating enough time at a destination due to less transport time.					
E6	Motorcycle transport service is likely to increase sales rate within urban attraction sites					
E7	Motorcycle transport service has a possibility of diversifying urban visitor activities.					

Eii) What are some of the urban tourism products that are likely to be consumed through the assistance of motorcycle transport utilization.

- i.* -----
- ii.* -----
- iii.* -----
- iv.* -----
- v.* -----
- vi.* -----

Thank You for Tour Time and Assistance

You can scan and send a filled copy to Angachi Reuben on rangachi@chuka.ac.ke

Or WhatsApp No. 0713997034

APPENDIX II: CHUKA UNIVERSITY ETHICS COMMITTEE APPROVAL

CHUKA



UNIVERSITY

Knowledge is Wealth (*Sapientia divitia est*) Akili ni Mali

CHUKA UNIVERSITY INSTITUTIONAL ETHICS REVIEW COMMITTEE

Telephones: 020-2310512/18
Direct Line: 0772894438

Email: info@chuka.ac.ke

P. O. Box 109-60400, Chuka

Website: www.chuka.ac.ke

19th March, 2024

REF: CUIERC/ NACOSTI/479
TO: Angachi Reuben Nahason

RE: Contribution of Motorcycle Transport Services Utilization on Urban Tourism Performance in Busia County, Kenya


This is to inform you that *Chuka University IERC* has reviewed and approved your above research proposal. Your application approval number is *NACOSTI/NBC/AC-0812*. The approval period is 19th March, 2024 – 19th March, 2025.

This approval is subject to compliance with the following requirements:

- i. Only approved documents including (informed consents, study instruments, MTA) will be used
- ii. All changes including (amendments, deviations, and violations) are submitted for review and approval by *Chuka University IERC*.
- iii. Death and life threatening problems and serious adverse events or unexpected adverse events whether related or unrelated to the study must be reported to *Chuka University IERC* within 72 hours of notification
- iv. Any changes, anticipated or otherwise that may increase the risks or affected safety or welfare of study participants and others or affect the integrity of the research must be reported to *Chuka University IERC* within 72 hours
- v. Clearance for export of biological specimens must be obtained from relevant institutions.
- vi. Submission of a request for renewal of approval at least 60 days prior to expiry of the approval period. Attach a comprehensive progress report to support the renewal.
- vii. Submission of an executive summary report within 90 days upon completion of the study to *Chuka University IERC*.

Prior to commencing your study, you will be expected to obtain a research license from National Commission for Science, Technology and Innovation (NACOSTI) <https://oris.nacosti.go.ke> and also obtain other clearances needed.

Yours sincerely


Dr. Benjamin Kanga
SECRETARY

APPENDIX III: BOARD OF POSTGRADUATE APPROVAL



CHUKA UNIVERSITY

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**OFFICE OF THE DIRECTOR
BOARD OF POSTGRADUATE STUDIES**

Telephones: 020-2310512/18
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P. O. Box 109-60400, Chuka
Website: www.chuka.ac.ke

REF: NM13/29163/17

5th April, 2024

**Director
National Commission for Science Technology and Innovation
Off Waiyaki Way, Upper Kabete
P O Box 30623, 00100
Nairobi.**


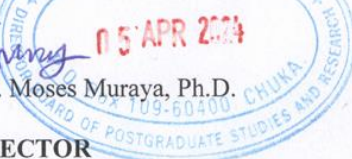
Dear Sir / Madam,

REUBEN NAHASHON ANGACHI

The above-named person is a *bona fide* student of Chuka University pursuing Masters in Tourism Management proposal titled: **Contribution of Motorcycle Transport Services Utilization on Urban Tourism Performance in Busia County, Kenya.**

Mr. Angachi has defended at the Faculty level and is now expected to conduct research. Any assistance accorded will be highly appreciated.

Yours sincerely,



Prof. Moses Muraya, Ph.D.

**DIRECTOR
BOARD OF POSTGRADUATE STUDIES**

APPENDIX V: NACOSTI RESEARCH LICENSE



REPUBLIC OF KENYA



**NATIONAL COMMISSION
SCIENCE, TECHNOLOGY &
INNOVATION**

Ref **5215**

Date of **24 /April/2024**

RESEARCH LICENSE



**This is to Certify that Mr.. ANGACHI NAHASHON REUBEN of Chuka
the provision of the Science, Technology and Innovation Act, 2013
MOTORCYCLE TRANSPORT SERVICES UTILIZATION ON URBAN TOURISM
KENYA for the period ending :**

24/April/2025. License No: NACOSTI/P/24/34

5215

**Applicant Identification
Number**

**Director
NATIONAL COMMISSION
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